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POLAND

COMPETITIVENESS REPORT 2016

THE ROLE OF ECONOMIC POLICY AND INSTITUTIONS

Edited by
Marzenna Anna Weresa



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Comparative Economic Performance: Poland and the European Union

Zbigniew Matkowski, Ryszard Rapacki, Mariusz Próchniak

The aim of this chapter is to assess changes in the competitiveness of the Polish economy from 2010 to 2015. The analysis covers the basic indicators of economic development, such as GDP growth, inflation, unemployment, balance of public finances, and current account balance. Poland's economic indicators are compared with those reported by other European Union member states.

The international context

Before embarking on a comparative analysis of Poland's economic performance in 2015, we will first outline its global context, sketching a picture of the prevailing patterns of growth that occurred in the world economy during this period.

As can be seen from the preliminary data shown in Table 1.1, the global Gross Domestic Product grew 2.4% in 2015, which implies stabilization compared with 2013 and 2014. In the medium-term perspective, this growth dynamic is above the trend line for 2008–2011, which includes the effects of the deepest global recession since World War II (–2.4% in 2009). Yet it remains well below global economic growth in the pre-crisis period (3.9%).

Similar to the prevailing trends throughout the studied period, the continuing recovery of the global economy in 2015 was mostly due to relatively fast economic growth in developing economies; their GDP growth rate was 3.7%. The most remarkable growth indices were recorded in Southeastern Asia (5.7%), especially in India (7.2%) and China (6.8%). On the other hand, the relatively slow growth in the global economy was due to developed countries (with their 1.9% GDP growth) doing worse economically than in the pre-crisis period (though better than in the 2007–2014 period). Contributing factors included the continued fiscal crisis in the eurozone and economic stagnation in some of its member countries.

Table 1.1. World economic growth in 2007–2015 (rates of growth in %)

Year	2007–2012 (annual averages)	2013	2014	2015 ^a
World	1.9 ^b	2.3	2.6	2.4
Developed countries	1.0	1.0	1.7	1.9
Eurozone	0.4	-0.3	0.9	1.6
USA	1.3	1.5	2.4	2.4
Japan	0.4	1.6	-0.1	0.5
Transition countries	2.3	2.1	0.9	-2.8
Russia	1.8	1.3	0.6	-3.8
Developing countries, of which: least developed countries	5.3 5.7	4.6 5.1	4.4 5.6	3.7 4.5
Africa	4.1	3.3	3.4	3.7
Southeast Asia	7.0	6.1	6.2	5.7
China	9.2	7.7	7.3	6.8
India	7.3	6.5	7.2	7.2
Latin America	2.8	2.8	1.0	-0.5

^a Preliminary data. ^b 2008–2011.

The economic growth rates of country groups are calculated as a weighted average of individual country GDP growth rates. The weights are based on 2010 prices and exchange rates (for the growth rates from 2007) or on 2005 prices and exchange rates.

Source: United Nations (2009, 2015, 2016).

Size of the economy

We begin our analysis of the performance of the Polish economy in 2015 and of its international competitive position with a brief assessment of Poland's economic potential and its place in the world economy as well as in the European Union.

The basic measure of the size of the economy is the value of the gross domestic product (GDP) produced in a country in a given year. In spite of all its shortcomings, this is still the most comprehensive measure of economic activity and is widely used in macroeconomic analyses. For inter-country comparisons, the values of GDP expressed in local currencies are converted into a single international currency (e.g. USD or EUR), using current exchange rates (CER) or purchasing power parities (PPP) as conversion factors.¹ The GDP calculated at PPP is believed to better represent the value of output produced in a given country, considering different price levels in the

¹ Purchasing power parity (PPP) is a conversion factor that shows how many currency units of a given country would be needed to buy the same basket of goods and services that could be purchased for \$1 in the United States. The value of GDP at PPP is expressed in calculative units called "international dollars" that

local markets for goods and services; it is also less susceptible to the fluctuation in current exchange rates. For these reasons it is more widely used in broad international comparisons. On the other hand, the PPP conversion factors are often imprecise and tend to overestimate the value of GDP for less developed countries against the value of GDP in more developed countries. The same reservation applies to the comparison of per capita GDP). In our assessments of total and per capita GDP, we apply both conversion systems, CER and PPP, to provide readers with a more comprehensive comparison.

According to IMF estimates for 2015 (IMF, 2016), Poland's GDP was equal to \$481 billion if calculated at CER, but its real value estimated at PPP was \$1 trillion (\$1,003 billion). Among the world's largest economies arranged according to their total GDP, Poland ranked 25th in terms of the GDP value calculated at CER (between Sweden and Belgium), and 22nd in terms of the GDP value estimated at PPP (between Nigeria and Egypt). Compared with the previous year, Poland's position in the world economy deteriorated by two places in both assessments of the GDP value. This was due to more rapid growth in some developing economies and a depreciation of the Polish currency against the U.S. dollar. The share of Poland in global output did not change: it was 0.7% at CER and 0.9% at PPP. This share, reflecting Poland's position in the world economy, has remained stable for the last 10 years, although the country's place in the worldwide GDP ranking changes from year to year because of cyclical fluctuations in output, changing inflation and exchange rates, and some revisions in GDP data and conversion factors.

Let us now look at the position of Poland's economy in the European Union (EU28). Table 1.2 presents data on the value of total GDP in individual EU member countries in 2015, calculated in euros at current exchange rates (CER) and according to the purchasing power standard (PPS).² All the GDP data for 2015 are preliminary estimates published by the European Commission (European Commission, 2015a), which may be subject to further revisions. The ranking given in the table is arranged according to the value of GDP calculated at CER; the alternative ranks, based on the PPS GDP values, are given in parentheses.

represent the purchasing power of \$1 in the U.S. market. The estimated PPP value of the GDP of a given country corresponds to its value calculated at U.S. prices.

² The purchasing power standard (PPS) for EU member states, calculated by Eurostat, is based on the average price level in the EU28. The value of GDP at PPS is measured in calculative units (called PPS), which express the purchasing power of the euro in the given country.

Table 1.2. GDP of EU member countries in 2015 (€ billion)

Rank	Country	GDP at CER		GDP at PPS	
		billions of €	%	billions of €	%
1(1)	Germany	3,022.0	20.7	2,924.0	20.0
2(2)	United Kingdom	2,583.0	17.7	2,041.0	14.0
3(3)	France	2,175.0	14.9	2,017.0	13.8
4(4)	Italy	1,635.0	11.2	1,666.0	11.4
5(5)	Spain	1,079.0	7.4	1,233.0	8.4
6(7)	Netherlands	682.2	4.7	636.1	4.4
7(9)	Sweden	439.9	3.0	350.0	2.4
8(6)	Poland	425.6	2.9	755.4	5.2
9(8)	Belgium	410.0	2.9	375.6	2.6
10(11)	Austria	336.3	2.3	307.9	2.1
11(15)	Denmark	265.3	1.8	199.6	1.4
12(18)	Finland	208.6	1.4	170.1	1.2
13(17)	Ireland	204.5	1.4	185.1	1.3
14(13)	Portugal	178.8	1.2	233.1	1.6
15(14)	Greece	173.2	1.2	217.0	1.5
16(12)	Czech Republic	163.9	1.1	258.6	1.8
17(10)	Romania	157.7	1.1	310.3	2.1
18(16)	Hungary	108.8	0.7	194.7	1.3
19(19)	Slovakia	78.1	0.5	120.2	0.8
20(24)	Luxembourg	50.3	0.3	43.4	0.3
21(20)	Bulgaria	43.9	0.3	94.8	0.6
22(21)	Croatia	43.8	0.3	70.6	0.5
23(23)	Slovenia	38.5	0.3	49.2	0.3
24(22)	Lithuania	36.9	0.3	61.8	0.4
25(25)	Latvia	24.6	0.2	36.4	0.2
26(26)	Estonia	20.5	0.1	28.0	0.2
27(27)	Cyprus	17.4	0.1	20.6	0.1
28(28)	Malta	8.5	0.1	10.6	0.1
	EU28	14,611.0	100.0	14,611.0	100.0

