Role of the Eurozone membership in the post-crisis stabilisation:

Comparison of Slovakia and the Czech Republic

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List of abbreviations

CEE – Central and Eastern European (countries)

CNB – Czech National Bank

CSSD – Czech Socialist Democratic Party

ECFIN – Economic and Financial Affairs

ECU – European Currency Unit

EFSF – European Financial Stability Facility

EMS – European Monetary System

EMU – European Monetary Union

ERM II – European Exchange Rate Mechanism II

ESM – European Stability Mechanism

GDP – Gross Domestic Product

IMF – International Monetary Fund

INEKO – Institute for economic and social reforms

NBS – National Bank Slovakia

OCA – Optimum currency area

OECD – Organisation for Economic Co-operation and Development

SDKÚ-DS – Slovak Democratic and Christian Union-Democratic Party

Introduction

Members of the European Union, with an exception of Denmark and the UK, pledged themselves to accept the single currency as a part of the integration process. For this, however, no precise deadline has ever been set. Countries willing to join the Economic and Monetary Union (also the EMU) must meet the criteria set by the Treaty on European Union (Maastricht Treaty). Five convergence criteria cover requirements regarding price stability, public finances, durability of convergence and, lastly, exchange rate stability. There are still countries not formally meeting the criteria and thus postponing their accession. One of these countries is the Czech Republic, country which would meet all the criteria, however, due to the fact it is not participating in ERM II mechanism formally it cannot join the Eurozone. As the official documents of the Czech National Bank (CNB) are implying, the Czech Republic chose a strategy of 'waiting and observing' how the Eurozone will recover after the crisis. Afterwards, it will decide about the date of its accession. Even in the report on business cycle synchronisation and convergence between the Czech Republic and the Eurozone from 2017, the argumentation summarises that the Czech Republic can meet all criteria in a mid-term outlook, but the situation in the Eurozone has still not been stabilized enough for the Czech Republic to decide about the precise accession date yet (The Czech National Bank, 2017).

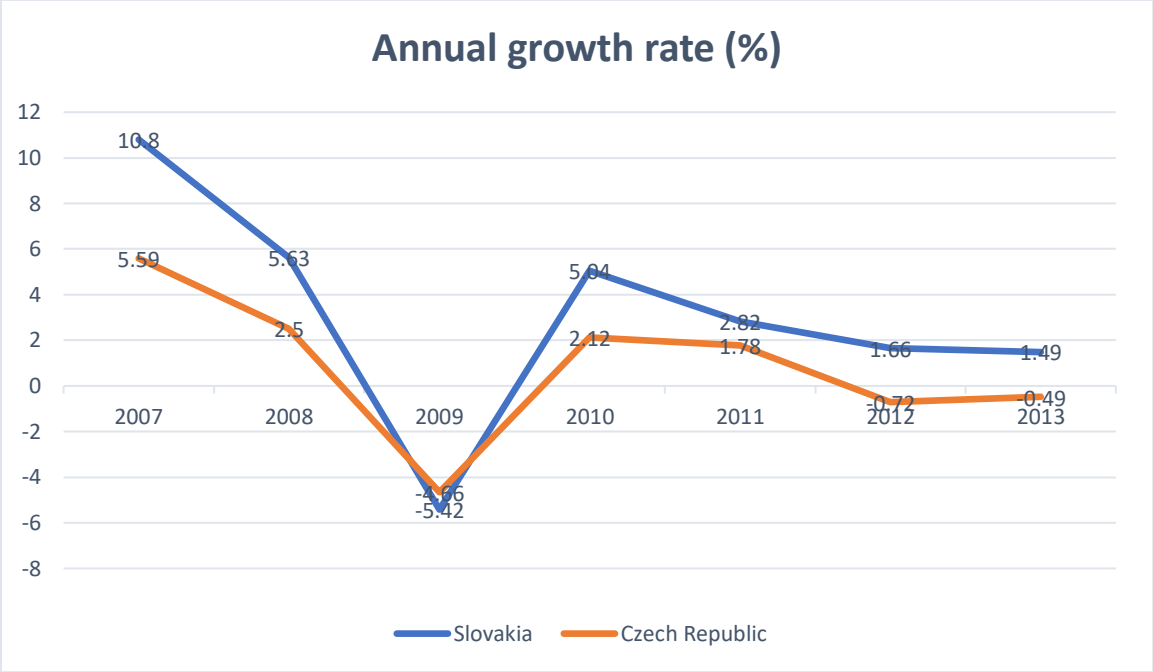
This approach is based on a theory according which by adopting a single currency, a country loses its adjusting mechanisms for a period of a recession. This is often considered as a cost of a monetary union, as the country cannot use its exchange rate mechanism or the abilities of its national central bank in their preferable way to cope with the falling aggregate demand. This is also a view of critics of the EMU and,

