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Article

The European Union as a global economic power

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BOGUMIŁA MUCHA-LESZKO*, KATARZYNA TWAROWSKA**

The European Union As A Global Economic Power

Abstract

The aim of this study is to evaluate the EU economic position in 1995–2014 as well as the prospective growth potential in the global dimension up to 2025. The subject of the research is real and projected data including: GDP growth rate, main growth factors (labour, labour productivity and Total Factor Productivity), and their input to GDP growth, as well as data showing public debts and budget deficits. The analysis was conducted for the years 1995–2014 and 2015–2025. The authors' basic conclusions are: 1) the technological and economic gap between the European Union and the United States has been deepening; 2) the increasing polarisation of world economic powers and low GDP growth in the European Union limit the EU's chances of maintaining the position as the second centre in the world economy; 3) improving the situation in public finances in the European Union as compared to the US is a factor which could raise GDP growth rates in European countries, however, there are countries whose future is in doubt due to the dramatically poor state of public finances, such as Greece, Italy, Portugal or Ireland; 4) economic growth forecasts indicate a deepening of the economic gap between the largest EU countries and the US.

Keywords: *European Union, economic growth, productivity, global position*

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1. Introduction

OECD forecasts from the end of the 1990s concerning the changes in the world economy line-up materialized. The positions of China, India and Brazil improved due to their high economic growth, as did Russia's. The weakening of the economic role of Japan resulted in China becoming the country with the highest potential in Asia. The world economic triad evolved into a multipolar system. The growing polarization of economic interests makes global cooperation more difficult. It raises questions about the economic prospects of the European Union and its influence on global policy. In this article we attempt to answer this issue using the analysis of data such as: GDP rate of growth as well as the input to GDP growth of labour, labour productivity and Total Factor Productivity (TFP). The sources of data are: Eurostat, OECD, The Conference Board and European Commission forecasts.

2. Theoretical framework

Economic growth is the result of the input of many factors. Their impact on GDP dynamics has changed together with technological progress and structural transformations, which are reflected in economic theory. The theoretical and empirical analyses employed at the earlier stages of economic development used the resource approach and the traditional concept of growth factors, which included natural resources as well as labour and capital resources. During the ongoing research other determinants of economic growth were taken into account and greater importance was attached to those factors affecting an increase in labour productivity, such as capital inputs, technological progress and human capital.

The neoclassical Solow model, based on endogenous factors, had a major influence on the development of modern theories of economic growth. Its author pointed to the savings (investment rate) as an important factor of economic growth in the short-term (1957). The representatives of neoclassical economics attach great significance to the accumulation of production factors and their productivity. The impact of technological progress on long-term growth is not analyzed in detail in this model because it is of exogenous nature. The so-called Solow residual which occurs in the model, explaining an increase in production under fixed labour and capital inputs, is interpreted as Total Factor Productivity (TFP). Changes in TFP are caused by technical and organizational progress as well as many other factors, i.e. an increase in workers' skills, the discovery of natural resources, investments in human capital, or immigration (Craft 2008, p. 1–10). An important supplement to the neoclassical method of proof was the breakdown of

investments into investments into physical capital and human capital, which significantly increased the utility of the theory in the analyses of economic growth. Human capital is understood as the skills and know-how of employees acquired in the process of education (Petraokos *et al.*, 2007, p. 7). Research confirming that a higher level of education increases a country's capacity for economic growth have been conducted, among others, by: R. Barro and X. Sala-I-Martin (Barro & Sala-I-Martin 1995), E. Hanushek and D. Kimko (Hanushek & Kimko 2000).

In parallel with research into human capital, another subject of economic theorists' attention is the impact of innovation and research and development activities on increases in Total Factor Productivity. The strong relationship between innovation and economic growth has been empirically proven in many studies, among others conducted by the International Monetary Fund (Ulku, 2004). Progress in the interpretation of the impact of technological factors on economic growth lay in the inclusion of the possible spillover of scientific and technical knowledge at the international level, which is facilitated by the liberalization of trade, capital movements and migrations of population.

The above-mentioned growth factors are used in contemporary analyses and long-term GDP growth projections carried out, *inter alia*, by teams of analysts in the OECD and the Conference Board. The methodological basis is the Cobb-Douglas production function. The OECD applies a supply side analysis in long-term forecasts of global economic growth, using a standard aggregate Cobb-Douglas production function with constant economies of scale. According to this concept, economic growth is a function of physical capital, human capital, and labour, as well as technological progress, i.e. the so-called multifactor productivity (OECD 2014, p. 216217). The Conference Board's methodology is similar; the contribution of production factors to GDP growth is determined by inputs of labour, capital and TFP (representing the impact of technological progress on the efficiency of all production factors). In recent years, many authors have used a method based on the production function for forecasting the economic growth of countries and groups of countries, including, among others: W. Easterly and R. Levine¹ (Easterly & Levine 2001) and J. Fouré and others (Fouré *et al.*, 2010).