Note: All GDP data for 2015 are preliminary European Commission estimates. The positions given in the first column refer to GDP calculated at CER and PPS (the latter in parenthesis). The percentage shares in the EU28 total were calculated by the author.

Source: European Commission (2015a).

The European Union now comprises 28 member states of very different sizes and different economic potential. The five biggest countries in terms of population num-

bers and production volume – Germany, France, the United Kingdom, Italy, and Spain – represent 63% of the EU28's total population and 72% of its combined GDP calculated at CER or 68% if calculated at PPS. The 15 Western European countries that belonged to the EU before its major enlargement (EU15) represent 79% of the total population and produce 92% of the combined GDP calculated at CER, or 86% of the combined GDP calculated at PPS. The 13 new member states that joined the EU in 2004, 2007 or later – 11 CEE countries plus Cyprus and Malta – represent 21% of the total population, but produce 8% or 14% of the total GDP respectively. This asymmetry between the “old core” and the new entrants (or, more broadly, between Western Europe and Central and Eastern Europe) should be borne in mind when evaluating the position of Poland in the European Union.

Poland is the largest country among the new EU member states in terms of area, population and GDP. Poland ranks sixth in the enlarged European Union in terms of area and population (7.1% and 7.5% respectively). In terms of GDP value calculated at PPS, it also ranks sixth (5.2%), but it is eighth (2.9%) if GDP is converted using CER. As we can see, Poland's share in the EU28's economic potential is much lower than what is indicated by the size of its territory or population, but, in light of historical experience, this should come as no surprise; a similar disproportion is in evidence for all other CEE countries.

Poland has significantly improved its position in the European economy since it joined the EU. Its share in the combined output of all the current EU member countries (EU28), calculated at CER, rose from 1.9% in 2004 to 2.4% in 2007, 2.8% in 2010, and 2.9% in 2015. Likewise, Poland's share in the total output of the EU28 calculated at PPS rose from 3.6% in 2004 to 4.1% in 2007, 4.7% in 2010, and 5.2% in 2015. Compared with the previous year, Poland's position in this ranking did not change in 2015.

Socioeconomic development and standard of living

The basic measure of socioeconomic development and standard of living is national income or product per inhabitant. Figure 1.1 shows the value of per capita GDP measured at PPS in EU member countries in 2004 and 2015.³ The figure enables us to compare the value of GDP per capita and to evaluate the growth of real income in individual countries in the period after the EU's major enlargement. The GDP per capita data for 2015 are preliminary estimates. Both the total and per capita GDP data for CEE

³ To simplify the information, the per capita GDP data originally expressed in PPS are labeled here € (standardized euro). The same applies to the total GDP data shown in Table 1.2.

countries calculated at PPS are much higher than the corresponding values calculated at CER. As already pointed out, the GDP data for CEE countries calculated at PPS are imprecise and may be overestimated.

According to our calculations based on preliminary data by the European Commission (European Commission, 2015a), the average per capita GDP in the enlarged EU (EU28), calculated at PPS, was €28,600 in 2015. In the current euro area (EA19) it was €32,300, and in the “old” EU countries (EU15) it was €31,000.

The income levels recorded in individual EU countries vary greatly. Luxembourg leads the EU with a GDP per capita at PPS of €76,200 in 2015.⁴ A high per capita GDP (between €30,000 and €40,000) is also recorded in Ireland, the Netherlands, Austria, Sweden, Germany, Denmark, Belgium, Finland, the United Kingdom, and France. Italy and Spain have lower per capita GDPs (at about €27,000). The less advanced Western European countries, Greece, Portugal, Cyprus, and Malta, have much lower per capita incomes (between €23,000 and €25,000). In CEE countries, per capita GDP ranges from about €13,000 in Bulgaria to more than €24,000 in the Czech Republic and Slovenia.

Against this background, Poland’s position in the per capita GDP rankings in the EU is unimpressive. With a per capita GDP at PPS of €19,600 in 2015, Poland is in the lower part of the list in the enlarged EU. Only four other EU countries (Latvia, Croatia, Romania, and Bulgaria) have lower income per inhabitant. Poland’s per capita GDP at PPS is comparable to that of Hungary, though Hungary had a slightly better result in 2015.

Comparing the GDP per capita data for 2004 and 2015, shown in Figure 1.1, we can see that since joining the EU, Poland has made significant progress in reducing its income gap with more advanced countries in Western Europe. During the last 10 years, Poland’s per capita GDP measured at PPS has increased by almost 80%, while the EU15’s per capita GDP at PPS has risen by 22%. As a result, the index showing the relative per capita PPS GDP level in Poland (taking the EU15 as 100) increased from 43 in 2004 to 63 in 2015, implying further progress in closing the income gap toward Western Europe.

Of course, GDP per capita is a crude and tentative measure of the standard of living in a country. The living standards of inhabitants are also dependent on income distribution and possessed wealth. Unfortunately, international statistics do not offer much data on the financial and real assets of households. Information on income

⁴ The unusually high value of GDP per capita in Luxembourg is largely due to high incomes generated and earned by international banks, financial institutions, and headquarters of big international corporations located in the country. This does not adequately reflect the average living standard of inhabitants compared with other Western European countries.

inequality, particularly poverty, is also incomplete and often outdated. The latest estimates of poverty rates made by the World Bank (2016a), using the international poverty lines of \$1.90 or \$3.10, show that the incidence of absolute poverty in all EU countries is small. However, in most CEE countries a considerable part of the population lives below the income and consumption level recognized as a poverty line using national standards. According to a recent OECD report on income distribution and poverty (OECD, 2013), based on 2010 data, the relative poverty rate in Poland (the percentage of the population living at less than half of the national median income) was about 11%, an indicator roughly equal to the OECD average, but almost twice as high as in the Czech Republic and Denmark.