moreover, one of the reasons the CNB is opting for its ‘waiting and observing’ strategy. In contrast, Czechia’s neighbour Slovakia joined the ERM II mechanism in 2005 and subsequently the Eurozone in 2009, during the outbreak of the crisis. It is generally accepted that Slovakia, historically considered as a less developed part of former Czechoslovakia, gained from this decision and its membership in the Eurozone is generally perceived highly positively.

Difference in the monetary regimes used in neighbour countries with shared history and highly similar economic development offers an appropriate laboratory for a comparison of the abilities of these regimes in time of crisis. Proclaimed benefits of own currency for the Czech Republic should have been observed in this period, in contrast with Slovakia without control over its own currency. Recent crisis hit the countries in question, however, rather similarly. As I will show, both countries are small, pro-export economies highly dependent on German production and economy. This shared feature of the countries has a significant impact on their crisis and post crisis development. This work is, therefore, focused on a puzzle implied from a similar development of the countries operating in different monetary regimes. By examining the structures of Czech and Slovak economies and considering their political development it is suggested that the monetary sovereignty of the Czech Republic does not seem to cause a significant difference in the post crisis development when compared with the situation observed in Slovakia. This puzzle, subsequently, brings a question about the role of monetary regimes in times of crisis and the role of the euro in the post-crisis stabilisation generally.

1. Countries in question

Main puzzle of this work is focused on the role of exchange rate mechanism in times of crisis. Two countries used in this work, the Czech Republic and Slovakia, offer an appropriate laboratory for a comparison as they are highly similar in their economic structure and historical development, yet they still chose different approaches towards the Eurozone accession. Divergent choice of the monetary regimes, however, did not prevent from a similar crisis- and post-crisis development of the countries in question. As it is shown in the Table below, both countries experienced sharp decline in 2009 when Slovak GDP fell to -5,42 from extra-ordinary high growth rate a year before and the Czech one plummeted to -4,66. Both countries were also able to get back on almost a pre-crisis level in 2010, however, only Slovakia maintained to keep the growth above zero also in the following years.



Source: OECD Economic Outlook: Statistics and Projections

This comparison thus offers a research question for this paper focusing on two countries operating in completely different monetary regimes. On one hand there is a flexible, completely floating regime of the Czech Republic, on the other, the representation of the hardest fixed regime possible; the single currency. The question I am trying to answer in this work then is how it can be possible that their crisis- and post-crisis development was still so similar? This puzzle seems to be significantly striking mainly in times when the Czech Republic constantly refuses the Eurozone accession using the argumentation that their floating regime can be helpful in times of a recession. My main inquiry then is; what does the Slovak example say about this reasoning? That is why I am examining in this work the role of monetary regimes and precisely the role of monetary sovereignty during the crisis- and post-crisis development.

It should be noted, however, that this comparison should not be generalised for other countries in the Eurozone as they all have their specifics suitable for separate analyses. In the analysis of this work I am rather aiming to examine two significantly open and export-oriented countries which chose different ways for their monetary regimes. In the first part of this work, therefore, background situations of the countries will be considered. Firstly, I will focus on the situation in the Czech Republic; I will explain the reasons this country found to not to join the Eurozone. Subsequently, its structure of the economy – an important determinant of its later development – will be considered. Afterwards, I will turn my focus on Slovakia; a country which made more ambitious decision and joined the EMU exactly in the middle of the world economic crisis. The first part of the work, thus, offers a background information needed for later examination of the crisis development in the countries in question.