J. Fouré emphasizes that there is a need for **better understanding of TFP** and the factors that determine its growth in order to more accurately **model** long-term economic growth and to implement economic policy in the most optimal way (Fouré *et al.*, 2010). The number of factors taken into account to calculate the overall productivity of all production factors is of crucial importance.

¹ Three-factor function of production: labour, capital and energy, and two forms of technological progress.

TFP concepts are not uniform, and the selection of the measures used to determine changes in individual factors of production is of particular significance. In practice, TFP is understood as the real product of combining all production factors. Changes in TFP are assumed to reflect, *inter alia*, technological improvements, structural changes in the industry, or the adoption of lower cost production methods. In connection with the narrower or wider views of TFP and the measures used for measuring changes in stocks of individual production factors, the results of research and empirical verification of the impact of changes in TFP on economic growth can vary and may not fully reflect economic realities (Fouré *et al.* 2010).

3. Evaluation of the EU's economic position in 1995–2014

The factors which most influenced the economic development of the European Union countries in 1995–2014 were: 1) development of ICT technologies; 2) structural changes in the economy, especially the growing role of the services sector in GDP and employment; 3) the effects of the Single European Market and the GATT Uruguay Round; 4) macroeconomic policy aimed at fulfilling the treaty criteria of the Economic and Monetary Union; 5) introduction of the euro and the effects of the common monetary policy in countries with high and low inflation rates; 6) bursting of the Internet bubble on the New York stock exchange (2001) and later the real estate bubble, financial, economic and public debt crisis (2008). The aforementioned factors point out the changing conditions for economic activity and growth. They were favourable in the years 1994–2000, mainly due to the rapid technological progress, and the centre for computer, semiconductor and software production was in the United States. Investment in the ICT sector didn't become a European specialty (with the exception of Finland, Sweden and the United Kingdom) and beginning in the mid-1990s the technological gap between the US and the EU began to grow, proof of which was a decrease in the rate of growth of labour productivity, TFP, and GDP. The data confirming the regressive tendencies in the EU economy is presented in Table 1 and Chart 1.

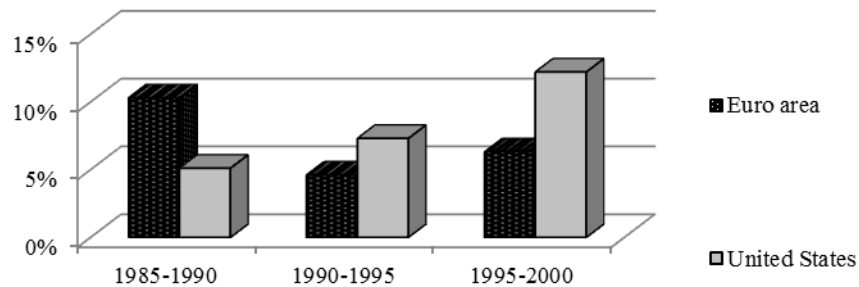
Table 1. Growth of GDP, labour input and labour productivity in the European Union and the United States in 1991–2000

Years	GDP		Labour input		Labour productivity	
	EU	US	EU	US	EU	US
1991–2000	2.1	3.6	0.3	1.9	1.8	1.7
1991–1995	1.5	3.1	-0.9	1.8	2.4	1.3
1995–2000	2.6	4.1	1.2	2.0	1.4	2.0

labour input = annual number of hours worked, labour productivity = GDP per hour

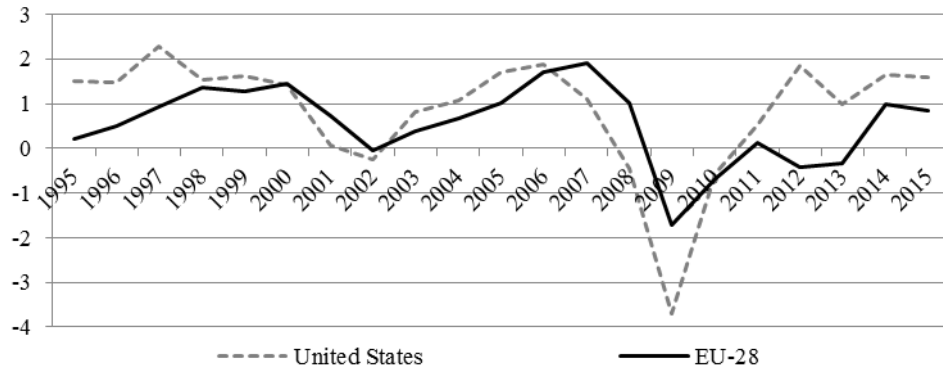
Source: (Sapir *et al.*, 2004, p. 32).