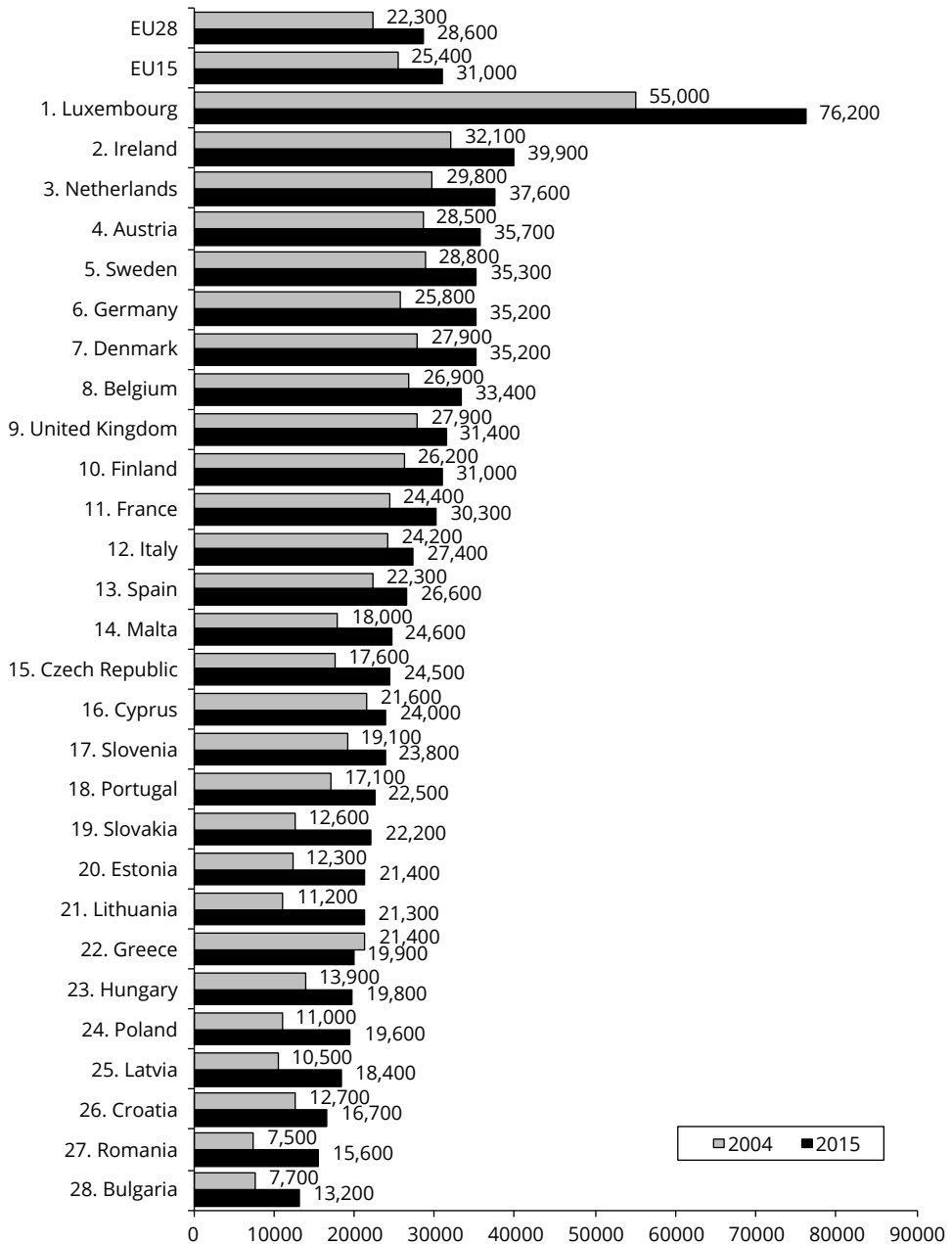
The common view in Poland is that the country's solid track record in economic growth, measured by an increase in real GDP, has not translated well into the well-being of the average citizen. If this opinion is true, one important factor contributing to this feeling is a high dispersion of income and wealth distribution.

A conventional gauge of income inequality is the Gini coefficient, which measures the overall concentration of household income. Poland is among EU countries with relatively high income inequalities. The Gini coefficient of disposable income for Poland, at 30.8 in 2014, was slightly lower than the EU28 average. Among the new EU member states, more egalitarian patterns of income distribution are reported by the Czech Republic, Slovakia, Slovenia, Croatia, and Hungary. Among Western European countries, more equality can be seen in Austria, Belgium, Denmark, the Netherlands, Sweden, Finland, and Germany, countries that strongly promote the welfare state idea. Poland is showing a gradual decrease in the Gini coefficient, which is a positive trend.

Another indicator of income inequality is the income gap between the poorest and the richest people in a country. According to Eurostat data (Eurostat, 2016), the ratio of income earned by the wealthiest 20% and the poorest 20% of families in Poland in 2014 was almost 5:1, roughly equal to the EU average. But in most EU countries this ratio was lower, and a significantly larger income gap between the rich and the poor was only noted in Italy, Spain, Portugal, and Greece, as well as in Romania, Bulgaria, and Latvia. In the quintile distribution of household incomes observed in Poland, the wealthiest 20% of families accrued almost 40% of total household income, and the richest 10% gained almost 25% of total disposable income.⁵

⁵ More information on income inequality and poverty in Poland and other EU countries can be found in chapter 3 of this report.

Figure 1.1. EU28 member countries by GDP per capita in PPS (€)



Note: Ranking based on preliminary PPS GDP estimates for 2015; reference data for 2004 illustrating change after EU enlargement; GDP per capita calculated by dividing total GDP by total population.

Source: European Commission (2015a).

A concise measure of social development and the standard of living is the Human Development Index (HDI), compiled by the United Nations Development Programme (UNDP). It is the geometric mean of three component indices reflecting gross national income (GNI) per capita, life expectancy at birth, and education level, which are assumed to represent three basic dimensions of human development: a long and healthy life, thorough knowledge, and a decent standard of living. The index values range from 0 to 1; higher values imply a higher development level.

According to the latest *Human Development Report* (UNDP, 2015), based on 2014 data, Norway, Australia, Switzerland, Denmark, the Netherlands, and Germany lead the way in the global HDI classification. Slovenia (ranked 25th) was the best performer among CEE countries, followed by the Czech Republic, Estonia, Slovakia, Poland, Lithuania, Hungary, Latvia, Croatia, Romania, and Bulgaria (59th). Poland, with an HDI of 0.843, is close to the CEE average, but behind most other EU28 countries and ahead of only Lithuania, Portugal, Hungary, Latvia, Croatia, Romania, and Bulgaria. Poland is currently No. 36 among 185 countries in the worldwide HDI rankings.

Poland's HDI has increased consistently, which testifies to the sustainability of the country's socioeconomic development. Since 2008, Poland has advanced in the HDI classification by three places, with most of the progress made in the last three years, and Poland's HDI has increased significantly. However, Poland's position in the worldwide HDI rankings is still remote. Nor does Poland rank high in the HDI league table in terms of the three components of the index: income, health, and education.

The same source also gives estimates of the so-called inequality-adjusted HDI (IHDI). This index aims to capture the living standard and development level of the average person in a country, which is less than the aggregate HDI when there is inequality in the distribution of income, education, and health. Poland's IHDI is lower than the value of the original HDI, but this does not change significantly the country's position in the global HDI rankings.