1.1 Czech Republic before the crisis

The Czech Republic (officially also Czechia), similarly as all the other countries of the EU, committed itself to join the Eurozone as soon as possible when the Maastricht criteria are met and the country is thus ready for the accession. In 2003, the Czech National Bank and Czech government released a document – Strategy on the Eurozone accession for the Czech Republic (The Czech National Bank, 2003) where a non-binding date for the accession was set for 2009-2010, similarly as in Slovakia. However, the assumption was that the country will meet the criteria and reach a high level of synchronization with other countries of the Eurozone. In the following years, however, the Czech Republic did not keep the deficit criterion under 3 % and the Eurozone accession was postponed for a later date. Thus, during the crisis, the Czech Republic was operating in flexible and floating exchange rates and later it will be examined how did it benefit from such regime.

Later documents considering Czechia's readiness for the Eurozone accession evaluated that the country was prepared to join the Eurozone from the economic point of view, however, the CNB repeatedly suggested to wait until the consequences of the crisis are gone and the situation is stabilized. Even more than 10 years later, the approach of the CNB has not changed as it is still emphasizing the positive effects of the adjustment mechanisms available in the flexible exchange rate mechanism (The Czech National Bank, 2017). In addition to Maastricht criteria, the CNB also considers other factors such as synchronization of the business cycles of the Czech economy with the Eurozone or the ability to deal with asymmetric shocks without sovereign currency.

1.1.1. Theoretical background of the accession decisions

The CNB's analyses and considerations follow a theoretical background of Optimum Currency Area (OCA) pioneered by Mundell, McKinnon and Kenen in 1960s and further developed by De Grauwe (2012). According to the original interpretation, the countries which plan to form a monetary union should ensure that there is a sufficient wage flexibility and mobility of labour in their economies. Without these adjustment mechanisms, the countries would find it more difficult to adjust to asymmetric demand shifts than they would had they maintained their own national currencies. De Grauwe (2012) explains this theory on the examples of two countries, named Germany and France. OCA theory argues that if an asymmetric shock occurs and hit only one of these two countries – both members of a monetary union – flexible wages in the country experiencing a recession would lower to stimulate demand. At the same time, the second country would increase their wages so as it will become less competitive. Eventually, both countries would reach new equilibrium.

Similarly, in case of labour mobility, workers from the country hit by the recession will simply move to the country experiencing boom as well as the excessive demand for labour. Due to these movements, new equilibrium will be reached similarly as in the first example with wage adjustment. However, in case of rigid wages and limited labour mobility, countries that are willing to form a monetary union will find it more difficult to adjust to asymmetric demand shifts than countries that have maintained their own national money and that can devalue (revalue) their currency. In the latter case, national monetary policies, including the exchange rate, add some flexibility to a system which is overly rigid. Put differently, a monetary union between two or more countries is optimal if one of the following conditions is satisfied: there is sufficient wage

flexibility or there is sufficient mobility of labour (De Grauwe, Economics of Monetary Union, 2012).

1.1.2. Application of the theory

Applying this theoretical background on the country in question, the Czech Republic, we can find that the CNB is focused on similar factors in its reports. Of course, the real comparison is much more complex than the two-countries example from the theory, however, one of the factor the Czech Republic is indeed considering with regards to the EMU accession is labour mobility and overall synchronization with the Eurozone so as to prevent from asymmetric shocks after the potential accession. In fact, the annual reports of the CNB are dividing considered areas into four categories according to their synchronization with the EMU. First category suggests accepting euro for the Czech Republic as soon as possible. This suggestion comes from the point of high openness of the Czech economy and significant trade connection with the Eurozone. From this point of view, accepting the single currency would decrease transaction costs and limit the exchange rate risks. Strong trade and ownership connection also add to a higher synchronization of the Czech Republic with the Eurozone.

Fundamentals which were hit by the crisis but nowadays are not an impediment for the Eurozone accession anymore are covered in the second group. These are stabilization of financial markets and governmental finance, which are slowly moving back to pre-crisis level. In the third group, the fundamentals are still too far from the Eurozone levels. Here the report mentions mainly a real convergence of the Czech economy to the Eurozone. It argues that fundamentals as GDP per person or the price and wage level are still only catching up with the Eurozone average. Lastly, long term problems and mismatches are covered by the fourth group where recovery is not foreseen.