Chart 1. Total Factor Productivity in the EU and the US in 1985–2000, cumulative growth over 5-year periods (in %)



Source: (EEAG, 2002, p. 60).

The data in Table 1 shows that in the early 1990s the rate of labour productivity growth in the EU was significantly higher than in the United States. The reversal of that tendency occurred in the second half of the decade. Since the 1970s till the mid-1990s there had been a periodic decrease of labour input to the GDP growth or maintaining the number of working hours on the unchanged level in the EU, as well as a decrease in the employment rate. In 2000 all European countries had a lower number of working hours per employee than the US (below 90%) (Sapir *et. al.*, 2004, p. 29). This situation was caused by the employment policy, focused on improving the labour market by the creation of new jobs and part-time employment. Furthermore, new jobs caused a decrease in labour productivity due to the lower technical equipment per employee. Chart 2 shows that in 1995-2006 (except for 2001–2002), the increase in employment in the EU-28 was lower than in the US. During the economic downturn (2001–2002) and the recent recession the decline in employment in the US was significantly higher (2007-2010), reflecting the level of job protection in the EU. The higher GDP growth rate after 2010 in the US contributed to a rise in employment, especially after 2011.

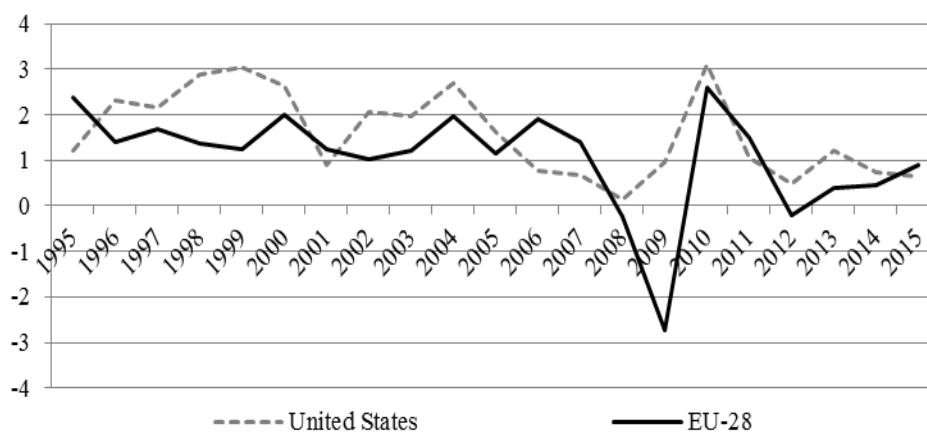
Chart 2. Employment growth (annual average, percent)

Source: (The Conference Board, 2015).

In analyzing labour productivity growth one should consider sectoral changes. In 1995-2005 there was a significant growth in the share **of services** in the economies of the EU countries, and employment grew mainly in this sector, which is characterized by a lower productivity than manufacturing. Sectoral analysis, including the influence of ICT technologies on the aggregated rate of labour productivity growth in the EU, euro area and the United States, led to the same conclusions. R. Gomez-Salvador, A. Musso, M. Stocker and J. Turunen (Gomez-Salvador *et. al.*, 2006) based their breakdown of industries on the intensity of their use of ICT technologies. They distinguished three sectors: ICT-producing, ICT-using, and non-ICT to assess their individual impact on the overall growth of labour productivity in the euro area. Sector I, encompassing the production of computers, software, telecommunication equipment, electronic valves and tubes, scientific equipment etc., had a strong influence on the growth in productivity in the US while it was **insignificant in the euro area**. Sector II was also an important factor of labour productivity growth in **the US, especially the usage of ICT** in retail, wholesale, and financial services. These dynamically growing services not only did not have a positive impact on productivity growth in the euro area, but in 1996 - 2002 caused a decrease of 1 percentage point in the rate of the overall labour productivity compared to the United States (Gomez-Salvador *et. al.*, 2006, p. 21). However, most of the decline in euro area aggregate labour productivity growth was explained by Sector III, which consisted of the industries remaining outside the sectors of ICT technology production or use, including manufacturing and other economic activity. There was a negative correlation between the growth of employment and labour productivity in the non-ICT sector, because an increase in employment diminished the effects of capital deepening.

