

Poland – Ukraine

Key findings

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In 1990, the level of GDP per capita in Poland and Ukraine was very close to each other and (according to the World Bank) oscillated around 9.5–10.0 thousand USD (at PPP, at constant prices from 2010).

Poland was the first country in the former Soviet bloc to reject the dominance of the communist party in the partially free elections of June 4, 1989, and to transform the political, social and economic system. In the second half of December 1989, in the conditions of then-hyperinflation and economic collapse, the Polish parliament (Sejm) adopted 11 economic laws called the Leszek Balcerowicz Plan (Minister of Finance in the first post-war, non-communist government in Poland, of Prime Minister Tadeusz Mazowiecki). The plan boiled down to balancing the budget, removing most price controls, freeing most prices, introducing a rigid exchange rate of the Polish zloty against hard currencies (thanks to a stabilization fund from the IMF to the amount of approx. USD one billion) and privatizing a significant part of the economy.

The direct effects of Balcerowicz's plan seemed negative. In 1992, the GDP per capita in Poland was almost 7% lower than in 1990. Unemployment also increased, in 1993 the unemployment rate in Poland was already 14% and until 2005 it was among the highest in Europe. On the other hand, Balcerowicz's plan led to the stabilization of public finances and improved the overall macroeconomic stability of the economy, which resulted in a reduction of excessive employment (i.e., hidden unemployment) in some enterprises (mainly in the private sector) and an increase in the competitiveness of the economy. As a result of growing competitiveness and stabilization of the public finance sector, since 1993 Polish GDP and labor productivity began to grow rapidly. In 2000, GDP per capita in Poland was over 40% higher than in 1990.

Ukraine regained independence only in 1991, as a result of the collapse of the Soviet Union. A reform of the country's political, social and economic system was undertaken there as well.

However, it should be remembered that the existing Union of Soviet Socialist Republics, until 1991, was much more dependent both politically and economically on the state capital in Moscow. At that time, the Ukrainian

economy was more strongly influenced by economic interconnections (including supply chains) with other former republics of the Soviet Union (including the Russian Federation) than the Polish economy.

Also, the economic reforms undertaken after Ukraine regained independence were much more conservative than in Poland. The process of ownership transformation is still far from being completed, which is widely recognized as a necessary stimulus for the development of a market-oriented political and economic system. A lack of proper control over the course of Ukrainian privatization, and corruption, caused a lot of dissatisfaction and a lack of general social consent for the continuation of this process, by the then current methods. Privatization in Ukraine is an unfinished process.

For the first two decades of the economic transformation in Ukraine, the implementation of an autonomous and transparent monetary policy in the central bank was not carried out. The central bank's independence from political pressure was illusory. Special economic zones created in Ukraine resembled tax havens, rather than solutions for managing local and regional development. The lack of transparency of state institutions and the creation of legal provisions for specific interest groups led to the emergence of a “government of the few operating mainly in their own interests” (Aristotle). The result is the “oligarchization” of the most profitable sectors of the Ukrainian economy (natural gas and the steel industry). An oligarchic group has not developed in Poland, not only because of the lack of raw materials that offer special opportunities for profit. From the early 1990s Poland has consistently pursued the goal of full EU membership. Privatization could not be inbred. It had to be open to foreign investors. The rules of privatization had to be clear. The low level of domestic savings that politicians were aware of resulted in an opening up to foreign investment capital, which the anticipated political and business stability and transparency were dependent on.

Ukrainian GDP per capita in the 1990s (as in many other post-Soviet economies) remained in a downward trend. In 1998, that is, at the beginning of the Russian financial crisis (which led, among others, to a stronger depreciation of both the Russian ruble and the Ukrainian hryvnia), Ukrainian GDP per capita was almost 60% lower than in 1990 (while the value of this macroeconomic variable in Poland increased then by almost 30%).

However, the Russian financial crisis also had a positive impact on the Ukrainian economy. Significant depreciation of the hryvnia led to an increase in the price of consumer products (but also semi-finished products and capital goods) imported from neighboring countries. Therefore, Ukrainian buyers of imported products shifted their demand from more expensive imported products to domestic products. This, in turn, as a result of the Keynesian multiplier mechanism, led to a boom in the Ukrainian economy (which was not prevented even by the Orange Revolution of 2004/2005). In the years 1998–2008, the Ukrainian GDP per capita almost doubled, while the unemployment rate dropped from over 11% to around 6.5%.

