Theoretical and Applied Economics
Volume XXVI (2019), No. 4(621), Winter, pp. 5-18

Expanding the Eurozone. The stage of economic convergence for Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania

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Abstract. *Before the economic crisis started in 2009, joining the Eurozone was mainly conditioned by meeting the nominal convergence criteria. Because of the problems faced by the Eurozone member states during the crisis, the European institutions implemented a series of measures aimed at increasing the resilience of the Eurozone, and thus the conditions for new candidates became more and more difficult. Gradually, they imposed conditions related to reaching a high level of real convergence, maintaining macroeconomic balance, and, more recently, joining the Banking Union, at the same time as joining the Exchange Rate Mechanism II. The sustainability of the nominal convergence criteria depends on a high level of real convergence and on sound macroeconomic indicators that would not generate macroeconomic imbalance. Based on the above, this paper touches on these aspects for the following six European Union member states, which stand to adopt the euro: Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania.*

Keywords: Convergence criteria, Euro area, GDP per capita, Romania, CESEE EU Member States.

JEL Classification: E60, F15, F36, F43, O40.

1. Introduction

The idea of using a single European currency by all European Economic Community countries and creating a European Central Bank was born in April 1989, by approving the Delors Plan. After the Madrid Summit in December 1995, it was established that the single European currency be named "euro".

In February 7, 1992, the Maastricht Treaty was approved, and it entered into force on November 1, 1993. The Treaty foresaw the creation of the European Union (EU), the Economic and Monetary Union, i.e. the Eurozone, by all member states using a single European currency, as well as the necessary convergence criteria for adopting the euro.

On January 1, 1999, 11 EU member states – Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain – adopted the euro, but it was used as a virtual currency for payment operations, while the national currencies were still being used for cash payments. Starting January 1, 2002, the euro was also introduced as bills and coins, thus replacing the old national currencies. Two European Union member states, Denmark and the United Kingdom went for an "opt-out clause" from adopting the euro.

Expanding the Eurozone started on January 1, 2001, with Greece joining, and it continued with the joining of Slovenia (2007), Malta (2008), Cyprus (2008), Slovakia (2009), Estonia (2011), Latvia (2014) and Lithuania (2015).

Currently, the euro is the national currency of 19 European states, and it stands to be adopted by the other seven states: Bulgaria, Czech Republic, Croatia, Hungary, Poland, Romania and Sweden.

This paper concentrates on the future expansion of the Eurozone, by analyzing the way in which the European Union member states who stand to adopt the euro meet the nominal, legal and real convergence criteria. The economic crisis was a cold shower for the Economic and Monetary Union, which determined its' strengthening, by new rules and supervisory mechanisms, and by coordinating the economic policies of the Eurozone.

2. The problems met by the Eurozone and the measures implemented for its consolidation

There are different opinions within the Eurozone about economic policies and future reforms. The Southern European countries, such as France, Italy, Greece, Spain, Portugal, Cyprus, Malta, want a more flexible budget policy and risk sharing by tax transfers between the Eurozone states. On the other hand, Central and Northern countries, Germany, Austria, the Netherlands, Finland, Slovakia, are relying on following tax regulations, promoting structural reforms and risk mitigation (Tokarski and Funk, 2019, p. 4).

The Eurozone benefitted from a favorable global economic context during the first decade of its existence, when most EU member states dearly wanted to adopt the euro, without considering the high differences between their national economic structures and their stages of development, compared to most Eurozone member states, which were highly developed. It was also during this time that many of the Eurozone founding member states, including

Germany, Italy and France, did not abide by some nominal convergence criteria. At the end of 2003, Germany had a budget deficit of 4.2% of the GDP, Italy had 3.3% of the GDP and France had a 4% of the GDP, which were over the threshold of 3% of GDP, provisioned in the Maastricht Treaty.

The economic crisis revealed these irregularities, which led to an explosion of public debt for some Eurozone member states, and an increase in unemployment rates, which imposed the adoption of new regulations and treaties for improving the institutional framework of the Economic and Monetary Union.