A similar analysis was performed by the Center for Economic Studies in Munich for the years 1985–2000. The authors evaluated the input of various sectors (depending on the intensity in their use of ICT technologies) in the aggregated growth of labour productivity in the EU and the United States. B. van Ark, R. Inklaar and R.H. McGuckin analyzed 51 industries in the EU and the US (Ark van 2003, p. 295–318; Mucha-Leszko 2007, p. 263). Their results allowed for identification of the causes of higher growth of labour productivity in the United States: 1) a significantly higher share of employment in the ICT-producing sector compared to the European countries; 2) higher labour productivity growth in ICT-using services; and 3) the lower productivity of wholesale, retail and financial services contributed considerably to the decrease in total **labour productivity in the EU**. In conclusion, in 1995-2005 the United States increased its economic advantage over the EU due to investment in ICT technologies, which resulted in labour productivity growth of the whole economy, especially the service sector. During the same period the EU productivity growth rate was either declining or remained stable at a much lower level than the US due to the increasing technology gap. Further research by B. van Ark, M. O' Mahonay and M. P. Timmer (Ark van 2008, p. 25–44) confirmed the great impact of low labour productivity in the EU services sector on the weakening of EU's economic position compared to the US. The increase in commercial services labour productivity in 1995-2004 in the US was 3.2% (per annum), while in the EU it was only 0.9%, and in financial and business services the disproportion was especially strong: 0.1% in the EU and 1.2% in the United States (Ark van 2008, p. 40).

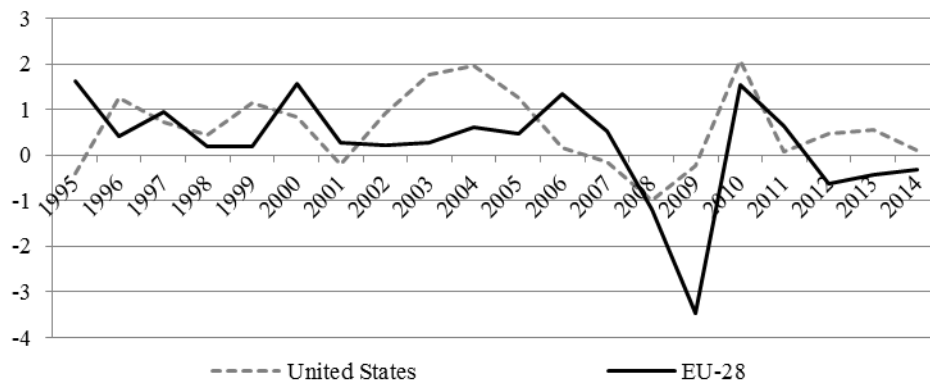
Chart 3. Labour productivity growth (GDP per person, annual average, in %)



Source: (The Conference Board, 2015).

The growth rate of overall labour productivity in the years 1996–2014 (Chart 3) was higher in the US (with the exception of a short period in 2001), in the period preceding the last recession (2006–2007) and from 2015. Taking into consideration the fundamental role of labour productivity for economic growth and the huge regress in that area in the EU during the peak of ICT technologies development, it is important to understand and bear in mind the main causes of that phenomenon. The rate of labour productivity growth depends on capital input and the Total Factor Productivity. TFP can be defined as a real product per unit of all production factors and is considered a measure of technological progress and structural changes in the economy. The slump in labour productivity growth was the result of both factors, but the impact of the decrease in TFP on European Union productivity was stronger after 2000, as illustrated in Chart 4 (with short periods of improvements in 2006 and 2010).

Chart 4. TFP growth (annual average, in %)



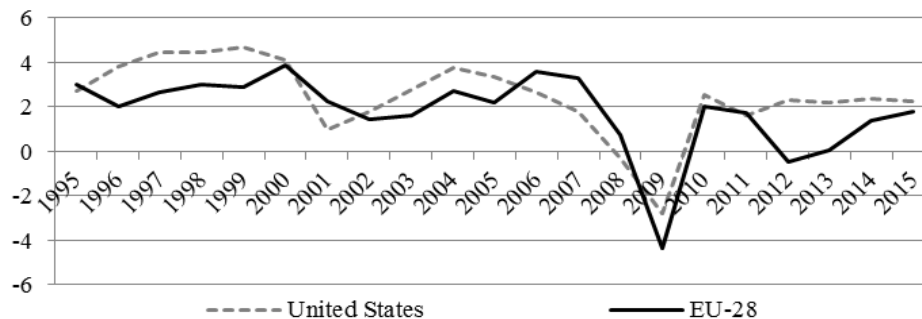
Source: (The Conference Board, 2015).

The role of other internal and external factors influencing the economic growth and structural changes in the EU and its position in the global economic policy was less significant. However, it is possible to point out those which had a positive impact and those which had a negative impact. One combined factor which encouraged economic activity and contributed to economic growth was the progressing liberalization on the EU internal market (Single European Market Project) as well as the multilateral liberalization (implementation of the results of the Uruguay Round). Another positive factor in 1996–2000 was the growing foreign demand, which was an outcome of favourable economic conditions in the United States, China, and the emerging markets. On the other hand, the macroeconomic policy of most European countries was not aimed at economic growth, but focused on fulfilling the criteria for entering the European