The OECD compiles for its member countries a composite well-being index called "Better Life Index" (BLI), which tries to capture various components of the quality of life and various dimensions of social well-being, such as: (1) income and wealth, (2) housing, (3) job opportunities, (4) work-life balance, (5) education, (6) health, (7) environment, (8) community links, (9) freedom and governance, (10) personal safety, and (11) life satisfaction. The index is based on a large set of quantitative and qualitative data and employs an advanced computation methodology that allows the user to calculate their own aggregate well-being index for each country, using own weights attributed to the various dimensions of social well-being, but the data and results are only available for 36 OECD member and candidate states, including only a few CEE countries. The composite index takes values ranging from 0 to 10 (higher

values mean a better performance). According to the latest BLI ranking (OECD, 2016), Poland, with an unweighted BLI value of about 5.5, is close to the OECD average. Among several dimensions of social well-being captured by the BLI, Poland has relatively high marks in areas such as personal security, education, and social links, but relatively low marks for material living conditions, health, and life satisfaction.

A similar quality-of-life index (QLI), recently called the “where-to-be-born index,” is compiled by the Economist Intelligence Unit (EIU), which is linked to *The Economist* magazine. The index is published on an irregular basis. The latest, 2013 QLI ranking (EIU, 2013) covered 80 countries and was topped by highly developed countries: Switzerland, Australia, Norway, Sweden, and Denmark. Of 11 CEE countries included in the classification, the highest ranks were given to the Czech Republic and Slovenia, and the lowest ones to Lithuania, Romania, and Bulgaria. Poland was ranked 33rd, in the upper middle of both the whole pack and the CEE subgroup.

One important aspect of social wealth is the availability of jobs and employment opportunities. This factor directly influences income and wealth as well as the extent to which education and knowledge can be transformed into higher living standards. High unemployment is in sharp conflict with people’s sense of well-being and wealth. Meanwhile, high unemployment has become one of the main economic problems in Europe and elsewhere. The problem has become more acute in the last several years due to the global crisis and turbulence in the eurozone. Unemployment levels in most EU countries are still quite high, even as the recession has phased out. This is because a large portion of the jobless are affected by long-term structural unemployment and short-term frictional unemployment (both are rather unrelated to the current level of business activity), and because changes in employment and unemployment lag behind changes in output and are usually less significant.

In 2015, the average unemployment rate in the EU28, as recorded in labor force surveys, was 9.5% according to preliminary estimates (European Commission, 2016). In Western Europe, the highest unemployment was seen in Greece (25%), Spain (22%), Portugal (13%), and Cyprus (16%). Among CEE countries, Croatia (16%), Slovakia (12%), and Bulgaria (10%) were the most affected.⁶ Poland, with an unemployment rate of 7.5% reported in labor market surveys, was below the EU average, but registered unemployment was much higher: 10.5% yearly on average (GUS, 2016a). A special problem is high unemployment among the young. On average in the EU, unemployment among young people is at least twice the rate among adults. In Poland, the unemployment rate among those aged under 24 exceeded 20% in 2015.

⁶ All the figures are the average unemployment rates recorded in the harmonized labor force surveys (LFS). Registered unemployment was usually higher.

Comparative assessment of macroeconomic performance

Our assessment of the current condition of the Polish economy is based on an analysis of five macroeconomic indicators commonly used in comparative assessments of macroeconomic performance: (a) the rate of economic growth, (b) unemployment rate, (c) inflation rate, (d) general government balance, and (e) current-account balance. The key tool used in this analysis is called the pentagon of macroeconomic performance.⁷ It illustrates the extent to which individual countries meet five macroeconomic goals: (a) economic growth, (b) full employment, (c) internal equilibrium (no inflation), (d) public finance equilibrium, and (e) external payments equilibrium. The extent to which these goals have been achieved in a given year is expressed by the five variables marked on the pentagon axes.

The tips of the pentagon, representing maximum or minimum values of the indicators, are considered to be desirable (positive) targets, although in some cases this can be disputable. For example, a high current-account surplus or a budget surplus, accompanied by zero inflation or zero unemployment, may not be an optimal result. Another problem is interrelations (notably conflicts) between various macroeconomic goals. For example, low unemployment (according to the Phillips curve) is often accompanied by high inflation, and vice versa. A separate question is the relative significance of each criterion (e.g. whether low inflation is as important as low unemployment). All these reservations should be taken into account when interpreting such charts.

When comparing the pentagons drawn for a given year among individual countries or when comparing them over time for any single country, we should consider both their surface and shape. A larger surface of the pentagon is assumed to mean better economic performance, while a more harmonious shape indicates more balanced growth. Of course, such an assessment is confined to the five aforementioned parameters of current macroeconomic performance. It tells nothing about the size of an economy, its potential, or its development prospects. It does not even tell much about its possible performance in the next year, though an economy in good condition increases the chances of good future performance. Nevertheless, any analysis based on this method should be conducted with caution.

Let us now compare the overall performance of the Polish economy in 2015 with the situation seen in three other CEE countries: Hungary, the Czech Republic, and

⁷ This method was also used in the comparative analysis of Poland's macroeconomic performance in earlier reports by this publisher. This is also where the merits and limitations of this kind of analysis are discussed in greater detail, along with a list of references (cf. Weresa (ed.), 2013, pp. 27–33).

Slovakia, and in five Western European economies: Germany, France, Italy, Spain, and Sweden. Table 1.6 includes data on the five macroeconomic indicators reflecting the performance of the analyzed economies in 2015. These are the most recent estimates, released by European Commission on Feb. 4, 2016 as part of its newest economic forecast (European Commission, 2016). Most of the data are preliminary estimates that may be subject to further corrections and revisions. In the case of Poland, these data are more or less in line with preliminary data published by the Central Statistical Office (GUS, 2016a, 2016b). Some minor differences do not significantly affect our general assessment.⁸ Figure 1.2 presents the data in the form of pentagons, which are more convenient for a comparative analysis.

Table 1.3. Key macroeconomic indicators for Poland and selected other EU countries in 2015

Country	GDP growth	Inflation	Unemployment	General government balance	Current-account balance
	%	%	%	% of GDP	% of GDP
Czech Republic	4.5	0.3	5.1	-1.6	-2.4
France	1.1	0.1	10.5	-3.7	-1.4
Germany	1.7	0.1	4.8	0.5	8.8
Hungary	2.9	0.1	6.7	-2.1	5.0
Italy	0.8	0.1	11.9	-2.6	2.2
Poland	3.5	-0.7	7.5	-3.0	-0.2
Slovakia	3.5	-0.3	11.5	-2.7	0.3
Spain	3.2	-0.6	22.3	-4.8	1.5
Sweden	3.6	0.7	7.4	-1.0	5.4