Traditionally, here the report considers aging population and, already mentioned, rigid labour market with high taxation and low labour mobility. Lastly, the report also considers non-economic perspective, where the weakness of the Czech Republic is recognized in its institutional environment lacking behind the EU average mainly in a law enforcement. Similarly, problematic seems to be a pace of the innovative production which is too low in comparison with the EU average (The Czech National Bank, 2017).

It is doubtful, however, whether these factors are the real obstacles for the Czech Republic preventing from the Eurozone accession. As De Grauwe (2012) mentions as well, it is more likely that countries will face the differential shock less frequently in a monetary union as their common trade and product differentiation would lead to a 'structure of trade in which countries buy and sell to each other the same categories of products. (…) This structure of trade leads to a situation where most demand shocks will affect these countries in a similar way' (p.2). In other words, in a monetary union, policies for coping with asymmetric shocks may not be necessarily needed as these shocks are less likely to occur. This, so called European Commission view, is in contrast with the view presented by Paul Krugman (ibid.), according to whom a trade integration leads to a regional concertation in industrial activities. Then, Krugman argues, sector-specific shocks may easily become country-specific and the exchange rate mechanism can be preferable option for the countries to correct for these disturbances. However, the empirical evidence seems to support the view of European Commission as it can be summarized that monetary union is more than just an introduction of a common currency; it also leads to an integration of payment and banking system – and financial markets in general – which reduces the cost of trading (ibid.).

Moreover, endogenous theory on the monetary integration explains that even if the countries are not integrated before forming a monetary union, the formation, mutual integration and trade connection will lead to higher synchronization, subsequently reaching the optimal currency area (Frankel & Rose, 1996). Even if we left alone Rose's (2000) highly probably overestimated results showing that only by belonging to the same monetary union, the countries double the size of trade flows, other studies show still significant effects amounting to 5-20 % expansion of trade in monetary union in Europe (De Grauwe, Economics of Monetary Union, 2012). It will be notable later in the work how differently the countries in question used these theories. As already explained in this part, the Czech Republic has decided to stick with traditional OCA explanation and keep itself out of the Eurozone until sufficient synchronization is reached. On the other hand, Slovakia focused on possibility of future positive development and, with accordance to endogenous theory of OCA, it joined the Eurozone with expectation of a deeper synchronization afterwards.

1.2 Structure of the Czech economy

Structure of the economy is an important determinant of its development, not only during the crisis. Therefore, before I start to evaluate the abilities of monetary sovereignty in dealing with the recession, it is right to focus on this factor. The Czech Republic is known as a small, open economy with the export to GDP ratio constantly above 70 % (The World Bank, 2018). This feature was substantial already back in time when Czechia was entering the EU (2004). Nowadays, the structure of the Czech export is striking with a significant dominance of machinery and transport equipment, reaching the second highest number in the EU in 2013 (Czech Statistical Office, 2013). External trade is clearly focused on the European economies, as the Czech's share of

exports to EU 28 countries in total exports reached in 2014 again the second highest level among the member states, thus, 81,1 %. This level was even higher during the crisis, with constant values above 80 % (Czech Statistical Office, 2014).[1] Moreover, 32,4 % of total export in 2016 went to the main external trade partner of the Czech Republic – Germany. This leaves Czech's second main partner – Slovakia – well behind with only 8,3 % of the share (Czech Statistical Office, 2016).

This high dependence on the external trade and specifically on the German economy is also an important part of a discussion about the Eurozone accession as the countries experiencing falling domestic demand can replace the loss by the external one. However, when the main external partners are in sharp decrease, there is very little a dependent country can do to shield itself from imported shock. This was also case of the Czech Republic, where whole crisis was triggered by substantially reduced external demand. According to Czech Statistical Office (2011), therefore, the Czech Republic was not hit by the financial crisis but only by subsequent global economic crisis. Thus, it is important for an open economy to have partners for trading with sound economy also during the recession times. How relevant this factor was during the recent crisis for the Czech Republic will be shown after analogous description of the second country in question, Slovakia.

[1] In both mentioned fundamentals, it was only Slovakia reaching higher numbers in total export on GDP as well as the share of export to European countries in total export.