During the economic crisis, the European Union took a series of legislative measures which led to consolidating the *Stability and Growth Pact* and issuing the *Macroeconomic Imbalance Procedure*. The Macroeconomic Imbalance Procedure's purpose is the early detection and correction of excessive macroeconomic imbalance, and the analysis is made based on economic indicators included on a Scoreboard. Thus in the *Convergence Report* from May 2012, the European Central Bank has first analyzed and presented the situation of economic indicators on the Macroeconomic imbalance procedure scoreboard, for EU member states who are candidates for joining the Eurozone. The European Central Bank mentions that "EU Member States with a derogation that are subject to an Excessive Imbalance Procedure can hardly be considered as having achieved a high degree of sustainable convergence as stipulated by Article 140(1) of the Treaty" (European Central Bank, 2012, p. 18).

Finalizing the Banking Union represents one of the major reform projects for the Eurozone, in order to increase its resilience. This project began in 2012, as a response to the effects of the economic and financial crisis in Europe. The Single Supervisory Mechanism is one of the finalized pillars of the Banking Union, and participating in this mechanism is compulsory for all Eurozone member states.

Lately, the European Union institutions recommend Eurozone candidate states to participate in the Single Supervisory Mechanism at the same time as they enter the Exchange Rate Mechanism II, upon joining the Eurozone.

3. Expanding the Eurozone

Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania are European Union member states with "derogation" from adopting the euro. According to the Treaty on the functioning of the European Union, these states will adopt the euro only after they sustainably meet the nominal convergence criteria as foreseen in article 140 and after they harmonize their national laws with the European ones, according to articles 130 and 131.

The nominal convergence criteria are price stability, soundness of public finances, long-term interest rates and exchange rate stability, by having the national currency participate in the Exchange Rate Mechanism II (ERM II) for a minimum of 2 years.

Legal convergence refers to the harmonization of law as regards the central bank activity, banning monetary financing and privileged access of the public sector to financial institutions.

Nominal convergence is evaluated by the European Commission and the European Central Bank once every two years (or faster, if the analyzed state requests it), by drawing up a convergence report to be presented to the Council.

Accessing the Eurozone will be more difficult for the seven EU states outside the euro area, compared to the states who adopted the euro before the economic crisis start in 2009, whose entrance was mainly based on meeting the nominal convergence criteria. During the last decade, the European Commission and the European Central Bank present and analyze not only the evolution of nominal convergence, but also real convergence, and economic indicators which can create macroeconomic imbalance.

Because of the financial problems of some of the Eurozone states, such as Greece, but also because of the corruption scandals within the Central Bank of Slovenia (Euobserver article from July 7, 2016), European institutions and Eurozone member states have become very precautious with regards to expanding the Eurozone. Moreover, the effects of the economic crisis have curbed the enthusiasm of the candidate states, and they set their target dates for adopting the euro as late as possible.

Czech Republic, Hungary and Poland have not yet set a date for adopting the euro. Through the *Substantiation report of the national plan to adopt the euro*, Romania has set 2024 as the target date. Bulgaria and Croatia have shown their intention to enter the Exchange Rate Mechanism II (ERM II) as soon as possible.

According to the Eurobarometer of the European Commission no. 465 of May 2018, the euro currency is highly appreciated by the Romanian citizens, as 69% agree to adopt the euro. In Hungary, 59% of the surveyed citizens agree to move to the euro, in Bulgaria 51%, in Poland 48%, in Croatia 47% and in Czech Republic, only 33%.

These wishes of the citizens play an important role in political decisions. Thus, Czech Republic, Hungary and Poland are in no hurry to adopt the euro any time soon.

The high support of the euro amongst the citizens of the majority of candidate states should represent an important factor in accelerating the reforms made by the national institutions, in order to successfully adopt the euro.

When it comes to adopting the euro, most citizens are concerned with a possible increase in the price of goods and services. According to Eurostat estimations, as a result of a adopting the euro, for the latest states to join the Eurozone (Slovenia, Slovakia, Estonia, Latvia and Lithuania), the increase in prices was under 0.3 percent points.

Adopting the euro will bring a series of advantages for new member states, such as eliminating exchange rate risk, a reduction in interest rates, a better financial and macroeconomic stability, etc. Based on the reduction in interest rates and introducing a more stable currency such as the euro, an increase in investments is expected, including direct foreign investments in the new euro states. In order to benefit from all of these advantages, it is necessary that the country reaches a high and sustainable nominal and real convergence before joining the Eurozone, and also maintaining them after accession.

Adopting the euro will increase the resilience of the national financial sector, and in the event of a national financial crisis, the new member states will have access to the European Stability Mechanism, through which they could receive financial assistance.