Economic and Monetary Union. The goal of the monetary policy was to lower inflation and stabilize the exchange rate, while fiscal policy was focused on reducing budget deficits and public debt. Introducing the common currency and single monetary policy constituted a significant change in the functioning of the economies and market participants. There is one interest rate for the whole euro area, and because of that countries with the highest inflation rates gained access to a cheap money, while countries with low inflation, such as Germany or France, incurred costs leading to falling GDP rates. Thus both countries, aiming to counteract regressive economic tendencies, raised their public expenditures. The policy of the European Central Bank was also too restrictive for Austria and Belgium, leading to the problem of the impossibility to adjust the interest rate to the economic conditions of each country, which was caused not only by the differentiation of inflation rates but also by the lack of sufficient synchronisation of economic cycles. The Monetary Tension Index (MTI) is used to evaluate the adjustment of the optimal EMU interest rate to a country's economic situation. A positive value of MTI means that monetary policy is too restrictive for the economic cycle of a given country, while a negative result points to a loosening of monetary policy and easy access to cheap money, which can cause a credit boom. In the period of 1999-2003 the MTI was negative for Finland, Spain, the Netherlands, Ireland, Portugal and Italy (although in the case of Finland and Italy it was relatively low). Thus real interest rates had pro-cyclical impact, increasing internal demand and inflation in Ireland, the Netherlands, Portugal and Spain (Fernandez & Gonzalez 2004, p. 25; Mucha-Leszko 2007, p. 163–165). A credit boom is dangerous because it leads to a growth in demand, prices, wages, and the unit cost of products, and in consequence to a decrease in competitiveness and rise in the current account deficit. Joining the monetary union brings the risk of rising prices and costs in less advanced euro area economies, which is expressed in the appreciation of the effective exchange rate. This occurred mostly in Spain and Portugal. Giving up its own currency and adopting the euro didn't improve the trade position of Portugal. On the contrary, there was even a further decrease in the comparative advantage, caused by the following factors (Mucha-Leszko & Kąkol 2011, p. 615): 1) diminishing rate of labour productivity; 2) disadvantageous relations between costs and prices; 3) export specialization based on labour-intensive production; 4) high concentration of exports on the EU market (over 70%), where the growth in turnover is much lower than the world economy average; 5) increase in competition on the world market, especially in labour-intensive products, and 6) a drop of international corporations' share in Portuguese exports (from 39% in 2000 to 11% in 2008) as a result of the diminishing attractiveness of Portugal for foreign investors. This diversity of trade competitiveness in the euro area deepened until the financial and economic crisis of 2008–2009, and the slump in the demand and imports contributed to lower trade deficits in the least competitive

countries (Spain, Portugal, Italy, Greece). However such an improvement in trade balance is misleading as the crucial conditions for a lasting improvement are innovativeness and an increase in labour productivity. The largest economic gains in the euro area were realised by those countries with the highest competitive advantage: Germany, Finland, Austria, and Belgium.

Since 2000 the factors of fundamental significance affecting economic processes and the global position of the European Union have been the common currency and effective functioning of the euro area, including implementing a policy of preventing macroeconomic imbalances as well as counterbalancing external conditions, such as the economic situation in the United States and China, state of financial markets and prices of fuels. A decrease in the economic growth rate of the EU took place in 2001 and persisted until 2004. This was the result of the collapse of the technology boom in the United States (fall in ICT stock prices, Standard & Poors 500 and Nasdaq indexes). The terrorist attack in New York on September 11th 2001 also had a negative impact on the US capital market and economy, but it didn't cause the recession, which had been under way since March 2001, as shown by the declining employment. The slowdown in GDP growth in the EU was prolonged – GDP growth didn't surpass 2% until 2004, and grew to over 3% in 2006–2007 (see Chart 5). The economic recovery was weakened by rising oil prices, stagnation of merchandise exports (intra and extra EU) (WTO 2011, p. 12–17), and the low growth rate of individual consumption (European Commission, 2004, p. 32–33). The small increase in employment and wages, the rise in unemployment rates and the growing savings propensity caused by the reform of social security systems (European Commission, 2004, p. 32–33) were barriers to growth of consumption, while investment was mainly hindered by high oil prices and increasing production costs. The decrease in the GDP growth rate in the European Union preceding the recession started from the second quarter of 2008 and in the fourth quarter the rate of GDP growth was already negative, and dropped to –4.3% in 2009 (European Commission, 2013, p. 112). In 2010–2011, in many EU countries there has been a restoration of economic prosperity and the average GDP growth rate has remained at around 2%. Countries that have achieved high GDP growth rates include: Sweden (6.6%, 2.9%), Slovakia (4.4%, 3.0%), Germany (4.0%, 3.3%), Poland (3.9%, 4.5%) and Estonia (2.6%, 8.6%) (European Commission, 2014, p. 134). However, the recovery turned out to be unstable and in 2012 the GDP rate of the EU-28 has again fell below zero (by 0.5%), with a large divergence of economic situations in the member countries.

Chart 5. Real GDP growth (annual average, in %)

Source: (The Conference Board, 2015).