1.3 Slovakia before the crisis

As it was already outlined, Slovakia chose much more ambitious approach and committed itself in 2003 to prepare the conditions to meet the Maastricht criteria before 2006 (National Bank Slovakia, 2003). National Bank of Slovakia (NBS) repeatedly declared its strong support for the country's accession to the EMU as it expected full enjoyment of the benefits from the integration process only in its final stage – as a part of the monetary union. It is already notable that Slovak Strategy on the Eurozone accession (2003) considered the accession only as a matter of time – and the argumentation of the Strategy suggested that the sooner the policies are set in line with the European ones, the better. In this document, prepared in cooperation of Slovak government and NBS, it was concluded that the advantages of the acceptation of the euro clearly outweighed the costs. Therefore, it was argued, eventual accession should not be postponed once the criteria are met (p. 15).

This document, on the other hand, discusses also the possibilities of asymmetric shocks for which the sovereign monetary policy might be helpful - this argumentation used against accepting the single currency in the Czech Republic. However, Slovak report summarizes that according to empirical findings, such development is unlikely to occur. Moreover, the Strategy (2003) implies possible benefits of endogeneity of the OCA for Slovakia, where the synchronization can be reached ex post after the accession (p. 9). Given the nature of Slovak economy – small and open economy with 90 % of export directed to the EU countries in 2003 – it argues that the accession would only add to the economic growth of the country.

This, apparently much more optimistic approach of Slovakia, might be partially determined by the governmental structure of those times. Slovakia was, in contrast to

the Czech Republic, much more consistent in its governments as the later of the countries experienced several resignations of governments in its history. Moreover, in 2003, Czech government in power was led by Czech Socialist Democratic Party (CSSD), ultimately less willing to undergo structural reforms and to lower the governmental deficits needed to meet the criteria. On the other hand, Slovak Democratic and Christian Union-Democratic Party (SDKÚ-DS) was well known for its right-wing approach to economy which led to important reforms of a government led by Mikuláš Dzurinda and Ivan Mikloš, the president of SDKÚ-DS and Minister of Finance respectively. They helped this young and relatively underdeveloped economy to meet Maastricht criteria as well as the limits set by the Stability and Growth Pact with regards to stability of public finance (ibid., p.14). In 2005, Slovak government together with NBS published National plan of the euro establishment in Slovakia (2005), where step-by-step approach for Slovakia towards the Eurozone accession was prepared. When the criteria were met, there was nothing preventing the country from joining the monetary union.

The question why Slovakia, historically less developed and more 'Eastern' part of former Czechoslovakia, joined the Eurozone while its neighbour has been hesitating with the accession until today is a large question for its own research. In a paper published by Pechova (2012) on this question the difference in the decisions of these countries is explained by constructivist understanding of 'legitimizing discourses' in the political process. According to this argumentation, it is mainly ideological reason standing behind divergent approach of two countries with a common history. The Czech Republic favoured 'greater national assertion and policy independence' while 'Slovakia came to understand Eurozone membership as an important tool in reversing

the feelings of isolationism experienced during the Mečiar period[2]' (ibid., p. 1). In the next part I will focus on economic structure of Slovakia, similarly as it was in a previous part with the Czech Republic. Afterwards, the crisis development in countries will be considered focusing on the role of monetary regimes.

1.4 Structure of the Slovak economy

Slovak economy is even more open and focused on the EU market than the Czech one regarding its export structure. Slovak Strategy on the Eurozone accession (National Bank Slovakia, 2003) informed that Slovakia had 60 % of its export directed to the EU in 2003 and this was expected to reach 90 % after the 2004 enlargement. Current development shows significantly high level of both export fundamentals; the ratio of Slovak export to GDP (The World Bank, 2017) as well as the ratio of the EU-directed export (Czech Statistical Office, 2014) are the highest in the EU. Dependence of Slovakia on German economy is slightly lower than the situation was in the Czech Republic with regards to export-to-GDP ratio, however, export to Germany still covers the highest ratio of Slovak's total export (National Bank Slovakia, 2018).

With this structure of the economy, it is unsurprising that whole country's development during the crisis depended on the external demand and its movements. As it will be shown in the part devoted to the crisis development in Slovakia, the country's growth firstly dropped significantly with the decrease in external demand without any 'pillow'

[2] By this, Pechova (2012) means two successive governments led by Vladimir Mečiar. This period is infamously known as being non-democratic part in recent Slovak history. It is almost certain that the country would not be able to join the EU if Mečiar would be still the leader of the government as the political criteria of democratic state would not be met.

offered in flexible exchange rate. However, subsequently, when the biggest trade partners recovered, the growth in Slovakia occurred even faster than in the Czech Republic, regardless its monetary regimes.