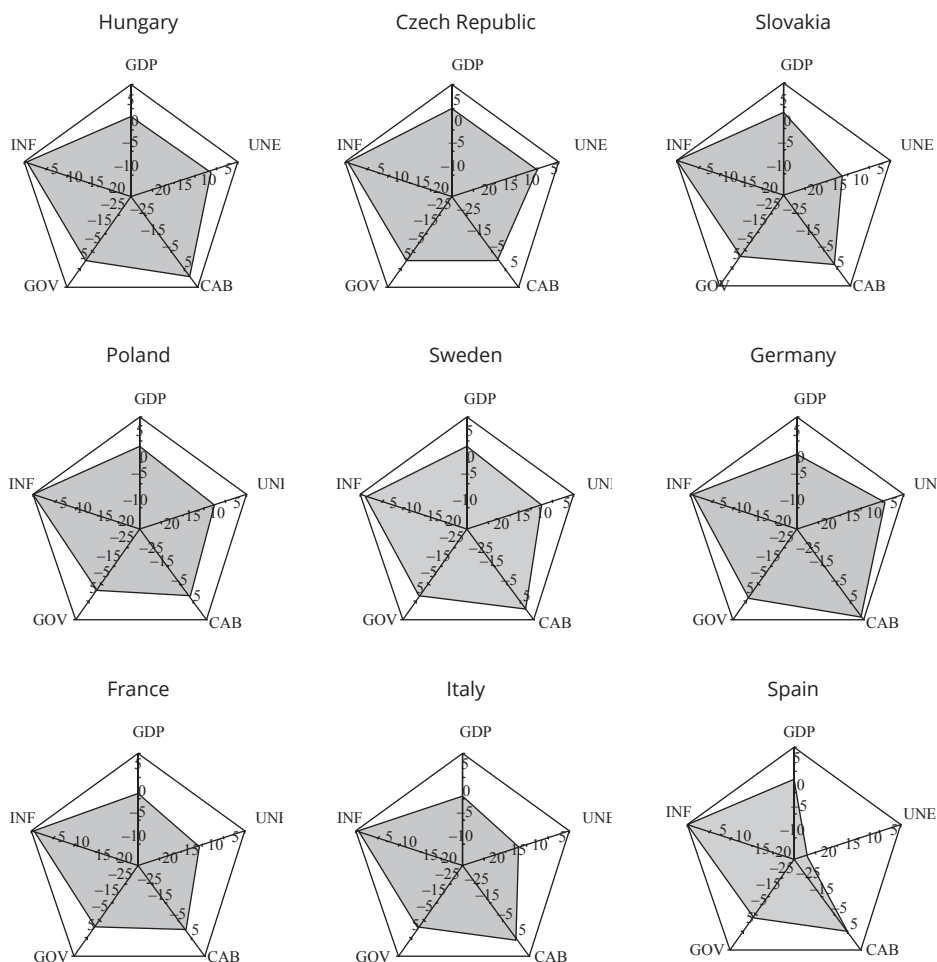
Note: All the data are preliminary estimates. Data on inflation refer to consumer price inflation. Data on unemployment are the harmonized unemployment rates based on labor market survey data (yearly average).

Source: European Commission (2016).

We begin our analysis with an inter-country comparison of the five macroeconomic indicators (in light of the overall economic situation in the EU28). Next, we will compare the general performance of the economies concerned in 2015 from the point of view of the comparative position of the Polish economy, taking into account changes from the previous year.

⁸ The Central Statistical Office's preliminary estimate – released on Jan. 25, 2016 – for Poland's 2015 GDP growth was 3.6%, and its estimate for consumer price inflation was -0.9% (GUS, 2016b).

Figure 1.2. Macroeconomic performance in Poland and selected other EU countries in 2015



GDP – GDP growth rate (%)
 UNE – unemployment (%)
 INF – CPI inflation (%)
 GOV – general government balance (% of GDP)
 CAB – current-account balance (% of GDP)

Source: Author's own elaboration based on the data shown in Table 1.3.

The year 2015 was the sixth year of moderate growth in the world economy after the global economic crisis of 2008–2009. After a slowdown in 2012–2013 triggered by the financial crisis in the euro area, economic growth in the eurozone and in the EU as a whole remained unimpressive. According to preliminary estimates, total real GDP in the euro area increased by 1.6% in 2015, and the combined EU28 GDP grew by 1.9%

(compared with around 3% growth in global output). The weak economic growth indicators in Europe were mainly due to relatively slow output growth in Germany, France, and Italy, which could not be outweighed by firmer growth in Ireland, Sweden, Luxembourg, and most CEE countries. In the analyzed group, the best growth results were achieved by Poland (3.5%), Slovakia (3.5%), and the Czech Republic (4.5%) as well as by Sweden (3.6%) and Spain (3.2%), though this last economy has yet to expand vigorously enough to neutralize a previous fall in output during a prolonged recession. Germany noted modest output growth (1.7%), and France and Italy both recorded meager growth of around 1%.

Despite some acceleration in output growth in Europe, last year brought a further decline in inflation in most countries. In 2015, average consumer price inflation in the EU28 was suppressed to zero. In all EU countries inflation was cut to less than 1%, and some economies faced slight deflation. In the analyzed group, only the Czech Republic and Sweden reported some rises in consumer prices (0.5%–1%), while all the remaining countries saw virtually no inflation or faced some deflation. The deepest deflation appeared in Poland (almost 1%). Inflation in Europe has subsided as a result of both slackening demand and restrained fiscal and monetary policies. But now governments and central banks must be alert because deflation may soon become an additional drag on economic growth.

The average unemployment rate in the EU28 decreased slightly due to some acceleration in output growth, but it has remained quite high, at 9.5%. A small decrease in unemployment was also seen within the analyzed group. The unemployment rate continued to be relatively low in Germany and the Czech Republic (around 5%). In Poland, Hungary, and Sweden, the unemployment rates (ranging from 7% to 8%) were also below the EU28 average. In Italy, France, and Slovakia, unemployment was much higher (10%–12%), and in Spain it remained extremely high (22%) despite a remarkable rise in output. It should be recalled that the figures quoted here refer to unemployment rates recorded in labor market surveys; these are usually lower than the registered unemployment rates.

The last few years have brought some improvement in the state of public finance in the European Union, as reflected by a reduction in the average size of the general government deficit in the EU28 from 6.5% of GDP in 2010 to 2.5% of GDP in 2015. This is the result of the deliberate policies pursued by the governments of most EU countries, strongly supported by the European Commission, aimed at fiscal consolidation (even at the expense of slower output growth). Nevertheless, the road toward meeting the budget deficit limit imposed by the Maastricht Treaty (3% of GDP) is still quite long for several EU member countries, including some EMU members. In the analyzed group, Germany was the only country where government expenditure was

fully covered by budget revenues in 2015. All the remaining countries reported budget deficits ranging from 1%–2% of GDP in Sweden, the Czech Republic, and Hungary to 2.5%–3% in Italy, Slovakia, and Poland, and 4%–5% in France and Spain. In Poland, the budget deficit calculated according to EU standards stood at 3% of GDP, a figure significantly lower than in the preceding year. However, this improvement was partly a temporary consequence of a change in the pension system in 2014 (which may be soon reversed by a plan to reinstate the previous retirement age).⁹

Continued budget deficits lead to a rise in public debt, both in absolute terms and relative to the GDP value. By the end of 2015, the total gross public debt in the EU28 had risen to €12,800 billion, or almost 90% of the total GDP produced that year, according to preliminary data (European Commission, 2015a). In the analyzed group, the public debt-to-GDP ratio at the end of 2015 ranged from 41% in the Czech Republic and Sweden to 51%–52% in Poland and Slovakia, 72% in Germany, 76% in Hungary, 96% in France, 101% in Spain, and 133% in Italy (European Commission, 2016). In most countries, public debt is growing in absolute terms due to continuous budget deficits and rising interest payments.