In assessing the growth prospects of the European Union in the global dimension we cannot overlook an important factor in its contemporary stage of development, which is the situation in public finances. Stimulation of demand in order to reduce the effects of 2008–2009 financial and economic crisis has been agreed upon at the international level.

The necessity for an expansionary fiscal policy has been recognized by the group of G-20 countries, to avoid threats such as loss of jobs by millions of people and deepening economic recession. The debt crisis has become not just the European Union's problem, but also that of the majority of OECD countries, especially the United States and Japan. In the euro area, public debt in 2009 has doubled compared to 1979.

The increase in debt and debt servicing costs has a negative impact on GDP growth, which is why fiscal consolidation is an essential condition for regaining full capacity for the economic growth in countries with high debt, and as its consequence the lower effectiveness of fiscal policy.

Table 2 shows the public debt in the EU and selected member states, the euro area, the US and Japan in the years 2009 to 2014 and the forecast for 2015 and 2016.

The average debt level (as a % of GDP) in the EU has increased from 73% in 2009 to 88.6% in 2014, but in subsequent years the debt is expected to decline. Among the EU member states, the most indebted country is Greece (177.1% of GDP in 2014, the debt having increased by 50.3 percentage points in the period 2009–2014) and its debt is expected to grow. The problem of high debt (above 100% of GDP in 2014) also concerns Italy, Portugal, Ireland and Belgium. The Central and Eastern European countries fare relatively better compared with this group, especially Poland and Slovakia, while Hungary is the only country among those presented in Table 2 where the level of debt decreased (by 1.3 percentage points) in the period 2009–2014.

Table 2. General government consolidated gross debt (% of GDP)

Country	2009	2010	2011	2012	2013	2014	2015	2016	Change from 2009 to 2014 (percentage points)
EU	73.0	78.5	81.4	85.1	87.3	88.6	88.0	86.9	15.5
Euro area	78.4	83.9	86.5	91.1	93.2	94.2	94.0	92.5	15.9
Belgium	99.2	99.5	102.0	103.8	104.4	106.5	106.5	106.4	7.3
Germany	72.6	80.5	77.9	79.3	77.1	74.7	71.5	68.2	2.1
Ireland	62.3	87.4	111.2	121.7	123.2	109.7	107.1	103.8	47.4
Greece	126.8	146.0	171.3	156.9	175.0	177.1	180.2	173.5	50.3
Spain	52.7	60.1	69.2	84.4	92.1	97.7	100.4	101.4	45.0
France	79.0	81.7	85.2	89.6	92.3	95.0	96.4	97.0	16.0
Italy	112.5	115.3	116.4	123.1	128.5	132.1	133.1	130.6	19.6
Hungary	78.2	80.9	81.0	78.5	77.3	76.9	75.0	73.5	-1.3
Netherlands	56.5	59.0	61.3	66.5	68.6	68.8	69.9	68.9	12.3
Poland	49.8	53.6	54.8	54.4	55.7	50.1	50.9	50.8	0.3
Portugal	83.6	96.2	111.1	125.8	129.7	130.2	124.4	123.0	46.6
Slovakia	36.0	40.9	43.4	52.1	54.6	53.6	53.4	53.5	17.6
Sweden	40.3	36.8	36.2	36.6	38.7	43.9	44.2	43.4	3.6
UK	65.8	76.4	81.8	85.8	87.3	89.4	89.9	90.1	23.6
USA	86.0	94.8	99.1	102.9	104.7	104.8	104.9	104.7	18.7
Japan	210.2	216.0	229.8	236.7	243.2	247.0	250.8	251.9	36.8

Source: (AMECO, 2015).

For years, the high level of debt has been a serious problem in Japan, where debt levels rose from 210% of GDP in 2009 to almost 250% in 2014. In the US, the debt has also been growing and in 2012 exceeded 100% of GDP.

It can be seen that public debt in the EU is low compared to its major competitors (the US and Japan), but the problem in the EU is not the high level of debt but the considerable differences across member states. The EU average debt is raised by countries such as Greece, Italy, Portugal, Ireland, Cyprus, Belgium, Spain, France and the United Kingdom (above the EU average in 2014). However, the condition of public finances in the largest EU economies is better than in the US.

