THE JUSTIFICATION FOR INFLATION CRITERIA IN V4 COUNTRIES[23]

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Abstract

The countries aspiring to the membership in the Eurozone must cover the Maastricht convergence criteria, which are divided into fiscal (government deficit, public debt) and monetary (price stability, exchange rate stability, stability of long-term interest rates). The basic requirements for criteria were settled at the time of their formulation in the Protocol to the Treaty of European Union. There was the requirement to ensure a high degree of sustainable economic convergence. Currently, global uncertainty and significant financial fluctuations in the world and off course in Europe, appears to be important question of whether the fulfillment of these nominal criteria is sufficient condition, for the adoption of the common European currency as a guarantee of future success Eurozone membership. The basic objective of the article is through the analysis of monetary convergence criteria - price stability - to assess the merits of sustainability monetary criteria in Visegrad countries (V4) as an informal group of four Central European countries - the Czech Republic, Hungary, Poland and the Slovak Republic. We concluded that it is a certain distortion ability to express reference value determined by developments in the EU member states (and not members of the Eurozone). However, it should ensure price stability as a precondition for the smooth functioning of the euro area, covered by a common monetary policy of the ECB.

Keywords: Maastricht criteria, Inflation, V4 countries, Eurozone

Introduction

Any country joining into the European Union (EU), at the same time, committed to future membership of the euro area - the adoption of the euro. It happens EMU Member States with a derogation (exception) to adopt the euro, but the time horizon of its entry into the euro area is not directly addressed. For the introduction of the common European currency is required fulfillment Maastricht convergence criteria, which are enshrined in the Protocol to the Treaty of European Union, signed on 7. February 1992 in Maastricht (also referred to as the Maastricht Treaty). These criteria cover the monetary and fiscal criteria and they should also ensure a high degree of sustainable economic convergence. They represent the convergence of the numerical values of inflation and long-term interest rates, acceding countries to the values prevailing in the euro area. It is necessary to stabilize their exchange rates against the euro during the two years Membership in ERM II and respecting fiscal discipline. In the current period, marked by global financial and debt crisis (in the Eurozone) are increasingly emerging views and doubts, whether the fulfillment of the Maastricht criteria of nominal convergence is sufficient condition for adopting the euro and successful membership of the euro area

countries. The basic objective of the article is through the analysis of monetary convergence criteria - price stability - to assess the merits of sustainability monetary criteria in Visegrad countries (V4) as an informal group of four Central European countries - the Czech Republic, Hungary, Poland and the Slovak Republic.

Maastricht criteria – price stability

Price stability	Sustainable price stability, while the average rate of inflation over the past year, may not exceed by more than 1.5% average inflation rate in the three Member States of Eurozone with the lowest inflation.

Source: The Treaty of European Union (1991).

Reducing the rate of inflation in countries with high inflation is not generally a necessary condition of forming the Monetary Union, but this is a condition for forming a Monetary Union with a low inflation rate. According to the Treaty of EU, the rate of inflation should not exceed the average rate of inflation in the three EU countries with the lowest price increase by more than 1.5 %. The level of price stability must be sustainable. It is measured by the Consumer Price Index (Consumer Price Index - CPI), but on a comparable basis, taking into account differences in national definitions of inflation. In the EU has been compiled and adopted Harmonized index of consumer prices (Harmonized Index of Consumer Prices - HICP) in 23th of October 1995).[24] According to D. Gros, (Gros, 2004) existence of a convergence criteria on price stability, as we know it today, appeared to be justified as being necessary in order to minimize the risk of project failure to involve the European single currency group of countries, with the lowest inflation rate. Many economists (Gros, 2004, Buiter, 2004, Kowalski, 2003) criticized precisely the fact, that when assessing price stability criteria based on the inflation rates of all EU countries instead of examining inflation rates in the euro area. While taking into account, the inflation rates of the countries, which are not full members of the Eurozone, and therefore they are not justified common monetary policy of the ECB. With the current number of 28 members of the EU are more likely to just those three countries, whose average inflation rates will form an evaluation of price stability limit (as defined in the Protocol of the Maastricht Treaty) and basically those countries will not be directly involved to the common monetary policy.[25] O. Dedek, (Dedek, 2008) find out, that despite the relatively clear definition of the inflation criteria, they were seen as essential to any subsequent interpretation. "Preferably to be the best in inflation, it was confirmed to have the lowest inflation. At that time no one bother possibility, that the baseline value of inflation rate, can be against common sense, could deflect inflation downward, if one of the Eurozone member will has deflation. Later, when did this anomaly occurred, it was treated by pointing out, that the inflation criteria says, thus the price increase, while deflation is a decrease price level. Thus, the exclusion of inflation with a negative sign was something that could be useful in formal criteria."