The costs of joining the Eurozone include a possible slight, negligible, increase in prices, logistics expenses related to changing the national currency, the financial contribution of new states to the European Stability Mechanism, the Single Resolution Fund, paying a participation fee at the European Central Bank subscribed capital etc.

4. The analysis of the nominal convergence criteria and of the economic situation of the six Eurozone candidate states

According to the European Central Bank 2018 Convergence Report, at the time of the analysis, the legislation of five out of the six states analyzed in this paper – Bulgaria, Czech Republic, Hungary, Poland and Romania – did not fully meet the requirements related to the independence of the central bank and of its integration in the Eurosystem, as well as the interdiction of monetary financing. Within the European Semester of 2018, of the European Commission, Croatia is mentioned as the only Eurozone candidate country whose legal framework is completely compatible with the European one.

By the end of 2018, none of the 6 states analyzed had met the nominal convergence criteria. The criterion related to the stability of the exchange rate is not met by any of these states, because they have to yet enter the Exchange Rate Mechanism II.

The criterion related to maintaining the budget deficit under 3% of the GDP was met by all six states, Croatia, Czech Republic and Bulgaria even registering budget surplus. Croatia and Hungary have public debt of 74.6% and 70.8% of GDP respectively, and they are the only Eurozone candidate states with a public debt of over 60% of GDP. The criterion regarding price stability has not been met by Bulgaria, Hungary and Romania; the criterion regarding long-term interest rates has not been met by Poland and Romania.

Table 1. *The level of meeting nominal convergence criteria, except the criterion on the stability of the exchange rate, for Bulgaria, Czech Republic, Croatia, Hungary and Romania in 2018*

Country/Indicators	Inflation Rate HICP (%, annual average)	Long-term interest rates (% per year, annual average)	General Budget Deficit/Surplus (ESA, % of GDP)	Public Debt (ESA, % of GDP)
Bulgaria	2.6 criterion: < 2.2	0.89 criterion: < 3.19	+2.0 criterion: ≥ -3	22.6 criterion: ≤ 60
Czech Republic	2.0 criterion: < 2.2	1.98 criterion: < 3.19	+0.9 criterion: ≥ -3	32.7 criterion: ≤ 60
Croatia	1.6 criterion: < 2.2	2.17 criterion: < 3.19	+0.2 criterion: ≥ -3	74.6 criterion: ≤ 60
Hungary	2.9 criterion: < 2.2	3.06 criterion < 3.19	-2.2 criterion: ≥ -3	70.8 criterion: ≤ 60
Poland	1.2 criterion: < 2.2	3.20 criterion: < 3.19	-0.4 criterion: ≥ -3	48.9 criterion: ≤ 60
Romania	4.1 criterion: < 2.2	4.69 criterion: < 3.19	-3.0 criterion: ≥ -3	35.0 criterion: ≤ 60

Note: The average annual inflation rate of the top 3 highest performing EU states as regards price stability (Ireland, Denmark, Cyprus) is 0.7% for 2018, and the average long-term interest rate in the 3 states is 3.19%.
Source: Eurostat.

Hungary and Romania did not meet their medium-term budgetary objective, as they registered an estimated structural deficit of 2.3% and 2.7% of GDP respectively, which is a lot over the threshold of 1% from the Stability and Growth Pact.

In order to coordinate the economic processes of the member states, the Macroeconomic Imbalance Procedure (MIB) was introduced. Its purpose is the early detection of macroeconomic imbalance within one member state, which may have negative effects on the economies of other member states. In order to detect the generating factors, the MIB Scoreboard is used – it contains a set of economic indicators.

Bulgaria and Croatia are dealing with macroeconomic imbalance, and they are subjected to a new analysis by the European Commission, within the Alert Mechanism Report of 2018.

Czech Republic, Poland, Romania and Hungary are not facing major macroeconomic imbalance, and they are not the object of an analysis within the Alert Mechanism Report of 2018.

