

INFLATION AS ONE AMONGST COSTS FOR JOINING EURO AREA

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Abstract

Euro Area rise and its enlargement belongs to one of important economic topics. Regarding this, many economic characteristics are being studied. Based on these characteristics evaluations of countries' readiness to join currency union are carried out in economic terms. Concordances of price levels and price relations were amongst the most important characteristics to study. Lots of economists in their opinions state that significantly lower price levels and discordance of price relations within accessing country and original currency union are presenting a major source of inflation in new accessing country. It is a significant cost for the accession country into the currency union. In the past the Czech Republic committed itself to joining the euro area. It was for this reason that our literature was focusing with caution at relative prices between the Czech Republic and the Eurozone. For the same reason attention used to be and still is focused at relative prices between the Czech Republic and the Eurozone. It is a question whether difference between the price levels is a severe hindrance in the Czech Republic's joining the Eurozone. Obviously, even more important is the question of relative prices. Plenty of economists are still turning an attention towards the great danger of inflation after the Czech Republic' Eurozone accession.

This papers' aim is to show whether there is something based on studying empirical data that shall point out possibility of raising inflation after the Czech Republic joins euro area.

Key words: euro area, rate of inflation, price relations, price level

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Introduction

Question of functioning and extension of Euro area is amongst significant topics in Europe nowadays. This question is linked with issues of real convergence of country accessing Euro area. Real convergence is considered for one of the most important characteristics when country is accessing the currency union. Therefor it was devoted considerable attendance in

scholarly literature in Czech Republic (CZ). Real convergence and convergence of prices as it integral part is convergence of price level and price relations.

There exists an imagination of economists that a sufficient approximation of price levels and price relations with Euro area hinders burst of inflation in the country that is about to access. Bold growth of the inflation rate after Euro area accession would be dangerous for it would had been reason for loss of competitiveness of home economics. In Czech Republic was this topic frequently discussed in past and concerns were expressed not only because the price level is according to many economists strongly lower than price level in Euro area, but also because the relative prices are according to plenty of economists constantly strongly distorted (again in comparison with Euro area). It is a question to what extent is this imagination of economists responding reality.

Goal of the paper is to show using specific data to what extent are above mentioned fears of economists just. Specific data show how the inflation rate was evolving after the Euro area accession in case of Slovak Republic, Estonia, Latvia and Lithuania. Paper evaluates to what extent was the price level of these countries in the time of their accession to Euro area. It gauges if the level was or was not comparable with price level of CZ. It is next examined whether the relative prices were restrained in the way it is in CZ. Results found can provide a lesson for CZ. Providing that examined countries were accessing Euro area with prices restrained similarly and with lower price level than CZ is showing, then it is possible to estimate in line with inflation rates in these countries how important threat the high inflation rate would have been for Czech Republic after the accession to Euro area.

1 Restrained relative prices as a source of inflation

Issues of formation of currency unions and its trouble-free functioning were studied by economists in a close-up since 60s of former century. This intensive effort was interrelated with process of establishing and further spreading of Euro area in Europe. Major theory that is a foundation for economists to position their view upon the readiness of certain country to access the Euro area is Theory of optimum currency areas (OCA). This was formulated by R. A. Mundellem (1961) then it was elaborated for instance by: Peter B. Kenen (1969), Ronald McKinnon (1963), Georg Tavlas (1993), Paul De Grauwe (2000), and others.

In respect to a fact that Czech Republic accessed European Union already in 2004 and did not negotiate so-called non-participation clause, it also strives for Euro area accession since its EU access. Therefore it was paid great attention to individual characteristics stated by OCA

in CZ and in the top of the discussion topics was and still is discussion about real convergence. Towards the real convergence in CZ there were publications such as: Vávra (1999), Dědek (2001), Frait and Komárek (2001), Šmídková (2001), Singer (2005), Slavík (2007), Vojnovič and Oplotník (2008), Žďárek (2008).