The justification for inflation criteria and the reference value

The literature presents the view, that countries wishing to establish a Monetary Union, must take certain steps leading to the convergence of the inflation. The basic purpose of price

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[24] HICP was based on a comparable basis, taking into account differences in national definitions (range of goods and services, consumer population, geographic coverage, rates, scales used). It is calculated as a weighted average of the indexes of the Member States. Country weights depend on the percentage of the final monetary consumption expenditure of households in total expenditure in the euro area (the highest weight to Germany, France and Italy) and it is allowed to change the weight each year. HICP is constantly reviewed and improved.

[25] MUCHOVÁ, E. 2009. Nominal and real convergence in the context of EMU. In: Macroeconomic convergence of the Slovak economy of the euro area: *electronic book of article International Scientific Conference* [CD-ROM]. Bratislava : Katedra ekonomickej teórie NHF EU, 2009, s. 1-9. ISBN 978-80-225-2822-1.

stability in the Maastricht criteria is to align preferences about the inflation rate in the Eurozone, which is actually the willingness of developing countries to adapt their own inflation rates with respect of the primary objective of monetary policy ECB - price stability.

The design of the Maastricht criteria in price stability is subject to criticism on two grounds. The first, it is the way in which they calculated benchmark to assess the performance of the inflation criteria. The second, it is the adequacy or inadequacy of the inflation criteria, its original form in 1991 called for "catching-up" countries. The low flexibility in the interpretation of this criteria makes difficulty for the countries of Central and Eastern Europe fulfilment in nominal performance criteria.[26] Maastricht criteria on price stability does not determine specific value for the assessment of compliance with this criteria. In order to calculate the reference value, is measurement of inflation, based on the average rate of HICP of the three EU countries with the best performance in terms of inflation. Definition of the criteria on price stability and interest rate convergence criteria includes matching three EU Member States, which in terms of price stability have best results. According to the results of these three states is determine the reference value of the two criteria, for the definition of the individual criteria. The European Commission in assessing the stability criteria is based on the inflation rates of all EU Member States instead of examining inflation rates of the euro area.

Even in EMI Convergence Report (1998) introduced the concept of "extraordinary value" in inflation towards negative value.[27] This exceptional value could be excluded when calculating the reference value, as it could lead to reduce its explanatory power in the EU. We concluded that it is a certain distortion ability to express reference value determined by developments in the EU member states (and not members of the Eurozone). However, it should ensure price stability as a precondition for the smooth functioning of the euro area, covered by a common monetary policy of the ECB.

The following table 1, shows a comparison of benchmarks for the Maastricht inflation criteria laid down by the Protocol of the Maastricht Treaty, with average annual HICP inflation for the EU and the euro area countries, as well as their values after adding 1.5 percentage points.

Table 1.: The reference value and average value for inflation criteria (%) in 1998 – 2012

Year	1998	2000	2002	2004	2006	2007	2008	2010	2012
Reference value[1]	2,7	2,4	3,3	2,4	2,8	3,0	3,2	1,0	3,1
Average of EU[2]	1,7	1,4	2,3	1,9	2,2	2,2	2,7	1,0	3,1
Average of Eurozone[2]	1,5	1,4	2,5	2,1	2,2	2,1	2,5	0,3	2,8
Average of EU + 1,5 %	3,2	2,9	3,8	3,4	3,7	3,7	4,2	2,5	4,6
Average of Eurozone + 1,5%	3,0	2,9	4,0	3,6	3,7	3,6	4,0	1,8	4,3

Source: Convergence reports of ECB 1998 - 2012, Eurostat, authors calculations.
[1]Specification for 1998 refer to the period from February 1997 to January 1998. For the year 2004 covering the period September 2003 to August 2004. For the 2006 period from November 2005 to October 2006. Data for other years are from April last year to March of the present year.
[2]The average annual inflation rate in the EU and the euro area are based on data for the same period as the reference value.