Table 2. *The Scoreboard for the supervision of macroeconomic imbalance in Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania in 2017 and 2018*

	Indicator Criterion	Years	Bulgaria	Czech Republic	Croatia	Hungary	Poland	Romania
Current account balance - 3 year average (% of GDP)	between -4% and 6%	2017	1.9	1.2	3.6	3.9	-0.3	-2.2
		2018	3.4	1.2	3.0	3.1	-0.4	-3.3
Net international investment position - annual data (% of GDP)	minimum -35%	2017	-44.7	-25.0	-62.4	-53.0	-61.0	-47.8
		2018	-36.8	-23.6	-54.1	-46.8	-55.6	-44.7
Real effective exchange rate based on HICP - Percentage change (t/t-3)	±5% (EA); ±11% (non-EA)	2017	-3.3	5.3	-0.1	0.0	-3.5	-5.6
		2018	4.1	11.0	4.1	2.0	0.1	-0.6
Export market shares - 5 years % change	minimum -6%	2017	19.0	8.7	19.6	11.1	28.1	36.6
		2018	10.5	12.1	18.5	9.2	25.4	23.1
Nominal unit labour cost - 3 years % change	maximum +9% (EA); +12% (non-EA)	2017	13.6	5.9	-4.3	6.7	4.2	13.5
		2018	13.5	13.4	:	16.8	7.8	33.5
House price index, deflated - annual average rate of change (%)	maximum 6%	2017	6.2	9.1	2.8	3.3	1.7	3.3
		2018	3.9	5.3	4.8	6.2	4.9	1.8
Unemployment rate - 3 year average (%)	maximum 10%	2017	7.7	4.0	13.5	5.4	6.2	5.9
		2018	6.3	3.0	11.0	4.3	5.0	5.0
General government gross deb - annual data (% of GDP)	maximum 60%	2017	100.1	67.4	98.2	71.6	76.4	51.0
		2018	:	:	:	70.8	76.0	48.1
Private sector debt - annual data (% of GDP)	maximum 133%	2017	25.6	34.7	77.8	73.4	50.6	35.2
		2018	22.6	32.7	74.6	70.8	48.9	35.0

: – unavailable data.
Source: Eurostat.

With the exception of Czech Republic, the indicator regarding the net international investment position is under the reference threshold of -35% of GDP, recommended within the *Macroeconomic Imbalance Procedure*.

In 2018, out of the six Eurozone candidate states, the Czech Republic had the lowest unemployment rate, 3%, while Croatia had the highest, 11%. It is worth mentioning that there are several Eurozone states who have high unemployment rates at the end of 2018, Greece having a level of 18.6%, Spain 14.5% and Italy 10.8%.

In 2018, the highest employment rate of the population aged between 15 and 64 years old was that of Czech Republic, with 75.4%, while Croatia was the lowest, at 60.6%.

In order for the European Central Bank's policy to act in the same way for all economies in the Eurozone, it is necessary that the national economy structures be as similar as possible and there should also be a synchronicity of the economic cycles.

The economic structures of the six states are different from the ones in the strong Eurozone states; for instance, the Czech industry weighs more in the GDP than the Eurozone average, and the Romanian agriculture has a larger weight than that of Eurozone states. There is also an improper alignment of economic cycles in candidate states with the economic cycles of Eurozone states, which may lead to asymmetric shocks.

For Croatia, according to the information included in its own euro adopting strategy, losing their monetary policy will not have a very high cost, due to the high level of deposits and loans granted in euros; Croatia also has an economic cycle which is synchronized with the Eurozone states. As a small country, with a large economic opening, Croatia will find it easier to give up its own monetary policy, because its financial conditions are mainly influenced by external factors.

As regards banking, Croatia has the highest degree of euroisation of the six Eurozone candidate states. At the end of 2016, 58.1% of Croatian banking loans were granted in euros, while 59.4% of all banking deposits were in euros.

Table 3. *The weight of loans and deposits granted in euros out of the total number of loans and deposits in Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania, at the end of 2016*

	Outstanding amounts of euro- denominated loans (in EUR millions)	As percentage of total Loans (%)	Outstanding amounts of euro-denominated deposits (in EUR millions)	As percentage of total Deposits (%)
Bulgaria	11,159	42.9	11,109	31.9
Croatia	15,974	58.1	19,876	56.7
Czech Republic	11,957	12.3	8,930	7.2
Hungary	8,159	19.8	9,725	18.3
Poland	25,644	10.8	17,346	7.1
Romania	18,816	38.8	16,006	26,5

Source: European Central Bank (2017), The International role of the euro, July 2017.

5. The Exchange Rate Mechanism II and participating in the Banking Union

Before joining the Eurozone, a candidate state will have to participate in the Exchange Rate Mechanism II (ERM II) for at least 2 years, and the euro exchange rate will have to fluctuate within a margin of maximum ±15% or even within a smaller interval, if the responsible parties establish it.