There is an imagination of economists that sufficient approximation of price levels and price relations with Euro area will restrain new accessing countries from significant inflation pressures. “When there is an absence of adaptation in currency mechanism then there will be a difficult task for economic politicians to secure concordance of price increase with growth of labour productivity. Only sufficient advance in growth of productivity will allow for responding growth of real wages without decrease in standard of live or decrease of competitiveness of enterprises. Otherwise giving in wage's pressure under the greater price swing would lead to dismissal of employees and increase of unemployment. Temporary support of competitiveness by means of weakening of currency rate will no longer be possible.”¹

1.1 Relative prices and its development in selected countries

Development of relative prices in Slovakia, Estonia, Latvia and Lithuania is an important information for Czech Republic. Czech Republic is currently in situation of solving question of readiness of the accession to Euro area. One of the facts that is being observed in Czech Republic is the concordance of relative prices with Euro area. Among main questions that economists of CZ are asking the following ones: Are the relative prices still significantly distort in comparison with situation in Euro area? Is the level and development of relative prices in between CZ and Euro area significant hindrance of accession to Euro area? Etc. Development of some relative prices in afore mentioned countries is provided in Tables (1-5).

Information on relative prices (Food and non-alcoholic beverages, Clothing and footwear) could be found in Tables (1-2). Both these “goods” can be matched to tradeable. Following Table 3 provides data for Transport. Referred “good” – and not only this – would need by itself a detailed analysis in terms of discussion about marketability and non-marketability. However, this is not a subject of this paper. In this setting this problem could be closed by stating that “good” encompasses both elements of non-marketable and marketable goods. Last two Tables are showing relative prices (Health, Education). In both cases could be concluded that both “goods” can be understand as non-marketable.

¹ Vintrová, R. (2003). Konvergence ekonomické úrovně a cenových hladin. *Acta oeconomica pragensia*, 6, p.132.

Tab. 1: Relative prices (EU28 =100): Food and non-alcoholic beverages

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
Euro area (19)	106,5	104,7	105,7	105,0	105,5	104,7	104,0	106,5	106,2
CZ	74,2	77,2	82,7	83,9	83,6	79,7	79,0	80,7	82,8
Slovakia	81,3	81,1	87,3	88,2	89,7	89,2	88,7	88,3	92,2
Estonia	80,7	81,5	86,6	86,1	88,3	89,2	88,0	90,1	94,1
Latvia	86,2	84,4	87,6	87,4	86,5	90,1	88,5	91,3	93,9
Lithuania	74,1	72,8	78,3	77,7	77,5	78,9	77,5	80,1	81,3

Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

Tab. 2: Relative prices (EU28=100): Clothing and footwear

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
Euro area (19)	104,4	103,7	104,0	102,1	103,3	101,8	99,5	102,6	103,7
CZ	96,7	97,8	102,1	93,6	90,3	86,7	88,4	93,1	96,5
Slovakia	100,0	98,0	96,0	94,6	96,3	100,7	99,5	102,2	102,7
Estonia	101,3	103,0	102,1	103,8	108,3	105,3	105,2	111,8	114,5
Latvia	108,4	100,4	108,4	104,5	104,5	105,1	102,8	105,6	104,7
Lithuania	107,4	100,2	103,1	100,6	102,5	100,2	99,1	103,5	105,0

Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

Tab. 3: Relative prices (EU28 =100): Transport

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
Euro area (19)	102,8	101,5	101,6	100,0	100,9	100,3	98,4	100,8	101,8
CZ	76,0	78,2	78,0	75,5	70,4	66,7	66,9	69,6	72,6
Slovakia	84,3	76,0	76,0	77,0	76,2	75,1	71,3	75,1	77,2

Estonia	80,2	81,2	81,1	80,7	80,0	79,0	76,2	77,5	80,2
Latvia	79,1	79,2	79,6	78,6	76,3	75,6	73,9	75,5	76,2
Lithuania	81,8	79,3	80,7	79,0	77,7	77,0	73,6	74,6	76,2

Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

Tab. 4: Relative prices (EU28 =100): Health

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
Euro area (19)	108,1	109,3	109,3	107,9	105,6	105,3	103,4	105,3	106,4
CZ	53,9	51,5	56,7	57,1	48,7	44,3	44,7	44,2	41,8
Slovakia	55,3	41,5	43,5	44,4	48,8	49,3	48,5	49,4	51,3
Estonia	52,8	52,1	52,7	53,2	57,6	58,7	59,7	60,4	62,7
Latvia	49,0	41,3	45,9	44,4	45,3	45,6	45,3	45,3	46,0
Lithuania	50,4	46,2	41,8	41,8	41,5	39,3	41,3	43,6	44,3

Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

Tab. 5: Relative prices (EU28 =100): Education

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
Euro area (19)	106,4	104,5	104,5	103,0	103,9	101,9	99,4	102,3	103,8
CZ	49,0	49,6	51,6	48,7	48,3	45,5	45,8	47,8	51,7
Slovakia	32,9	34,2	35,2	36,9	39,8	49,6	50,8	49,8	50,7
Estonia	44,5	43,1	44,1	44,2	49,0	50,4	51,4	54,5	57,7
Latvia	41,9	37,2	42,2	45,0	50,3	49,1	50,3	52,3	57,7
Lithuania	35,1	33,6	35,2	35,6	37,0	37,3	39,0	41,0	42,6

Source: : <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

As it is obvious from Table (1-5), without taking into account, which of the “goods” (i.e. which Table) we are interested in, relative prices of CZ in relation to Euro area are in very close level as relative prices of Slovakia, Estonia, Latvia, Lithuania, already Euro area member

countries. This outcome is very important for now the development of inflation in CZ can be estimated based on development of inflation in named countries.

In Table 2 is presented a tradeable “good” Clothing and footwear that is almost at the same level in all observed countries as it is in Euro area.

Similar information is offered in Table 1 that is focused on other tradeable “good” (Food and non-alcoholic beverages). As for the Food and non-alcoholic beverages it could be noticed that relative prices in observed countries are somewhat lower than in Euro area, but it certainly could not be stated that the level is significantly lower. But for the Czech Republic and Lithuania are in this item approximately 80% EU(28) – that is about 75% of Euro area, the rest of the countries (Slovakia, Estonia and Latvia) access only a little above 90% EU(28) – in other words its roughly 85% of Euro area.

Worse results in relation to Euro area are found for “good” Transport, shown in Table 3. It is derived from fact that part of this “good” can be labelled among “goods” non-marketable.

Even worse results are to be found in “goods” grouped in Tables 4 and 5 (Health, Education) those are almost solely non-marketable.

In Table 4 are provided relative prices of “good” Health. It is possible to notice that relative prices in all considered countries are deeply under the EU(28) level and therefore also deeply under the Euro area level. The best is Estonia, where relative price of this item is 62,7% in 2017. (Bearing in mind that Euro area was at 106,4% EU(28) in 2017, it will be about 56%). Rest of the countries achieve maximum of about 50% in comparison with Euro area level.

In Table 5 are provided relative prices of “good” Education. Situation of this non-marketable “good” is (nonetheless even worse), as for the item Health. The best were Estonia and Latvia in relation to Euro area about 55% in 2017. Rest of the countries are achieving a little worse results.

It is a question how the countries (Slovakia, Estonia, Latvia and Lithuania) were competing in similarly reshaped price relations when accessing the Euro area. Were these countries solving any problems with higher inflation rate? It could be foreseen that Czech Republic will be facing similar inflation pressures as named countries providing the fact that relative prices are reshaped in similar way in CZ.

1.2 Inflation rates and its development in selected countries

From previous part of the paper is obvious that the growth of inflation rate in newly accessed country to certain currency union would cause to economy under consideration significant damages. In case that alike fate would be faced by more new members of Euro area

then also a destabilization of whole currency union. It is therefore appropriate to ask question: Is it really growth of inflation that we notice in new members of Euro area that are accessing currency union with significantly lower price level and reshaped price relations? To this countries belongs Slovakia, Estonia, Latvia and Lithuania.

Tab. 6: Development of comparative price levels in selected countries of EU

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017
EU (28 countries)	100	100	100	100	100	100	100	100	100
Czech Republic	68,8	71,6	73,5	71,2	68,2	62,6	63,1	65,1	67,4
Euro area (19 countries)	103,8	102,8	102,9	101,8	102,8	102,0	100,5	102,2	103,1
Slovakia	72,5	69,4	70	69,6	68,6	65,9	65,4	66,5	68,3
Estonia	73,1	71,7	72,8	73,1	74,6	74,4	72,8	75,3	75,9
Latvia	74,2	68,6	71,2	71,5	70,5	70,7	68,9	71,2	69,5
Lithuania	64,3	63,1	64,1	63,4	62,0	60,0	59,3	61,4	63,5

Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

From Table 6 it is obvious what price levels were achieved by individual countries in respect to EU(28) and to Euro area since 2009. Slovakia became member of Euro area with price level of 72,5% of EU(28) in 2009. Estonia became member of Euro area with price level of 72,8% of EU(28) in 2011, Latvia with 70,7% of Euro area price level EU(28) in 2014 and Lithuania became member in 2015, when it achieved 59,3% of price level of EU(28).