As we can be seen from Table 1, the reference value of 2010 for the inflation criteria expressed using the non-weighted arithmetic average rate of inflation of the three EU countries with the lowest inflation rate, compared to the other years is very low. It is caused

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[26] MUCHOVÁ, E. - CHRENKOVÁ, J. 2009. Inflation and price stability in terms of global trends. In: Economic viewpoints.[online].   2009,   roč.   38,   č.   4.   s.   467-480.   [cit.   2013-02-10].   Dostupné   na internete:<http://www.euba.sk/department-for-research-and-doctoral-studies/economic-review/preview-file/er4_2009_muchova_chrenkova-10313.pdf>. ISSN 0323-262X.
[27] The exclusion of this value depends on the decisions of the ECB. The same applies to the interest rate convergence criteria, in which the reference value is determined on the basis of the level of interest rates in the same three states.

by negative values of countries entering the calculation of this criteria - Portugal (-0.8%), Estonia (-0.7%) and Belgium (-0.1%).[28] The average inflation rate was therefore 0.5% and the benchmark, after adding 1.5 percentage points, was 1.0%. The price developments during the reference period in Ireland, resulting in the 12-month average inflation rate of -2.3% in March 2010. It was considered an "extraordinary" value. It was given, that inflation is due to several factors specific to Ireland (exceptionally sharp decline in economic activity and the associated decline in wages) is considerably lower than in other Member States. Ireland's inflation rate was excluded for the calculation of the reference value, because its inclusion would cause a distortion of the reference value. As it is stated in the 2010 Convergence report - development of a Member State deems "exceptional" when two conditions are satisfied:

• If the 12-month average inflation rate is substantially lower than comparable rates in other   Member   States;
• If the price development in the country has been greatly influenced by exceptional factors.[29]

ECB Convergence Report of 2010: "the principle of an extraordinary, not mean mechanical process of elimination of certain inflation rates, but it was introduced to deal with potential significant deviations of inflation in the country."

Figure 1.: The comparison of average annual inflation rate in the EU, the Eurozone and the reference values for the inflation criteria in selected years
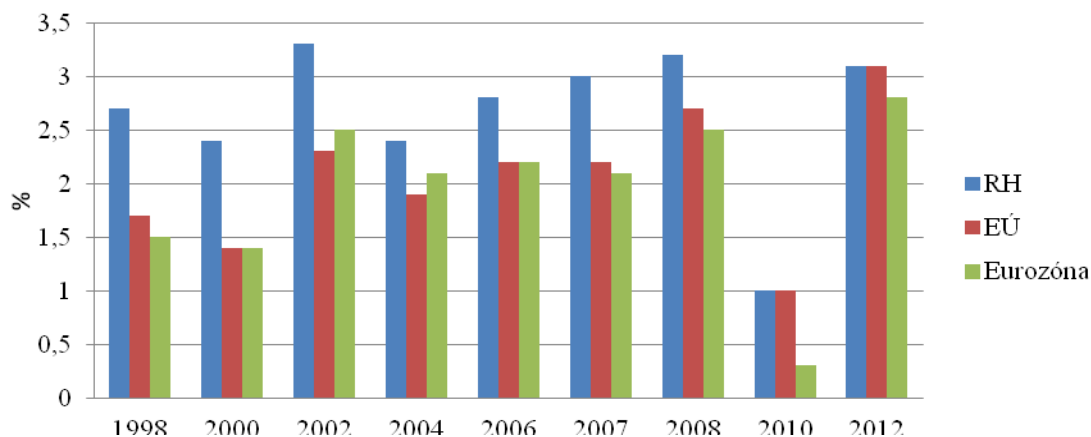
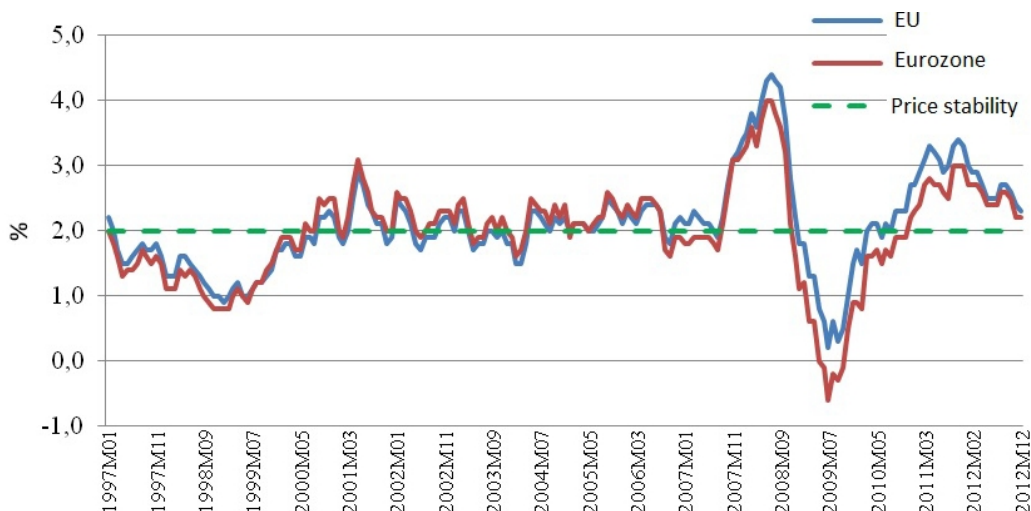*Source: Authors processing by Eurostat and ECB Convergence Reports.*