Before joining ERM II, the respective state will have to reach not only a high level of sustainable nominal convergence, but also a high degree of real convergence, of GDP per capita in purchasing power standards. There will be a negotiation process between the state who requests participation in ERM II, who will be represented by its Government and its Central Bank, and the European institutions and the Eurozone member states. The negotiations will be conducted based on setting the central parity of the national currency against the euro, the fluctuation margins, as well as on the participation of the candidate state in the Banking Union, by joining the Single Supervisory Mechanism. From the experience of the most recent states, we could observe that the negotiation process can last from several days to several months.

The states will have to undergo preparation for joining the Banking Union and to sign an agreement taking it upon themselves to update their legal framework with new tax regulations (Government of the Republic of Croatia; Croatian National Bank, 2018, p. 10).

Before joining the Single Supervisory Mechanism, ECB will request an evaluation of all commercial banks in the candidate states, which will include an inspection of bank assets and their shock resilience.

As a result of participating in the Single Supervisory Mechanism, certain commercial banks considered of systemic importance (a minimum of 3 commercial banks) will be supervised directly by the ECB. The rest of commercial banks will continue to be supervised by competent national authorities.

On June 29, 2018, Bulgaria sent a common letter from the Bulgarian Ministry of Finance and the Bulgarian National Bank to express their intention to participate in Exchange Rate Mechanism II and the Banking Union starting July 2019. On July 24, 2018, the President of the Eurogroup issued an answer mentioning that approximately a year after Bulgaria submitted their request, the ECB would finalize their evaluation of the cooperation with the National Bank of Bulgaria, of Bulgaria's participation in the Single Supervisory Mechanism, and the Single Resolution Mechanism (including the Single Resolution Fund). Also, the recommendation is for Bulgaria to improve their legal framework on the corporate governance of state owned enterprises. Bulgaria should also apply the recommendations of the Commission of the Cooperation and Verification Mechanism for judicial reform and the fight against corruption, which would lead to the stability and integrity of the financial system.

According to Bulgaria's Convergence Program 2019-2022, in order to participate in ERM II and in the Banking Union implicitly, in 2018, the National Bank of Bulgaria started preparing the modification of the legal framework.

The legal changes include establishing a close cooperation between the European Central Bank and the National Bank of Bulgaria, delegating certain competences to the ECB and extending the National Bank of Bulgaria's competences as regards macro prudential supervision of credit institutions. In view of joining the Single Supervisory Mechanism (part of the Banking Union), as Bulgaria joined the ERM II, they modified the Credit Institutions Law and the Law of the National Bank of Bulgaria (Ministry of Finance of Bulgaria, 2019, p. 21).

On July 4th, 2019, it was Croatia's turn to send a letter to the European institutions and to the ministries of finance of the Eurozone states and of Denmark, to request their accord to participate in the Exchange Rate Mechanism II.

Through the document titled "The Euro Adoption Strategy of the Republic of Croatia", Croatia manifests their availability to participate in the Exchange Rate Mechanism II, in view of adopting the euro.

"Strategy for the adoption of the euro in the Republic of Croatia" presents the economic and political determining factors in order to meet the criteria for joining the Eurozone, but it does not mention a target date for Croatia's adoption of the euro.

The document titled "Assessment of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area", elaborated by the Czech Ministry of Finance and the Czech National Bank, recommends that Czech Republic does not yet set a target date for joining the Eurozone and does not yet participate in the ERM II. The reasons shown are the necessity for finalizing Czech Republic's process of real convergence with the Eurozone average, the existence of a large gap between prices and wages in Czech Republic and the average levels of the Eurozone, the differences between the Czech economy structure and the Eurozone economies. Moreover, the ongoing changes in Eurozone institutions and regulations make it so that the Czech Republic cannot currently evaluate the obligations they will have to undertake after joining the Eurozone.

As the other Eurozone candidate states, the Czech Republic have established a Single Resolution Fund, whose capital is formed of the contributions of all commercial banks in Czech Republic. Thus, upon joining the Eurozone, or maybe even upon participating in the Exchange Rate Mechanism II, the contributions will be transferred in the Single Resolution Fund, as part of the Banking Union established at Eurozone level.