The current-account balances in the individual countries are not directly comparable because they depend on a variety of factors that determine the volume of exports and imports, terms of trade, current international payments, private income transfers, and short-term capital flows. The current-account deficits or surpluses reported by individual countries are to a large extent structural in nature. At the same time, cyclical changes in the current-account balance do not follow a regular pattern and are difficult to forecast. In 2015, acceleration in economic growth had a limited impact on the relative size of the current-account balances of the countries in the analyzed group. A slight worsening in the current-account balance was only recorded in Sweden, Slovakia, and the Czech Republic, while other countries in the group noted some improvement. Poland and Slovakia roughly equalized their current-account balances. The remaining countries in the group recorded surpluses that ranged from about 2% of GDP in Spain and Italy to about 5% in Hungary and Sweden, and almost 9% in Germany.

In analyzing the changes in the five indicators of macroeconomic performance compared with the previous year, we can conclude that 2015 brought some acceleration in economic growth in Europe, but the revival has not been very conspicuous so far. Nevertheless, almost all the countries in the analyzed group noted a remarkable rise in economic activity and some improvement in their GDP growth rates. Faster

⁹ The decrease in Poland's public debt from 56% of GDP in 2013 to 50% of GDP in 2014 and 51% in 2015 was mainly due to a new arrangement in public finance statistics following a change in the public pension system.

output growth was accompanied by decreased unemployment, but the unemployment rates remained relatively high in most countries. Despite some revival in output and demand, inflation fell to almost zero in all the countries in the group, and some countries faced the prospect of slight deflation. Most countries in the sample improved their fiscal stance by reducing their budget deficits (in relation to GDP), and some of them also improved their foreign current accounts.

Let us now assess Poland's economic performance in terms of the five macroeconomic indicators, compared with other economies in the analyzed group.

Both the surface and the shape of the pentagon reflecting the overall condition of the Polish economy in 2015 are similar to those shown by Hungary, the Czech Republic, and Slovakia. This means that in terms of these indicators, the overall performance of these economies was more or less comparable. All four countries noted a considerable rise in output last year, combined with a decrease in unemployment, though its level remains quite high, especially in Slovakia. Inflation was practically eliminated in all these countries. Poland's budget deficit was higher than in Slovakia and Hungary, and much higher than in the Czech Republic. Poland and Slovakia closed their external current accounts in equilibrium; the Czech Republic noted a deficit, while Hungary succeeded in raising its surplus.

The shape of the pentagon for Poland is also similar to the shapes for Germany and Sweden, but its surface is smaller. This indicates that using these five criteria, the results achieved by the Polish economy in 2015 were generally poorer than in the previous year. GDP growth in Poland was much faster than in Germany, and the inflation rate was lower than in Germany (according to the official data), but in all other respects Germany had better scores. Poland shared with Sweden a similar output growth and a similar unemployment level, but had a higher budget deficit and no current-account surplus.

The shape of the pentagon for Poland is also similar to that for France, but its surface is larger. This suggests that the overall current performance of the Polish economy in 2015 was better under these five macroeconomic terms. The main handicap of the French economy, compared with Poland, was very slow output growth, coupled with high unemployment. As regards the three remaining indicators of economic performance, the results noted by both economies were similar in 2015.

Poland continued to perform better economically than Spain, which finally overcame a prolonged recession but is still plagued by huge unemployment, a large budget deficit, and a substantial public debt. Much the same can be said about the general macroeconomic performance of Poland and Italy, whose economy was still slack, with slow output growth, high unemployment, and a giant public debt.

Compared with the preceding year, the overall performance of the Polish economy improved in 2015, but the improvement was not radical. GDP growth was moderate but slightly faster than in the previous year; inflation was stopped and even turned into deflation; the budget deficit – expressed as a percentage of GDP – was reduced, and the current-account deficit was cleared for the first time since 1995. The labor market improved slightly, though unemployment remained high.

Overall, Poland did relatively well in 2015 in terms of the five basic macroeconomic performance indicators, especially in the context of the general economic situation in Europe. The assessment of the general condition of the Polish economy offered by the OECD in its *Economic Survey of Poland* (OECD, 2014) was also highly positive. According to the OECD, Poland's overall economic performance has been impressive over the past decade, and the country's relatively rapid economic growth has made it possible to considerably shorten the distance to the EU average in terms of the standard of living.

Nevertheless, Poland's economic achievements throughout the transformation period and its relatively good macroeconomic performance in the last two years should not obscure the existence of several unresolved economic and social problems as well as some serious threats to future development. The new Polish government, formed after the parliamentary elections in October 2015, has declared its determination to solve some acute social problems and to improve institutional conditions conducive to further economic growth. However, it is not clear how some major changes introduced by the new government in socioeconomic and fiscal policies will influence the actual condition of the Polish economy in the short and long term.

The Polish economy in 2015 and the outlook for the years ahead

Poland was the only EU member country that managed to avoid recession during the global economic and financial crisis of 2008–2009. Even though this was mainly the result of an improved foreign trade balance (a deeper fall in imports than in exports), the very fact that the Polish economy was able to avoid a decrease in real GDP during the crisis was an unquestionable success, testifying to its noteworthy resilience to external shocks as well as its good general condition. After two years of relatively fast GDP growth (3.7% in 2010 and 4.8% in 2011), the next two years were marked by a considerable deceleration, to 1.8% in 2012 and 1.7% in 2013. The Polish economic slowdown was a direct outcome of slackening demand and economic stagnation in Western Europe, linked with the debt crisis in the euro area. The next two years

produced another revival in the Polish economy. In 2014, Poland's real GDP expanded by 3.3%, and in 2015 it grew by 3.6%, according to preliminary data (GUS, 2016b). The question is whether this accelerated growth will prove to be a permanent trend. The prognosis is difficult because future growth trends in both Europe and the global economy remain uncertain, and there is also uncertainty over the results of some economic and fiscal policies launched by Poland's new government.

Some judgments about the sustainability of economic growth and the possibilities of its acceleration might be possible after examining the changes in the main components of final demand, which determined the dynamics of GDP in the last two years.¹⁰ This kind of analysis makes it possible to show the main demand components responsible for GDP growth – to identify the demand components that either stimulated or sustained output growth and those that hampered it. It also enables us to establish whether the observed output growth was adequately matched by an increase in internal and external demand, which is essential for a further rise in output. Thus, the results of the analysis may be helpful in assessing the growth prospects of the Polish economy in 2016 and beyond.

In 2014, the main driver of output growth was a solid increase in domestic demand, whose volume rose by almost 5%, following a prolonged slack period. Private consumption increased by 2.5%, but public consumption rose by almost 5%, with a resulting 3% increase in total consumption (in constant prices). But the strongest growth stimulus was provided by a heavy rise in investment outlays (both private and public), whose volume increased by almost 10%, after a deep fall in previous years. Exports increased by 6.5%, while imports rose by 10%, so the net effect of foreign trade on GDP growth was negative. Nevertheless, the revival of domestic demand, reinforced by rising exports, provided a strong growth impulse, which resulted in a substantial growth of real GDP, by 3.3%.