Based on Figure 1, we compare the benchmark inflation criteria published by the European Central Bank in its Convergence reports for the years and the average annual inflation rate for the euro area and the EU in the respective reference periods. Reference values exceeded the annual average inflation rate in the EU and the euro area in the period 1998 - 2008. From the Figure 1 we can see, that in the years 2010 and 2012, the inflation criteria corresponds to an average annual inflation rate in the EU (for the period from April of the previous year to March of that year), while the average inflation rate for the reporting period fell down in 2010 (April 2009 to March 2010). The differences can be explained by the instability of the price level in European countries in the second half of 2008 and especially in 2009, which were mainly related to the sharp decline in commodity prices (especially oil prices, metals and agricultural commodities) reflecting to the decline in global demand as a result of the global financial crisis. This declines led to the development of prices in the EU, more pronounced in the euro area in 2009, the overall average HICP inflation stood at 0.3 %. Compared with the previous year and dynamics of the Harmonized index of consumer prices

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[28] Convergence Report 2010. The calculation includes data from April 2009 to March 2010.

[29] ECB. 2010. Convergence Report May 2010. [online]. Frankfurt nad Mohanom : ECB, 2010. s. 7 [cit. 2013-02-10]. Dostupné na internete: < http://www.ecb.int/pub/pdf/conrep/cr201005sk.pdf>. ISSN 1725-9665.

slowed down significantly (3.3% in 2008) and in the months from June to October 2009 inflation had negative values in the Monetary Union. In the Annual Report of the NBS in 2009 states, that "a dampening effect of commodity prices, largely in energy prices and partly foods, were the main reason for the significant reduction in inflation in 2009 in the euro area."[30] Price developments in the euro area was also dampened by a slowdown in economic activity during 2009, which was also reflected in the monetary policy of the ECB. It reached to the unconventional monetary measures with efforts to provide the necessary liquidity to euro area banks. The Figure 1 showed, that the most significant difference in the average annual inflation rate observed in the period (latest evaluation of the ECB or the Commission). Price developments in the EU and the euro area increased in the average growth, which was mainly related to recovery in economic activity in all countries in 2011. In 1998, the Governing Council established a quantitative definition of price stability as the annual growth of the Harmonized index of consumer prices (HICP) area less than 2 %. Price stability is maintained over the medium term. In 2003, this led to clarify the definition, according to the aim, is to keep inflation in the medium term, below or close to 2 % (to prevent deflation). If we have a look of the inflation criteria in terms of the basic objective of the single monetary policy of the ECB - the criteria on price stability - we find, that between 2000 and 2007 (Figure 2) year changes of HICP in the EU and euro area are slightly fluctuated at around 2 %, while in July 2008, this occurred the most significant shift on year changes upwards from the desired price target of ECB. As we mentioned above, the financial crisis has signed the lowest annual rate of HICP in the EU (0.2 %), or even negative in the euro area (-0.6 %) in July 2009.