It is expected that in 2022, Romania will request to participate in the Exchange Rate Mechanism II, since the *Substantiation report of the national plan to adopt the euro* sets 2024 as Romania's target date for adopting the euro.

Poland and Hungary aren't going to adopt the euro in the foreseeable future, as neither has yet set a target date for joining the Eurozone, nor have they announced their intention to take part in the Exchange Rate Mechanism II.

Currently, none of the six analyzed states participate in the ERM II. Thus, we have made a simulation of the fluctuations of the national currencies of Czech Republic, Croatia, Hungary, Poland and Romania, from January 2017 to December 2018 (the minimum 2 year period for participating in ERM II), against the central parity of national currencies, which we have hypothetically considered as the arithmetic average of the national exchange rate for the euro in December 2016, the month preceding the analyzed period. This analysis does not include the *leva* (Bulgaria's national currency), as Bulgaria has a fixed exchange rate with the euro, set at 1.95583 BGN/EUR.

Table 4. *The exchange rate for the euro in Czech Republic, Croatia, Poland, Hungary and Romania, from January 2017 to December 2018, compared to the average registered in December 2016 (%)*

	Czech Republic	Croatia	Hungary	Poland	Romania
Euro exchange rate (percentage appreciation(+)/depreciation(-) over 2 years)	+7.30/-0.10 criterion: ±15%	+2.19/-0.50 criterion: ±15%	+2.93/-5.33 criterion: ±15%	+7.09/+0.53 criterion: ±15%	+0.61/-3.34 criterion: ±15%

Note: the deviation of the national currencies/euro exchange rates during 2017-2018, compared to the average of December 2016; Bulgaria's currency has not been included, because it has a fixed euro exchange rate.
Source: European Central Bank.

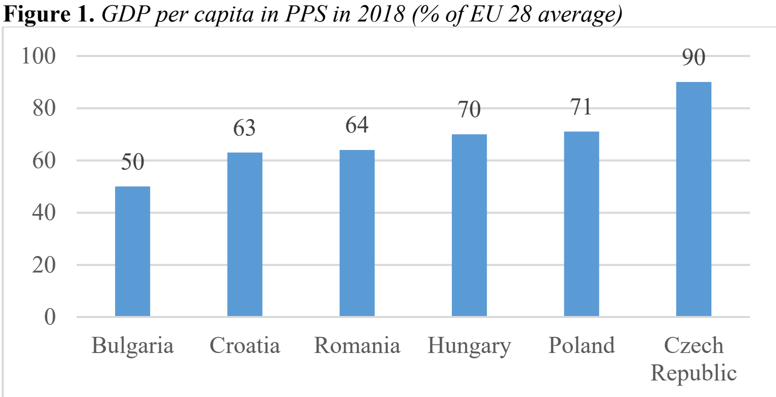
According to the data presented in Table 4, the national currencies/euro exchange rates fit in the fluctuation margin of ±15% against "central parity".

6. Real convergence and intra-national disparities

The Maastricht Treaty for the functioning of the European Union contains no article referring to the necessity of having a high degree of real convergence before adopting the euro. The idea was that the Eurozone will automatically lead to an increase in real convergence.

When talking about real convergence, we mainly refer to the indicator GDP per capita in purchasing power standards (PPS).

Figure 1. *GDP per capita in PPS in 2018 (% of EU 28 average)*



Source: Eurostat (latest update: 17.06.2019).

Figure 1 shows that Czech Republic's economy is a sound one, as its GDP per capita in purchasing power standards is 90% of the European Union average (EU28). The other five candidate states still have a series of economic measures to implement in order to reach real convergence to an as high as possible degree.

When joining the Eurozone in 2015, Lithuania had a GDP per capita in PPS at 75% of European Union average (EU28). The Czech Republic is far above this level, but official Czech documents show that the Czech authorities intend to adopt the euro only after their GDP per capita in PPS reaches the European Union average.