Table 3. General government net lending or net borrowing (budget balance, % of GDP)

Country	2009	2010	2011	2012	2013	2014	2015	2016
EU	NA	NA	-4.5	-4.2	-3.2	-2.9	-2.5	-2.0
Euro area	-6.2	-6.1	-4.1	-3.6	-2.9	-2.4	-2.0	-1.7
Belgium	-5.5	-4.0	-4.1	-4.1	-2.9	-3.2	-2.6	-2.4
Germany	-3.0	-4.1	-0.9	0.1	0.1	0.7	0.6	0.5
Ireland	-13.9	-32.5	-12.7	-8.1	-5.8	-4.1	-2.8	-2.9
Greece	-15.3	-11.1	-10.2	-8.7	-12.3	-3.5	-2.1	-2.2
Spain	-11.0	-9.4	-9.4	-10.3	-6.8	-5.8	-4.5	-3.5
France	-7.2	-6.8	-5.1	-4.8	-4.1	-4.0	-3.8	-3.5
Italy	-5.3	-4.2	-3.5	-3.0	-2.9	-3.0	-2.6	-2.0
Hungary	-4.6	-4.5	-5.5	-2.3	-2.5	-2.6	-2.5	-2.2
Netherlands	-5.5	-5.0	-4.3	-4.0	-2.3	-2.3	-1.7	-1.2
Poland	-7.3	-7.6	-4.9	-3.7	-4.0	-3.2	-2.8	-2.6
Portugal	-9.8	-11.2	-7.4	-5.6	-4.8	-4.5	-3.1	-2.8
Slovakia	-7.9	-7.5	-4.1	-4.2	-2.6	-2.9	-2.7	-2.5
Sweden	-0.7	0.0	-0.1	-0.9	-1.4	-1.9	-1.5	-1.0
UK	-10.8	-9.7	-7.6	-8.3	-5.7	-5.7	-4.5	-3.1
USA	-12.7	-12.0	-10.6	-8.9	-5.6	-4.9	-4.2	-3.8
Japan	-8.8	-8.3	-8.8	-8.7	-8.5	-7.8	-7.1	-6.5

Source: (AMECO, 2015).

A factor which buffers the problem of high public debt is a significant improvement in the budget balance (Table 3). The EU average has met the Maastricht criterion – the budget deficit has fallen below 3% of GDP (in the US it was 4.9% of GDP and in Japan - 7.8%) and the budget was close to balance in the following EU member states: Denmark (surplus of 1.2% of GDP), Germany (0.7%), Estonia (0.6%), Luxembourg (0.6%), Lithuania (deficit -0.7%), Latvia (-1.4%), Romania (-1.5%), Sweden (-1.9%).

4. Selected economic growth forecasts for the period up to 2025

The OECD, the European Commission and the National Intelligence Council (US) forecast that economic growth during the next 30 years and by 2060 will occur under the following conditions (Mucha-Leszko 2013, p. 435–436): 1) ab increasing demand for energy; 2) intensive urbanization in areas of high GDP growth, mainly in Asia and Africa; 3) the growing importance of the middle class and its impact on the global demand; 4) the aging of the population of European countries; 5) higher economic growth in non-OECD countries, but the range of growth rates between

this group and the OECD countries will decrease; 6) large differences between countries will persist in terms of income and standard of living; 7) the multipolarity of economic forces will deepen due to the rise in significance of China, India, Indonesia, South Korea, Brazil, Mexico, South Africa, Nigeria, and Turkey; 8) the United States and Europe will remain important in the system of the major centres of the world economy due to their high share in the global GDP and international trade, and because of the power of their corporations and investments; and 9), there are concerns whether the multilateralism and multipolarity of the world economy will be adequately balanced by the development of global governance. The fundamental question from the point of view of Europe's position pertains to the future of the European Union and the economic efficiency of this group of countries, as well as the degree of centralization of economic policy and decision-making. Progress in the federalization of the EU is an important condition for the strengthening of its position as a global economic centre. In view of the anticipated growing demand for energy, the common energy policy of the European Union is particularly important. However, the crucial issue is the removal of all barriers to free competition within the EU internal market, as they reduce the benefits of market integration, in particular the efficiency of the common market as a lever to reinforce competitive advantage in a global dimension.

Forecasts of long-term economic growth are developed on the basis of the assessment of growth opportunities arising from the resources, the quality of the labour force, the abilities to raising capital, and the technological base. Long-term growth paths are affected by supply and demand shocks. Depending on their strength, the deviation of the real economic growth rate from the potential one may be large. Such a situation occurred as a result of the deep recession in the period 2008–2009, which makes the projection of a long-term growth trend more difficult.

In Table 4 we present medium-term forecasts of GDP growth and the contribution of the following factors of growth: quantity of labour; **quality of labour** (depending on the level of qualifications); and the input of capital services and TFP for selected developed countries and the rapidly growing large developing economies. Within the group of five developed countries, the United States (1.1%) and Germany (0.8%) had the highest average annual GDP growth rate in 2008–2014. The economic gap (with respect to the leaders as well as the deviation of real from potential growth) widened in the **United Kingdom, France and Japan**. In the second group of dynamically developing countries (emerging economies), the highest positive deviation from the growth trend incurred in China and India. The economic gap in relation to the developed countries shrank in Argentina, Brazil, and the Russian Federation. GDP growth forecasts for the years 20142–2019 are best for Germany and the **US from the first group, and** in the second group China and India will remain leaders of growth, but their average

GDP growth rate will fall to 5.5%. Brazil is expected to remain on a growth path, maintaining an annual average GDP growth rate of 3.1%, while in Argentina the growth rate will slightly decrease and a small increase in economic growth is expected in Russia. In the next period – from 2020–2025 – the United States and the UK are expected to maintain the highest average annual growth rate (1.9%); the growth rate will remain low in France and Germany (1.3%); while it will fall from 1.4% to 1.1% in Japan. The downward trend in GDP growth will deepen in the second group of countries (except India), from 3.9% in China to about 3% Brazil, 2.0% in Argentina and 1.0% in the Russian Federation. The demographic factor will have the greatest impact on reducing the rate of economic growth in Germany, Japan, Russia and China.