Figure 2.: The year change of HICP in EU and Eurozone. Inflation target of ECB in years 1997 - 2012

Source: Authors processing by Eurostat and ECB Convergence Reports.

On Figure 2 we can see that the annual variation in inflation in the euro area was up to August 2006, slightly higher, eventually the same as the average in all EU countries. From this period the annual changes of rising inflation in the euro area significantly lower than in the EU.

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[30] NBS. 2010. The Annual Repurt 2009. [online]. Bratislava : NBS, 2010. s. 15 [cit. 2013-02-10]. Dostupné na internete: < http://www.nbs.sk/_img/Documents/_Publikacie/VyrocnaSprava/VSNBS09.pdf>. ISBN 978-80-8043-154-9.

The justification for inflation criteria in V4 countries
　　Comparison of the values for inflation criteria in the evaluation of the review period, the ECB and the European Commission are in the following Table 2.

Table 2.: The Maastricht inflation criteria (%) and reference value in 1998 – 2012

Country /year	1998	2000	2002	2004	2006	2007	2008	2010	2012
EU	1,7	1,4	2,3	1,9	2,2	2,2	2,7	1,0	3,1
Eurozone	1,5	1,4	2,5	2,1	2,2	2,1	2,5	0,3	2,8
Czech rep.	8,4	2,1	4,4	1,8	2,2	1,9	4,4	0,3	2,7
Hungary	18,4	10,1	8,1	6,5	3,5	5,6	7,5	4,8	4,3
Poland	14,7	8,2	4,6	2,5	1,2	1,5	3,2	3,9	4,0
Slovakia	6,1	12,6	6,7	8,5	4,3	3,8	2,2	0,3	4,2
Reference value	*2,7[1]*	*2,4*	*3,3*	*2,4*	*2,8*	*3*	*3,2*	*1*	*3,1*

Source: Author processing by Eurostat and Convergence reports of ECB 1998 - 2012,
[1]Convergence Report 1998, EMI (predecessorECB)

　　Based on Figure 3, we see, that in the period up to 2004 (1 May 2004 entrance into EU) the price level measured by the HICP in the V4 countries increased faster than the developed benchmark for inflation criteria in this period. The lowest inflation rate of post-communist transition (V4 countries) during this period comparable to the EU average and the euro area showed only the Czech Republic (CR). Czech Republic examined the evaluation period for the years 1998 and 2003 is declining, although not continuous trend, which could reduce the average rate of measured HICP inflation of 8.4% in 1998 to 1.8% in 2004 (September 2003 - August 2004). It is representing a decrease of up to 6.6 p. b. Its value for the reference period considered in 2004 was lower, than the average for the EU and the euro area and even by 0.6 p. b. lower than the reference value for inflation criteria in a given period.

Figure 3.: The average inflation rate (%) and reference value of inflation criteria in selected years
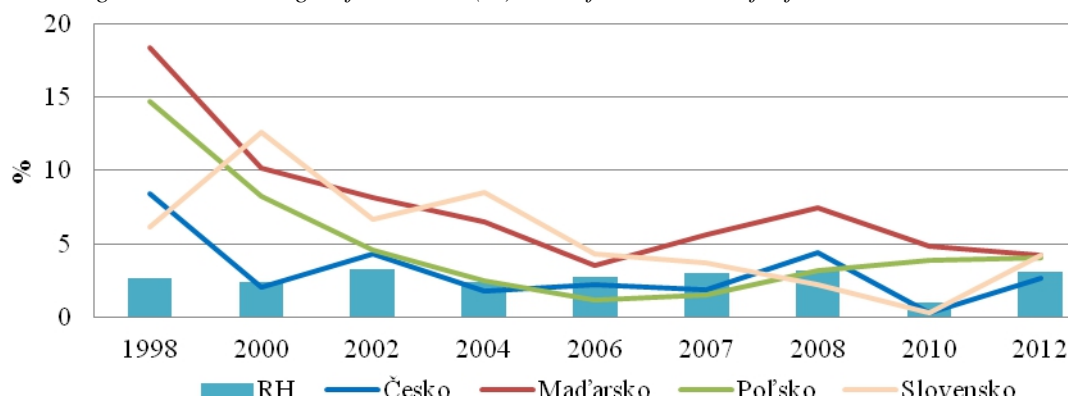
Source: Authors processing by Eurostat and ECB Convergence Reports.