2. Crisis in the Czech Republic

For the reasons mentioned in the beginning, the Czech Republic has decided to keep their monetary sovereignty and flexible exchange rate which they describe as 'the effective tools for taming the economic shocks hitting the European economies' (The Czech National Bank, 2017). In this part, therefore, I will firstly go through the crisis development in the country by tracing how the macroeconomic fundamentals – such as GDP growth, unemployment or public finance – have reacted to the crisis. Secondly, I will examine how the Czech Republic used the tools of monetary sovereignty in times of the crisis and, thirdly, I will evaluate their real effectiveness in post-crisis stabilization. Then I will turn my focus again on Slovakia and similarly as with the Czech Republic, I will describe the crisis development in this country as well as in the Eurozone as a whole.

2.1 Crisis development in the Czech Republic (2008-2013)

Central and Eastern European (CEE) countries[3] were hit by the crisis relatively significantly, with an exception of Poland (National Bank Slovakia, 2012). For the beginning of the crisis here is considered mid 2008, when investment banking company Lehman Brothers collapsed. This moment was already translated into crisis in some of the CEE countries (National Bank Slovakia, 2012). The Czech Republic experienced continuous decline in GDP growth in three quarters in a row, from the end of 2008 until the end of 2009. According to OECD data (2018), lowest level reached in 2009 was -4,7 % of annual growth rate. As it was outlined in the previous part, the

[3] By these are meant Hungary, the Czech Republic, Poland, Slovenia, Slovakia and Austria.

main determinant of the sharp decline – as well as of later recovery – was export component of the economy. As the report from National Bank Slovakia (2012) noted, this is the part of crisis development where the floating exchange rate mechanism can be used as a so called ‘pillow’ in taming the shocks resulting from the crisis. This accommodating role of exchange rate mechanism will be considered in later parts of this work.

External economic relations of the Czech Republic experienced significant impact of the crisis as well, given the fact that openness of the trade in goods and capital flows is the most sensitive part of the country’s economy (Czech Statistical Office, 2011a). Overall, the external trade decreased in 2009 by 15,7 % year-on-year, in the real terms the turnover of the external trade declined by 10,7 % in comparison with 2008 (ibid.). Moreover, Czech Statistical Office (2011b) informs about 1,2 % loss in employment level, which was less than in the EU average, however, with regards to the structure of the economy, the employment in finishing industry – where the majority of men has been working – decreased by almost 6 %.

It should be noted here that significant impact on the crisis development in the Czech Republic had also governmental reaction. On a contrary to Slovakia, Czech government reacted with less relaxed fiscal policy and did not spend as much as Slovakia did. This difference was translated into debt and deficit dynamics, which have been considerably different since then (Eurostat, 2018).

Despite this more restrictive approach of the Czech government, it did not prevent from the deficit reaching -5,5 % in 2009 after keeping the fundamentals under the 3 % criterion for three previous years. On the other, the public debt to GDP never exceeded the criterion of 60 % as even in 2009 it almost reached only 40 % (Czech Statistical

Office, 2018). Despite these sound macroeconomic fundamentals, the Czech Republic has chosen rather restrictive approach towards the public finance during the crisis when the public cuts as well as increased taxation took place. This policy was subsequently criticised for being too chaotic and proposed without any economic concept behind these decisions (Franče, 2012).

2.2 Flexible exchange rate in the Czech Republic (2008-2013)

Contrary to the argumentation prevailed in the Czech Republic emphasising positive effects of the exchange rate flexibility, Mabbett & Schelkle (2015) argues that countries initiating process of monetary union in the late 1980s were focused on excessive volatility of exchange rates and its possibility to bring the threat of 'sudden stops' of capital movements (p.2). Moreover, according to this argument, banking crises occurred much more frequently in the wake of financial liberalization than during the Bretton Woods era, known for fixed exchange rate mechanism. Referring to Rey (2013) it was shown that even if the country keeps the floating exchange rates, its monetary conditions are still subjected to and influenced by a common global cycle. Entering the EMU was a step towards stability in the face of these external pressures (Mabbett & Schelkle, 2015).