Table 4. Projection of the GDP growth trend and its components (%)

Country	Average growth 2008–2014	Average annual growth 2015–2019 (projected trend growth adjusted for output gaps)				Average annual growth 2020–2025 (projected trend growth)					
		GDP	Labor Quantity	Labor Quality	Capital Services	TFP	GDP	Labor Quantity	Labor Quality	Capital Services	TFP
USA	1.1	2.4	0.5	0.2	1.6	0.2	1.9	0.2	0.1	1.4	0.1
France	0.2	1.8	0.3	0.2	1.1	0.2	1.3	0.1	0.2	0.8	0.3
Germany	0.8	1.6	-0.2	0.1	1.1	0.6	1.3	-0.6	0.1	1.0	0.7
UK	0.2	2.2	0.4	0.2	1.4	0.3	1.9	0.1	0.1	1.2	0.4
Japan	0.2	1.4	-0.3	0.2	0.8	0.8	1.1	-0.3	0.1	0.6	0.7
China	8.7	5.5	0.0	0.1	4.2	1.2	3.9	-0.1	0.0	3.3	0.7
India	6.6	5.5	0.7	0.1	3.6	1.0	5.0	0.6	0.1	3.4	0.8
Argentina	1.8	1.4	0.3	0.1	1.2	-0.2	2.0	0.4	0.1	1.5	0.0
Brazil	2.7	3.1	0.6	0.2	1.4	0.9	3.1	0.4	0.2	1.2	1.2
Russian Federation	1.5	1.7	-0.7	0.3	1.1	1.0	1.0	-0.6	0.2	0.7	0.8

Source: Erumban & Vries, 2014, p. 19–20.

5. Conclusions

The conducted analysis shows that the development of ICT and the intense globalization of economic processes have contributed to a greater diversity of GDP growth rates and changes in the ranking of the major powers in the global economy.

China has become the new economic centre, and the economic importance of India and other Asian countries has been growing. On the other hand, the technological and economic gap between the European Union and the United States has widened. The increasing polarization of world economic powers and low GDP growth in the European Union weakens its chances of maintaining its position of the second centre of the world economy. Economic growth forecasts to 2025 indicate a widening of the economic gap between the largest EU countries and the US. This also applies to the economic leader of the EU – Germany – which will incur population losses.

On the other hand, the lower public debt and debt servicing costs in the EU, compared to the US and Japan, should stimulate better growth prospects and strengthen EU's position as the global economic power.

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Streszczenie

UNIA EUROPEJSKA JAKO GLOBALNA SIŁA GOSPODARCZA

Celem artykułu jest ocena pozycji gospodarczej Unii Europejskiej w latach 1995–2014 oraz perspektyw wzrostu do 2025 roku w wymiarze globalnym. Przedmiotem analizy są realne i prognozowane dane zawierające: stopę wzrostu PKB, główne czynniki wzrostu (nakłady pracy, wydajność pracy i TFP) oraz ich wkład do wzrostu PKB, a także dane

prezentujące stan finansów publicznych (deficyt budżetowy i dług publiczny). Analiza została przeprowadzona dla okresów 1995–2014 oraz 2015–2025. Główne wnioski są następujące: 1) luka technologiczna i gospodarcza między Unią Europejską i Stanami Zjednoczonymi pogłębia się, 2) rosnąca polaryzacja światowych potęg gospodarczych i niski wzrost PKB w Unii Europejskiej ogranicza jej szanse utrzymania pozycji drugiego centrum gospodarki światowej, 3) lepsza sytuacja w dziedzinie finansów publicznych w Unii Europejskiej ogółem w porównaniu do USA jest czynnikiem poprawiającym perspektywy wzrostu krajów europejskich, jednak są kraje, których przyszłość stoi pod znakiem zapytania ze względu na drastycznie złą sytuację w dziedzinie finansów publicznych, takie jak: Grecja, Włochy, Portugalia czy Irlandia, 4) prognozy wzrostu gospodarczego wskazują, że luki gospodarcze pomiędzy największymi krajami UE i USA nadal będą się pogłębiały.

Słowa kluczowe: Unia Europejska, wzrost gospodarczy, produktywność, pozycja globalna