　　The process of reducing inflation in 2003 was also affected by the orientation of monetary policy to achieve and maintain price stability in the medium term. In the next period (after the Czech Republic joined the EU in May 2004), the inflation rate was relatively volatile, mainly due to rising food and oil prices and changes in indirect taxes and administered prices.[31] In the next period inflation was mostly between 1.6% and 3 % until the end of 2007, when began to rise again (Figure 2). Negative consequences of price developments in the Czech Republic in this period was the average inflation rate, which have been 1.2 % above the reference value of 3.2% published by ECB and the European Commission in May 2008. Inflation in 2008

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[31] ECB. 2008. Convergence Report 2008. [online]. Frankfurt nad Mohanom : ECB, 2008. s. 37 [cit. 2013-02-11]. Dostupné na internete: < http://www.ecb.int/pub/pdf/conrep/cr200805sk.pdf >. ISSN 1725-9665.

reached a peak and in 2009 inflation decreased significantly (min. - 0.6 % in October 2009).

This year, the Czech economy due to the global financial and economic crisis plunged into recession. Since this period, Czech economy records rather lackluster recovery mainly due to exports, as its reflected in the gradual increase in inflation to March 2012 (4.2%), but not exceeding 12 observed average values of the reference period in 2010 (0.7 % below the reference value) and 2012 (0.4 % below the reference value). Price increase was due to developments in food, fuel and energy, but also relatively strong growth in regulated prices.[32]

Since April 2012, the inflation with minor fluctuations again slightly decreases. Next country in terms of price stability over the period showed, the second best result is Poland.

However, Poland has begun to fulfill the inflation criteria after its entrance into the EU, with the exception of last reference period in 2010 and 2012. Compared with the Czech Republic, 12 month average HICP entered into the calculation of the reference value, in December 2006 and in May 2007. It means, that in this period, the inflation rate in Poland was one of the three lowest rates in the EU. Since the end of the 90th years of the 20 century has seen annual HICP inflation in Poland decline in double digits (17.9 % in January 1997) to very low levels in 2003 (min. 0.3 % in April 2003). In 2004, inflation was temporarily increased due to the increase in administered prices and indirect taxes and higher food prices after Poland's accession to the EU (up 4.8% in August 2004). After a period with low inflation in 2005 and 2006, price developments was turn over in 2008 and 2009, inflation exceeded 4.0% since the beginning of 2010 began to decline. The extreme increase of the commodity prices in global markets, depreciation of the nominal exchange rate and the increase in VAT in an environment of domestic demand in 2011, caused increase of inflation. Until mid-2012, inflation was slightly fluctuated at around 4.0 % since gradually decreases. The development of inflation in Poland is based on a background of relatively steady growth in economic activity in mid-2008, which was only partially interrupted in the first half of 2005. Between 2007 and 2008, began to show capacity pressures in the form of visible growth in unit labor costs, deepening current account deficit and historically low unemployment rates. The onset of the global economic and financial crisis was caused sudden weakening of the capacity constraints. Relatively short economic downturn and lower global commodity prices led to a decline in the summer of 2010, annual HICP inflation to 1.9 % (July, August 2010).[33] Slovak Republic, although it is the only country among the V4 countries, which begun a member of EMU from 1 January 2009, filled benchmark inflation convergence criteria in the evaluation of the only times in 2008 and 2010. In the longer term, inflation in consumer prices in Slovakia volatile with the highest double-digit levels in the first half of 2000 (up 16.8 % in March 2000). The development was affected by significant inflation and accelerating growth in real GDP in 2005 - 2007. In 2007, there was a significant reduction in inflation, which was signed under particular appreciation of the Slovak currency. In the summer of 2007, the inflation rate has very low values (decreased mainly due to the slight development of domestic energy prices). Later, annual HICP inflation was started as a result of higher prices of food, energy and services in conjunction with global and domestic inflationary pressures.