In 2015, the satisfactory GDP growth rate was sustained and even slightly increased, to 3.6%, according to preliminary data, but the proportion between internal and external demand growth changed slightly. Real consumption spending (private and public) rose by more than 3% and investment outlays increased by about 6%, but the rise in fixed investments was partly neutralized by a decrease in inventories, so the growth stimulus provided by gross capital formation was weaker. Nevertheless, total domestic demand rose by 3.4%, and aggregate output grew a bit more thanks to a positive change in foreign trade whereby exports, fueled by revived demand

¹⁰ Detailed information on the contribution of various demand components to changes in the GDP volume (on a quarterly basis) may be found in national accounts statistics (e.g. GUS, 2016a). A more extensive analysis of demand changes and their impact on GDP growth in previous years was offered in some earlier editions of this report (e.g. Weresa (ed.), 2014, 2015).

in Western Europe and some depreciation of the Polish currency, began to rise more rapidly (around 7%) than imports (about 6%). Comparing the contribution of various demand components to GDP growth last year, we can say that the demand structure was marked by a well-balanced composition of rising private consumption, government expenditure, investment, and exports. Keeping up such a healthy demand and supply balance could guarantee similar or even slightly faster GDP growth in 2016.

To secure further output growth, it is essential that the positive demand trends of the last two years are sustained and reinforced. Critically important is, above all, a further rise in three autonomous demand streams: government expenditure, private investment, and exports, which determine the dynamics of total demand and aggregate output. Private consumption, as the largest demand component (and the ultimate production aim), is most important in maintaining output growth, but its volume will adjust closely to the actual rise in output and income. As regards government spending, its total volume (including public consumption, public investment, and transfer payments) will probably rise considerably in the next few years as a result of new socioeconomic policies and social spending programs announced by the new government (including the “Family 500+” child subsidy program), but the actual increase in public expenditure will be limited by the level of tax revenue. Of utmost importance, then, is a further evolution of private investment and exports. Both are difficult to foresee. As regards total investment outlays, much will depend on the effectiveness of government policy aimed at stimulating domestic enterprise, savings, and investment, especially since foreign capital inflow will probably decrease, at least this year. The prospects of export growth, in turn, depend on the development of economic activity in Poland’s major export markets and on further evolution of the exchange rate. All these factors are difficult to predict even in the short run because they are strongly influenced by economic policies pursued by governments and are highly dependent on future political and economic developments in the international environment.

On the supply side, industrial production increased by a healthy 4.8% in 2015, more than in 2014. On the other hand, construction raised its production volume by only 1%, much less than in the previous year’s level. Agricultural production was 4% lower than in the previous year due to a poor harvest and some disturbances in exports (especially those to the Russian market). However, industry, construction, and agriculture – the three basic sectors of material production – represent a relatively small part of total output in a modern economy, which is now dominated by the service sector in the broad sense. In Poland, these three sectors account for just over one third of total value added in the economy. Almost two-thirds of it is created in trade, finance, and services. Nevertheless, those three sectors of material production are the true

pillars of any economy and determine its real strength; in Poland, these sectors continue to have a significant impact on current GDP dynamics.

With a substantial rise in consumer spending, the total volume of retail sales increased by almost 3.5% in 2015, slightly less than a year earlier. The stock of commodities did not change much, but the total volume of stocks in the economy decreased, meaning a fall in inventory investment. With a considerable rise in residential construction, the number of new housing units completed last year increased by 3%.

The labor market has not improved radically as yet. A distinct rise in total employment would require more vigorous output growth. Total employment in the economy increased by 0.9% in 2015 compared with the previous year, and average employment in the enterprise sector rose by 1.3%. The level of unemployment recorded in labor market surveys decreased to about 7% at the end of 2015 and registered unemployment fell below 10%, but the overall labor market situation did not improve perceptibly. Some economists argue that official unemployment data tend to conceal the real scale of unemployment because many jobless people leave the country every year in search of better job opportunities abroad.

When assessing the rise in living standards, an important factor is an increase in wages and other income sources. According to official GUS data (GUS, 2016a, 2016b), the average real gross wage rose by 4.2% in 2015, and the average real gross pension increased by 3.5%, though both of these indicators depend on the reliability of statistical data on nominal incomes and on the accuracy of the adopted cost of living index. It would be interesting to check whether these statistical data are supported by the results of household budget surveys, but the survey data is not yet available so it is impossible to assess the change in the reported household incomes over the whole of last year. Nevertheless, beyond any doubt, the rise in the real incomes of the population was the main driving force behind the increase in consumer spending in 2015.

Business sentiment indicators for industry, construction, trade, and other sectors, based on survey data, reveal a rising trend, though some indicators remain in negative territory. Consumer confidence, as reported in household opinion surveys, improved significantly last year, yet it is still relatively low. The same is true of households' assessments of their own financial situation and of the general situation in the economy. Nevertheless, both business sentiment surveys conducted by GUS and similar surveys run by the Research Institute for Economic Development at the Warsaw School of Economics point to a marked improvement in the general business climate.

In 2015, Poland's budget closed with a deficit of PLN 50 billion, or about 3% of GDP. The new budget for 2016 (Rada Ministrów, 2015) envisages an increase in the public finance deficit to PLN 55 billion, but the deficit-to-GDP ratio is not expected

to increase over the 2015 level.¹¹ Both government expenditures and revenues are expected to rise by 9.5%. New expenditures include the “Family 500+” child subsidy program, and new revenues are planned from the introduction of a sales tax on retail trade and a new tax imposed on bank assets. Critics have voiced doubts about the government’s ability to finance all the planned expenditures (many of them tied to the ruling party’s election promises) under the 2016 budget. This budget was drafted with targets including 3.8% GDP growth and 1.5% inflation. Even if the 2016 budget closes with the same deficit-to-GDP ratio as in 2015 and does not overstep the Maastricht limit of 3% of GDP, it is likely that this ceiling will be exceeded considerably in 2017. The European Commission in its newest economic forecast (European Commission, 2016) suggests that the public finance deficit in Poland may rise to 3.4% of GDP in 2017.

In the money market, the M3 money supply increased by about 9% in 2015. The banking sector tried to keep the balance between the growth of assets and liabilities, which increased by 7% and 9% respectively, reflecting the increase in credit outstanding and the value of deposits. The basic interest rates of the National Bank of Poland were lowered by 0.5 p.p. in March 2015, but since then the reference rate has been kept at the same level of 1.5% despite some deflation. In the currency market, the exchange rate of the euro increased by 1.6% last year, but the exchange rates of the Swiss franc and the U.S. dollar jumped by 14% and 19% respectively. The depreciation of the Polish currency (PLN) stimulated a rise in exports, but increased the prices of imported goods and services and negatively affected the inflow of foreign investment.