At the turn of the 20th and 21st centuries in Poland, as a result of restrictive fiscal and monetary policy and the (partly) Russian financial crisis, economic growth slowed down until 2002. Per capita GDP growth rates fell from 5–6% in the second half of the 1990s to 1–2% in 2001 and 2002. The slowdown in economic growth led to a rapid increase in unemployment. In the years 2002–2003, the unemployment rate in Poland approached 20% and was one of the highest in Europe.

Poland's accession to the European Union in 2004, the first years of full membership in the new institutional order, combined with efficient utilization of EU funds, clearly improved the economic situation in the Polish economy. GDP growth rates increased again, which translated into an increase in employment and a more than two-fold fall in unemployment rates. Another slowdown in Poland's economic development was the result of the global financial crisis of 2008. At that time, the dynamics of Polish GDP decreased, which led to an increase in unemployment (in 2012 and 2013 unemployment rates in Poland again exceeded 10%). Nevertheless, after 2013, Polish GDP growth rates increased again (to 3–5%), which resulted in a decrease in unemployment rates practically to the level of natural unemployment (4–5%). Currently, unemployment rates in Poland are among the lowest in the European Union.

In 2009, as a result of the Russian-Ukrainian gas conflict and (to a lesser extent) the global financial crisis, the Ukrainian economy was affected by another (this time one-year) recession. At that time, GDP fell by more than 10%, while the unemployment rate increased by more than 2% points. Then (similarly to the Russian financial crisis of 1998), Ukraine returned to the path of rapid economic growth, which lasted until the Euro-Maidan of 2013/2014. GDP per capita in 2013 was more than 11% higher than in 2009, while the unemployment rate fell by 1.5% points. The result of the Euro-Maidan of 2013/2014 was the Russian annexation of the Crimean Peninsula (in 2014) and the fight against the pro-Russian separatists in the Donbas. This, in turn, led to another deep recession in Ukraine. In 2015, the GDP per capita in Ukraine was over 10% lower than in 2013, while the unemployment rate increased to 9–9.5%.

In the 21st century (to be more precise after 2004), the best-developed Polish voivodeship (measured by the per capita GDP or the labor productivity level) was the Mazowieckie Voivodeship. This province has the cities of both Warsaw and Płock, where the largest Polish oil concern (PKN Orlen) has its headquarters. Dolnośląskie, Wielkopolskie, Śląskie and Pomorskie were also among the best developed voivodeships. These are the voivodeships in which the largest and most economically thriving urban agglomerations (Wrocław, Poznań, Śląsko-Zagłębie and the Tri-City area) are located. The lowest level of economic development was recorded in voivodeships of eastern Poland.

Moreover, with the passage of time, the development gap between the Mazowieckie Voivodeship and other groups of voivodeships, including (in particular) the group of voivodeships of eastern Poland, is increasing. For example, the GDP per capita in the group of the voivodeships of western and central Poland in 2016 was lower than in the Mazowieckie Voivodeship in 2005, while the value of this variable in the voivodeships of eastern Poland in 2016 was close to the level of this variable in western and central Polish voivodeships in 2007.

In general, the voivodeships east of the Vistula (Wisła) River (except for the right bank in Warsaw), due to the lack of larger and economically more prosperous urban centers, were characterized by a lower level of economic expansion than the voivodeships west of the river.

In Ukraine, the highest level of economic development was definitely in the capital city of Kyiv, where on average in the years 2004–2016, almost 20% of the Ukrainian GDP was generated. The Kyiv Oblast, the Dnipropetrovsk Oblast (whose capital is the center of the Dnieper financial center in Ukraine) and the oblasts of eastern Ukraine, where the heavy industry and mining of this country were concentrated, were also characterized by a high level of economic growth.

In comparison to the oblasts of Left-bank Ukraine and the coastal oblasts of Odessa and Mykolaiv, the oblasts of Right-bank Ukraine are underdeveloped, including (in particular) the oblasts of western Ukraine. This is due to the fact that in the less-developed areas of western Ukraine, there are no major cities (except Lviv) and because these areas were, until 1991, peripherally located in relation to the countries to which they belonged during the last 200 years (the Russian Empire, Austria-Hungary before World War I, the USSR, Poland and Czechoslovakia in the interwar period, and the USSR after World War II), their situation was not conducive to political-social stability nor their economic development.

Considering the dynamics of economic growth of the Ukrainian oblasts, it turns out that (mainly due to Kyiv and the Kyiv Oblast) the oblasts of northern Ukraine are developing faster than the other groups of oblasts. Moreover, since around 2011, there has been a deep recession in the most industrialized regions of eastern Ukraine, which was the result of both low investment rates (still in the first decade of the 20th century) and the armed conflict with pro-Russian separatists in the Donbas.