This trend continued until the end of 2008. The global financial crisis in Slovak economy signed the profound decline in inflation in late 2009. At the beginning of 2010 inflation has seen even negative (-0.2 % in January and February 2010). "The decline in regulated energy prices in January 2010, slowdown in services prices and slightly lower growth in industrial goods excluding energy, have meant that, despite of the substantial

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[32] From January 2012 are settled the increased rate of VAT, which are subscribed to rising of food prices and regulated prices.
[33] ECB. 2012. Convergence Report, May 2012. [online]. Frankfurt nad Mohanom : ECB, 2010. s. 59 [2013-03-5]. Dostupné na internete: <http://www.ecb.int/pub/pdf/conrep/cr201205sk.pdf> . ISSN 1725-9665. 65 s.

increase in food prices, the average inflation fell down."[34] Rising inflation in the next period, was the result of a combination of external and domestic factors (increase in administered prices and government consolidation measures), when domestic price level was affected on the one hand, rising global oil prices and agricultural commodities, stagnant domestic demand on the other hand. This negative trend in the price level caused by the fact, that in May 2012 Slovakia did not cover the inflation criteria with difference 1.1 % above the reference value.

From December 2011 (4.6%) the inflation rate gradually decreases and its dynamics compared to the same period in 2012 decreased by 1.2 %. Hungary is the only country among the V4 countries, which for the reporting period did not meet even once convergence criterion for price stability. It showed the highest differences in average twelve-month inflation rate from average values measured in the EU and the euro area in the same reference period.

Development in the yearly changes in HICP inflation rate, compared with the same period in the EU and the euro area from 1997 captures the following graph.

Figure 4.: The year change in HICP (%), 1997 – 2012 (Hungary, EU, Eurozone)
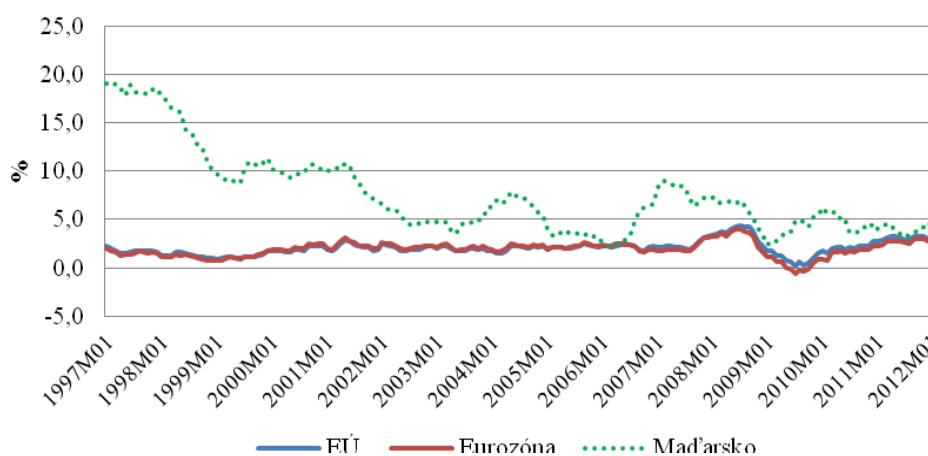
Source: Authors processing by Eurostat and ECB Convergence Reports.

The ECB Convergence Report 2012, showed, that long-term volatility in inflation rates during this period is largely caused by frequent changes in indirect taxes and administered prices. In the first decade of this century, there was typical for Hungary significant growth in unit labor costs caused by the rapid growth of compensation per employee. In the next period, the changes in the labor market led to a significant slowdown in overall growth in unit labor costs. In 2011, increase in compensation per employee again outpaced labor productivity, which caused into increase in unit labor costs. Inflationary pressures, despite the very low demand in 2011 were caused by rise in commodity prices, exchange rate depreciation in the second half of 2011. The impact of the introduction of specific taxes in certain sectors in 2010 (energy and telecommunications sectors, retailers etc.) led to increase in indirect taxes in early 2012. In the current period, the inflation rate in Hungary is the highest in the all countries of European Union.[35]

Conclusion

Countries aspiring to membership in the Eurozone must meet the Maastricht convergence criteria, which are divided into fiscal (government deficit, public debt) and monetary (price stability, exchange rate stability, stability of long-term interest rates). The basic requirements

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[34] NBS. 2011. Convergence Report 2010. [online]. Bratislava : NBS, 2011. s. 13 [2013-03-5]. Dostupné na internete: <http://www.nbs.sk/_img/Documents/_Publikacie/VyrocnaSprava/VSNBS10.PDF>. ISBN 978-80-8043-166-2.