From Table 6 is as well obvious that all named countries accessed Euro area when their price levels were below price level of Euro area and in that time of accession were their price levels mostly (with exception of Lithuania that had price level and still has price level below the level of CZ) at level a little bit higher than price level of CZ today. Further it is obvious in Table 6 that the years following the year of accession to Euro area did not come to significant approximation of price levels in examined countries – i.e. either the growth of inflation rate. Therefore we cannot discuss that the approximation was dramatic causing inflation rate threat to competitiveness of country in question. As it is noticeable, for now it seems that fears of economists about the high inflation rates are in case of country's accession with lower price level baseless.

When discussing inflation rates we would like to compare among individual countries and afterwards examine what was the development in time, it is always needed to work directly with inflation rate gauged by means of index HICP. Inflation rates during 2009 till 2018 are placed in Table 7.

Tab. 7: Inflation rates in selected EU countries gauged by means of index HICP

geo\time	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
EU (28 countries)	1,0	2,1	3,1	2,6	1,5	0,6	0,1	0,2	1,7	1,9
Czech Republic	0,6	1,2	2,2	3,5	1,4	0,4	0,3	0,6	2,4	2,0
Euro area (19 c.)	0,3	1,6	2,7	2,5	1,3	0,4	0,2	0,2	1,5	1,8
Slovakia	0,9	0,7	4,1	3,7	1,5	-0,1	-0,3	-0,5	1,4	2,5
Estonia	0,2	2,7	5,1	4,2	3,2	0,5	0,1	0,8	3,7	3,4
Latvia	3,3	-1,2	4,2	2,3	0,0	0,7	0,2	0,1	2,9	2,6
Lithuania	4,2	1,2	4,1	3,2	1,2	0,2	-0,7	0,7	3,7	2,5

Source: <http://apl.czso.cz/pll/eutab/html.h?ptabkod=tec00118>

In Table 7 we understand that none of the observed countries was noticing increase in inflation rate after the Euro area accession. It is easier to see that inflation in countries under consideration was mostly sub-optimally lower in 2012-2016 and in most of the cases there was even deflation noticed. It could not be assumed that deflation is related only to cases when results of inflation rates are negatives. It is not possible to forget that stability of prices means official inflation approximately about 2%. Such a low growth of prices is a demonstration of higher quality of goods and it is demonstrated by zero inflation increase of prices in economy. Official inflation in level of 0,2 or 0,5 is actually a decrease in prices i.e. deflation. Only in last two years 2018 and 2019 was situation starting to improve.

Conclusion

In paper it was examined how inflation was developing in Slovakia, Estonia, Latvia and Lithuania after Euro area accession. Concrete and specific data are used to show that none of the countries that accessed Euro area in similar price level that shows CZ and in similar reshaping prices did not experience increase of inflation. Contrary it seems that inflation rate was in the case of observed countries after Euro area accession sub-optimally low. Based on

this it could be assumed that factors of economists were considering for very important in evaluating Euro area accession, it does not have to be as important as it seemed to be. For now it seems to be that lower price level (in levels achieved in 2017 in CZ) is not a hindrance to country's accession to currency union. For the time being there are no hints for fears in form of remarkably higher inflation rates to come true in case of CZ Euro area accession. It is possible to conclude the problem with a statement: Now it seems that Czech Republic does not have to strive for significant approximation of price levels neither price relations before its Euro area accession. Obviously, there exists other factors that are more influential for inflation rate than accession to currency union itself.

Integral part of complex view that is solving whether the accession to Eurozone is or is not appropriate for the country is besides an economic view also political, social, cultural, psychological view etc. It is possible for the future to solve problems linked with functioning of Euro area that it will prove economic view to be the most important one.

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