Table 5. *GDP per capita in PPS in Bulgaria, Czech Republic, Croatia, Hungary, Poland and Romania, on regional level (NUTS 2016) in 2017*

Region (NUTS 2016)	GDP per capita (PPS)	GDP per capita PPS (%,UE28=100)	Region (NUTS 2016)	GDP per capita (PPS)	GDP per capita PPS (%,UE28=100)
BULGARIA	14,800	49	CZECH REPUBLIC	26,900	89
Yugozapaden	23,700	79	Prague	56,200	187
Yugoiztochen	13,000	43	Střední Čechy	25,100	84
Severoiztochen	11,800	39	Jihovýchod	24,400	81
Yuzhen tsentralen	10,400	35	Jihozápad	23,300	77
Severen tsentralen	10,200	34	Severovýchod	22,600	75
Severozapaden	9,300	31	Moravskoslezsko	22,100	74
CROATIA	18,500	62	Střední Morava	22,000	73
Kontinentalna Hrvatska	18,900	63	Severozápad	19,000	63
Jadranska Hrvatska	17,800	59	HUNGARY	20,300	68
POLAND	20,900	70	Budapest	41,900	139
Warszawski stołeczny	45,700	152	Nyugat Dunántúl	21,500	72
Dolnośląskie	23,100	77	Közép Dunántúl	18,800	63
Wielkopolskie	22,800	76	Pest	16,000	53
Śląskie	21,600	72	Dél-Alföld	14,500	48
Pomorskie	20,200	67	Észak Magyaroszág	13,700	46
Łódzkie	19,500	65	Dél Dunántúl	13,500	45
Małopolskie	19,100	63	Észak-Alföld	12,900	43
Mazowiecki regionalny	17,800	59	ROMANIA	18,800	63
Zachodniopomorskie	17,400	58	Bucharest - Ilfov	43,200	144
Lubuskie	17,300	57	Center	17,900	60
Kujawsko-Pomorskie	16,900	56	North-West	16,900	56
Opolskie	16,600	55	South-East	15,800	53
Podlaskie	15,000	50	South Muntenia	15,100	50
Świętokrzyskie	14,900	50	South-West Oltenia	13,600	45
Warmińsko-Mazurskie	14,700	49	North-East	11,600	39
Podkarpackie	14,600	49			
Lubelskie	14,400	48			

Source: Eurostat.

There is a very large economic gap between the national regions of Czech Republic, Hungary, Poland and Romania. On the one hand, there are those regions that include their capitals, Prague, Budapest, Warsaw and Bucharest, which have a GDP per capita in PPS far above EU average (the Prague region has an almost double level compared to the EU average), while on the other hand there are regions (except in Czech Republic) with a GDP per capita in PPS below 50% of European Union average (Table 5).

It is recommended that the states who stand to adopt the euro first reach a high level of GDP per capita in PPS compared to European Union average, together with a sustainable fulfillment of nominal convergence criteria, but that they also reduce the economic gaps between their own regions.

7. Conclusions

A strong Eurozone needs strict rules, that may not be broken by some of the member states. It is also necessary to finalize the Banking Union, to create the Capital Markets Union and a common Eurozone Treasury, as it emerges from the "The Five Presidents' Report: Completing Europe's Economic and Monetary Union".

Economic growth will still be possible after joining the Eurozone in the six analyzed states, under the condition that they continue their structural reforms, maintain their nominal convergence, while the institutions and mechanisms of the Eurozone continue their consolidation.

In order for the ECB's monetary policy to have the desired impact on the new states, it is recommended that before joining the Eurozone, they have a high alignment between their national economies and the economies of the Eurozone, but that they also align their economic cycles.

The competitivity of companies in the EU states outside the Eurozone has been maintained by the existence of national currencies which were weaker than the euro, which led to an increase in exports, but also by smaller wages costs. After adopting the euro, an increase in wages is expected, while the exchange rate advantage will disappear. Consequently, the new Eurozone member states will have to implement a set of structural reforms and measures to increase competitivity, especially by increasing labour productivity, offering good quality products and services, delivering goods on time etc.

In the 2018 Convergence Report by the European Central Bank, Croatia and Romania are recommended to improve the EU fund absorption and to take measures to improve the business environment, the institutional environment and corporate governance. Also, Hungary is advised to eliminate excessive taxation and bureaucracy, consolidating the institutional environment, in order to increase the competitivity of the private sector.

All in all, it is worth mentioning one recommendation from the 2018 Convergence Report by the European Central Bank, addressed to all six candidate states – Bulgaria, Croatia, Czech Republic, Hungary, Poland and Romania: "In order to further bolster confidence in the financial system, the national competent authorities should continue to improve their supervisory practices, among other things, by following the applicable recommendations from the relevant international and European bodies, and by collaborating closely with other national supervisors of EU Member States within the supervisory colleges" (European Central Bank, 2018, p. 69).

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