[35] ECB. 2012. Convergence Report, May 2012. [online]. Frankfurt nad Mohanom : ECB, 2012. s. 57 [cit. 2013-02-11]. Dostupné na internete: <http://www.ecb.int/pub/pdf/conrep/cr201205sk.pdf>. ISSN 1725-9665.

for criteria were settled at the time of their formulation in the Protocol to the Treaty of European Union. There was the requirement to ensure a high degree of sustainable economic convergence. Currently, global uncertainty and significant financial fluctuations in the world and off course in Europe, appears to be important question of whether the fulfillment of these nominal criteria is sufficient condition, for the adoption of the common European currency as a guarantee of future success Eurozone membership. The basic objective of the article is through the analysis of monetary convergence criteria - price stability - to assess the merits of sustainability monetary criteria in Visegrad countries (V4) as an informal group of four

Central European countries - the Czech Republic, Hungary, Poland and the Slovak Republic. When defining the criteria on price stability and the convergence criteria of long-term interest rates, there is introduced the concept of three EU Member States, which in terms of price stability have the best results. This is related to the problem of determining the reference value in assessing both criteria, whereas the EC is based on the inflation rates of all EU Member States instead of examining inflation rates of the euro area. Problematic also appears to be the introduction "exceptional value" of inflation rate, which may be the benchmark excluded from the calculations (case of Ireland in 2010). This fact may cause to some distortion, which have a direct impact on the assessment of compliance with the criteria in a specific country. Reference values for the inflation criteria exceeded the annual average inflation rate in the EU and the euro area in the period 1998 - 2008, while the reference period 2010 to 2012, the inflation criteria coincided with an annual average inflation rate in the EU (for the period from April of the previous year to March of the year), in 2010 the average inflation rate fell sharply. The differences can be explained by the instability of the price level in European countries in the second half of 2008 and especially in 2009. There were mainly related to the sharp decline in commodity prices (especially oil prices, metals and agricultural commodities) reflecting the decline in global demand as a result of the global financial crisis.

Dynamics of HICP slowed down significantly especially in the Eurozone in the months from June to October 2009. The temporary negative values has to be seen threat of deflation in the Monetary Union. The V4 countries in the period 1998-2004 (1 May 2004 entrance in the EU) the price level, measured by the HICP, significantly was faster than the developed benchmark for inflation criteria in this period. The lowest inflation rate of post-communist transition V4 during this period comparable to the EU average and the euro area showed only the Czech Republic. Downward trend in inflation and subsequent maintenance of inflation, was also influenced by the orientation of monetary policy to achieve and maintain price stability in the medium term. The only country among the V4 countries, which for the reporting period did not meet even once convergence criteria in price stability was Hungary. It showing the highest differences in average 12 -month inflation rate from average values measured in the EU and the euro area. When assessing the sustainability criteria can be pointed precisely to Slovakia. Slovakia is the only member of the Eurozone which fulfill the inflation criteria in the reference period of 2008, before joining the euro area on 1. 1. 2009. In the reference period of 2012, the inflation rate was the second highest in V4 countries, after Hungary significantly over average of the euro area and the EU. As shown, any adverse developments in recent years, to achieve the smooth functioning of the monetary union is important to achieve a certain degree of real convergence. This is generally expressed in particular by GDP per capita in purchasing power, productivity and comparative price levels.

In this respect, we can say, that the nominal convergence criteria have uncovered another problem - the extent to could the behavior of the countries after their adoption into the monetary union. The Maastricht criteria for joining the euro area were originally defined for countries with a similar level of economic development. This fact is confirmed by the direct continuation on the Treaty of EU – The Stability and Growth Pact (1997) and its subsequent reforms in 2005 and 2011 (the six pack). This documents primarily undertake the Member of

Eurozone to comply fiscal convergence criteria for a stricter regime and for imposing sanctions law Eurozone countries violating budgetary discipline.

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