An equally important issue presented in this book containing our research results is labor productivity, which is one of the most important factors of long-term economic growth. An increase in labor productivity is the result of the accumulation of productive capital, human capital and process innovations used. The novelty of the approach used in this book was to take into account the fourth determinant of labor productivity – domestic and foreign gravitational effects.

The spatial differentiation of labor productivity in Poland is most strongly influenced by the spatial differentiation of capital for the working person,

followed by national gravitational effects and foreign gravitational effects (flowing from Germany). The Łódzkie Voivodeship near Warsaw is the largest beneficiary of national gravitational effects, while the foreign gravitational effects are mainly of use to the voivodeships of western Poland.

In Ukraine, on the other hand, the level of product per employee (similar to Poland) is most strongly influenced by the amount of capital per employee. Then the value of this variable in Ukraine is influenced by gravitational effects flowing from Russia, national gravitational effects and (finally) gravitational effects flowing from Poland. Foreign gravitational effects from Russia mainly affect Kyiv and the regions of eastern, northern and central Ukraine, while foreign gravitational effects from Poland exert an influence on the regions of western Ukraine.

Since the voivodeships of eastern Poland and the neighboring oblasts of western Ukraine are among the poorest in these countries, further integration with the European Union (completed in the future with Ukraine's membership in the EU) should lead to an increase in Polish-Ukrainian gravitational effects, which may in turn lead to an accelerated economic development in both eastern Poland and western Ukraine.

The numerical simulations presented in Chapter 8 show that, assuming *ceteris paribus*, the Polish voivodeships should grow faster than the Ukrainian oblasts in the coming decades. Therefore, if the Ukrainian authorities do not undertake significant and effective structural reforms of the economy, the development distance between Poland and Ukraine may continue to increase. This, however, is not in the interest of Ukraine or Poland.

Labor productivity is an important determinant of wage levels. Hence, the spatial diversity of wages, both in Poland and in Ukraine, is largely determined by the spatial differentiation of labor productivity as well as by the spatial differentiation of unemployment rates. The higher the level of labor productivity, the higher *ceteris paribus* the (usually) level of wages, while the high unemployment rates of *ceteris paribus* are accompanied by lower wages.

In Poland, the differentiation of wages is much more strongly affected by the differentiation of unemployment rates than the differentiation in labor productivity, while in Ukraine the impact of these variables on wages is similar. This may be due to the fact that (in particular in the first decade of the 20th century) the diversity of regional unemployment rates was much larger than in Ukraine. This in turn meant that, in particular, in areas with high unemployment (including structural unemployment in some Polish voivodeships), the pressure on wage increases in the private sector (with increasing labor productivity) was much less than in well-run areas with low unemployment.

Changes in unemployment rates in the regions of the two countries studied were affected by both GDP changes and past (one year delayed) unemployment rates. GDP growth reduced unemployment rates, while in slump periods, unemployment rates rose the fastest in those regions where they

were the highest (but also in those regions, unemployment rates fell the fastest in slump periods).

Migration flows were the last process analyzed. Their size in the 21st century in Poland was influenced by both relative wages (the average level of wages in a given voivodeship in relation to the average level of wages in Poland) and relative unemployment rates (defined analogously as relative wages). What's more, relative wages influenced the size of migration flows more than relative unemployment rates. In the case of migration outflows, the opposite was true. This may be due to not only the economic but also psychological conditions of the nature of these migrations. People making migration decisions move from voivodeships with high unemployment to voivodeships with low wages. It's better to have any job, than not to have one at all. Similar processes are also taking place in Ukraine.

As wages in Ukraine are among the lowest in Europe, so in the 21st century there was a rapid decline in the population of both cities and rural areas. Rural areas are being depopulated faster than cities. This means that the best-educated and most enterprising Ukrainians, not seeing any opportunities for a rapid improvement in the economic situation in their immediate surroundings or in the country as a whole, decide to make economic migrations from the countryside to the cities or to emigrate to foreign countries.

The presented results of comparative research on two neighboring countries and their economies seem to confirm the expected – on the basis of economic theory – effects of specific political and economic decisions, the adopted institutional order and geopolitical position. However, the current theoretical base of economics for creating the pillars of economic growth and development of Ukraine and Poland must take into account factors such as ecological security, digital security or structural adjustments resulting from the transformation of industry.