Analyses of the crisis development in the Czech Republic, however, show rather beneficial outcomes of the floating exchange rate mechanism during the period of declining export shares of the Czech Republic. Moreover, this adjustment mechanism also stimulated later recovery of global economy (National Bank Slovakia, 2012). Significant devaluation of nominal exchange rates of Czech Koruna, as well as of Hungarian Forint and Polish Zloty, was reflected in a real effective exchange rate which offered relative competitive advantage for these countries (ibid.). It is widely believed

that in case of CEE countries, those where a floating exchange rate mechanism was used, recovery occurred much faster and the pre-crisis levels were reached relatively quickly. This development occurred mainly with regards to their important GDP component; external trade. Main example of this work, the Czech Republic, precisely shows that due to its floating exchange rate mechanism, it was already in the second quarter of 2009 when the export shares of the country started to grow again and the situation reached pre-crisis level (ibid.). However, situation in Slovakia was again rather similar since the pre-crisis level was reached relatively quickly as well, faster than in other CEE countries using the single currency. This comparison leaves us with a puzzle and shows that the impact of flexible exchange rate mechanism might be in fact less significant.

The Czech National Bank (2018b) summarizes that due to the increased risk aversion, the volatility and risk premium of Koruna's exchange rate plummeted because foreign investors did not sufficiently distinguish and evaluate the situations of particular countries in the region. Banks were subsequently less willing to lend money between each other, thus, interest rates set by monetary policy and those used on the markets diverged significantly. The Czech National Bank was one of the first central banks which started to relax its monetary policy due to the crisis. It started to lower its interest rates already in August 2008 but this could not fully prevent from the decrease of overall activity of the economy and increase in unemployment as they were highly depended on falling foreign demand (ibid.). This report, again, concludes that flexible exchange rate system did help the Czech Republic to tame this decreased demand and prices and helped the financial system to stay stable and in function.

Moreover, continuous economic stagnation, increased unemployment and low inflation forced the CNB to lower its interest rates to so called technical zero in 2012. Later it

was shown that this standard monetary tool was not enough in comping with the deflationary threat and the CNB started to relax its policy substantially. This resulted in highly controversial movement of monetary interventions where exchange rate mechanism became another tool for Czech monetary policy to avoid the threat of deflation and long economic stagnation (ibid.). This was finished in the mid 2017, and I will closely look at its implications in the following part.

2.3 Interventions in the Czech Koruna (2013-2016)

The CNB's main monetary goal is to keep price stability for which it chose to use regime of inflation targeting (The Czech National Bank, 2018a). For such aim, it considers prognosis of inflation development and use mid-term strategies to meet the target. If it is shown by these forecasts that the targeted inflation will not be met, the central bank will adjust its main tool – repurchase agreements – to set more restrictive (or expansionary) monetary policy. By these agreements, central banks are selling securities to commercial banks with commitment of later re-purchase for a higher price – which gives the commercial banks additional income, called repo rate (The Czech National Bank, 2018c). However, the situation after the financial crisis, which hit the country rather significantly and influenced its export possibilities highly, was found to be extraordinary and the traditional tools were not able to meet the target set at 2 %. As mentioned in a previous part, the Czech Republic started to use non-standard monetary policy in 2013, known as monetary interventions.

Czech economy was facing second recession and operating in a system of zero interest rates while still being threatened by forecasted deflation. As back then governor of the CNB Jiří Rusnok pointed out, there was just little the CNB could do in such a situation. It was, therefore, decided that the CNB will try to recover inflation

pressures, encourage aggregate demand and help exporters by directed depreciation of Koruna (The Czech National Bank, 2016). Main reason for the interventions was the threat of deflation as even in the post-crisis situation the CNB was unsuccessful in meeting the inflation target. As it was shown in the previous section, the floating exchange rate mechanism might have been considered as a 'pillow' for shocks coming from outside; it could not be, however, considered as a main component of the post-crisis stabilization *per se*. Directed monetary interventions, on a contrary, could be considered as a benefit coming from Czech monetary sovereignty. Slovakia, on the other hand, could not opt for a similar policy to help to meet its targets or to boost the exports. According to some studies, however, Mr. Rusnok admitted that due to deflationary pressures coming from abroad, these domestic pro-inflationary pressures initiated by the interventions were rather non-significant. Moreover, it was already calculated that the interventions costed 2050 billion CZK (79,5 bn EUR) which were needed for buying the euro and helped the koruna's depreciation (Aliapulios, 2017).