For the financial market as a whole, the depreciation of the Polish currency was just one of several pieces of bad news. Much more important was a prolonged slump on the local stock market. This was reflected by a deep fall in the share prices of most companies listed on the Warsaw Stock Exchange (WSE) and the resulting decline in their total capitalization by almost 14%. The WSE’s overall share price index (WIG) decreased by almost 10% last year, and the share price index for the 20 largest companies (WIG20) fell by 20%. The deepest fall in share prices was noted in the raw material and energy sectors, 44% and 31% respectively. The slump on the local stock market is partly a reflection of negative trends on global financial markets, linked with falling oil prices and an economic slowdown in China. But it is mainly the result of slack demand on the local investment market, caused by reduced investment by Open Pension Funds and a massive outflow of foreign speculative capital. Even if this slump is unrelated to the overall condition of the Polish economy, it will probably have an adverse effect on the volume of real investment and thus on further output growth.

¹¹ The deficit was set at 2.8% of GDP, the same target as that for the 2015 budget.

On Jan. 15, 2016, Standard & Poor's lowered its credit rating for Poland from A- to BBB+, with a negative outlook. The decision was attributed to fiscal expansion instituted by the new Polish government and the related increased political risk. Even though the two other major rating agencies, Moody's and Fitch, did not follow Standard & Poor's action, this controversial move may adversely affect FDI inflows to Poland and increase the costs of interest paid on public debt. In another decision on Feb. 8, 2016, Standard & Poor's downgraded its outlook for the Polish banking sector from "stable" to "negative."

Meanwhile, despite some turbulence in the financial market, the Polish economy continues to do well, as evidenced by its performance in 2015.

The growth prospects for the Polish economy in 2016 and beyond will strongly depend on future economic developments in Europe and the global economy. The latest forecasts for the world economy predict some acceleration in global output growth in the next two years. According to a recent forecast by the World Bank (World Bank, 2016b), the global economy will grow 2.9% in 2016 and 3.1% in 2017. The latest IMF forecast (IMF, 2016) assumed slightly faster growth in global output – 3.0% in 2016 and 3.2% in 2017 if converted into constant U.S. dollars, and 3.6% in 2016 and 3.8% in 2017 based on constant local prices. The OECD forecast (OECD, 2015) was also relatively optimistic: it put global output growth at 3.3% in 2016 and 3.6% in 2017. The European Commission, in its latest winter forecast (European Commission, 2016), slightly lowered its former growth projections for Europe, envisaging 1.7% GDP growth for the euro area in 2016 and 1.9% in 2017, and predicting 1.9% and 2.0% respectively for the EU28 as a whole. The IMF's and the World Bank's growth forecasts for the European Union are similar.

Growth forecasts for Poland vary for this year and the next, depending on the source and publication date. The European Commission, in its economic forecast for Europe released on Feb. 4, 2016 (European Commission, 2016), maintained its former projections for Poland's GDP growth at 3.5% in both 2016 and 2017. Similar GDP growth forecasts for Poland for the next two years have been released by the IMF (2016): 3.5% in 2016 and 3.6% in 2017, and the OECD (2015): 3.4% and 3.5%. The World Bank, in its January 2016 forecast (World Bank, 2016b), significantly upgraded its previous GDP growth projection for Poland to 3.7% in 2016 and 3.9% in 2017. On the other hand, the EBRD's latest forecast update for the transition region, released in November 2015 (EBRD, 2015), kept the bank's previous GDP growth projection for Poland at 3.4% in 2016 and 3.3% in 2017.

Among growth forecasts produced domestically, the latest forecast by the Gdańsk Institute for Market Economics, released in January 2016 (IBnGR, 2016), suggests that Poland's real GDP will grow by 3.6% in 2016 and 3.1% in 2017. When drafting

the budget for 2016, the government (Rada Ministrów, 2015) adopted an optimistic assumption that Poland's GDP would grow by 3.8% in 2016 (a similar assumption was made by the previous government in the 2015 draft budget). The National Bank of Poland, meanwhile, in its latest *Inflation Report* (NBP, 2016), raised its GDP growth forecasts to 3.8% in 2016 and 3.4% in 2017.

The IMF's medium-term growth forecast until 2020, published in October 2015 and revised in January 2016 (IMF, 2016), assumed that global output growth would accelerate to about 4% a year by the end of this decade and that the euro area and the EU28 as a whole would return to their "usual" growth rates of around 1.5% and 2.0% respectively. For Poland, the IMF predicted moderate GDP growth in the next five years, at a rate of around 3.5% a year.

Several analyses of growth factors for Poland published in the last few years suggest that the development potential of the Polish economy is still considerable and, if properly utilized and supported by an active growth-oriented economic policy, it could ensure a sustainable growth rate of about 4% a year (provided there is sufficient demand on both the domestic and foreign markets).¹² However, some recent studies warn that future growth in the Polish economy may be significantly reduced, to around 2% a year or even less, due to unfavorable demographic trends.¹³

Even if economic growth in Poland continues to run at a rate of around 3.5% a year for the next few years, as suggested by these medium-term forecasts, it is unlikely that the country will soon return to the kind of rapid growth it experienced before the outbreak of the global crisis, when Poland's economy grew at a healthy rate of 4% to 5% a year. In order to achieve and sustain such a growth rate, Poland would need a much higher investment rate and much better conditions in its export markets. Moreover, long-term growth forecasts, taking into account supply constraints related to demography, are extremely unfavorable to Poland and some other CEE countries.

A long-term growth forecast (until 2060) released by the European Commission (2015b) suggests that Poland and other CEE countries will experience a gradual deceleration of economic growth if no action is taken to remove the emerging supply constraints (not to mention possible demand barriers). According to this forecast, under *laissez-faire* conditions, Poland's potential GDP growth rate may decrease from 3.5% in 2015 to 2.6% in 2020, 1.9% in 2030, 1.3% in 2040, 0.6% in 2050, and 0.7% in 2060. A similar downward growth trend for Poland was predicted by an earlier long-term growth forecast by the OECD (OECD, 2012). The slowdown of economic growth

¹² Such a long-term growth rate was assumed in many projections for the Polish economy for the next 10–20 years – see e.g. Boni (ed.), 2009; Kleer *et al.* (eds.), 2011; Matkowski, 2010; Rapacki, 2002; Kołodko, 2013.

¹³ Cf. Matkowski, 2015; Matkowski, Próchniak, Rapacki, 2014.

predicted in both these forecasts would be mainly due to unfavorable demographic changes, including population aging, low fertility, and a massive outflow of young, well-educated working-age people.

If these forecasts come true, Poland may face not only slower growth in incomes and social well-being, but also a possible reversal of its catching-up process around 2045, coupled with a renewed widening of the country's income gap with Western Europe. In order to avoid such a scenario, the government should adopt a set of proper socioeconomic policies to neutralize the risks and keep GDP growth at a satisfactory rate. The same is true of other CEE countries facing similar risks to economic growth.¹⁴

Meanwhile, the growth of the Polish economy will still be critically dependent on further economic developments in Europe and worldwide. A big challenge for Poland in the next few years is public finance consolidation. A serious threat is posed by the aging population and the growing burden imposed on the economy by the costs of retirement payments, especially in light of the planned return to the previous retirement age. In any case, a continuous rise in exports and investments is the basic condition for sustained economic growth in the coming years.

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¹⁴ For more on this subject and the recommended policy measures, see chapter 2, which discusses the implications of this long-term growth forecast for the income convergence process between CEE and Western Europe.

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