When the interventions were finished in 2016, Koruna started to appreciate immediately, as it was expected. Appreciation was enhanced also by increased interest rates, aimed to attract foreign investors to the country (ibid.). This controversial approach of monetary interventions is dividing Czech economic society into two camps. For some it is clear that without interventions, the recession would be much more adverse. According to the CNB, by using this tool it was proven that the sovereign monetary policy is indeed beneficial when used in times of recession (The Czech National Bank, 2016). Moreover, accommodative monetary policy was supported also by OECD and IMF statements as forecasted growth of the country was too low (The Czech National Bank, 2013).

Others, however, are emphasizing the cost side of this policy. Not only is the CNB facing direct costs mentioned above needed for the euro purchase, but also it may experience indirect ones subsequently. Firstly, proponents of some economic schools would argue that artificially ‘printed’ money boosted into Czech economy will create a bubble on the markets which will be inevitably visible and followed by its burst. Even more importantly, as the CNB has now a significant amount of euro-nominated reserves, appreciation of Czech Koruna will create significant losses of the value of the reserves. It is, therefore, concluded that the CNB will lose in nominal terms due to the interventions. However, it should be noted that the CNB did take this losses into account when the interventions started. Thus, these losses were not made by money borrowed or collected from tax payers; they were ‘created’ by the CNB itself, indeed for the purpose of these interventions only. The loss will be visible only in the balance sheet of the central bank which, however, may rise some political questions about its current large independent mandate (Interventions of the CNB, 2017).

It can be concluded that when looking at the Czech Republic separately, some benefits of the flexible exchange rate could have been observed. Generally beneficial is considered the ‘pillow’ created immediately after the outset of the crisis which allowed the currency to devalue and by this also supported external trade, an important sector of the country. On the other hand, the volatility of the exchange rate mechanism did not offer much stability for domestic companies and their planning about future investing, as Koruna appreciated significantly already in 2009 after the initial depreciation (European Central Bank, 2018). Later use of non-standard monetary policy, the interventions, is still to be fully evaluated from the Czech economic experts. The opinions are so far divided; some praise the pro-export oriented approach of the country whereas others repeat that the main reason for the beginning of the

interventions – to increase the inflation – was not met even after three years of massive purchase of the euro. Moreover, interventions can now make the appreciation of Koruna much more expensive for the Czech Republic.

3. Crisis in the single currency regime

In this part of the work, I will turn my focus onto the crisis development in the single currency regime of the Eurozone. In the beginning of the Eurozone creation, it was mainly a stability of the currencies the countries were trying to reach. This ambition originated already in late 60s as it promised stability and an environment for higher growth and employment (European Comission, 2018). For the real first step, however, can be considered launch of the European Monetary System (EMS) in 1970, which was built on exchange rates defined with reference to a newly created ECU (European Currency Unit), a weighted average of EMS currencies (ibid.). These currencies were supposed to be kept within a narrow band which meant unprecedented coordination of monetary policies between EU countries followed by the Delors Report proposing a three-stage preparatory period for economic and monetary union and the Euro Area. Even before that, the criteria needed to be met in order to adopt the euro were agreed and Treaty on European Union was signed covering the provisions needed to implement the EMU. With the aim of more effective trade amongst the countries and overall higher stability, already 19 countries joined the Eurozone (European Commission, 2018). What seemed to be a beneficial deal for countries willing to trade without exchange rate differences has turned to a fragile union when the crisis hit in Europe. In the following parts I will shortly present few explanations of the recent crisis as well as the European policies used in practice.

3.1 Crisis in the Eurozone overall

There are several approaches explaining the crisis in the Eurozone. For instance, Krugman (2013) emphasises the traditional OCA theory presented in the beginning of the work and simply concludes that the EMU has never been an optimal currency area

which was eventually translated into the crisis. Counterargument to this would argue that there is no optimal currency area in the world at all – not even in the United States – and no one is doubting the advantages of single currency there. Therefore, different aspects may be then emphasised as the triggers of the crisis. De Grauwe (2011) and Mabbett and Schelkle (2015) would agree that the main trigger came from financial markets, operating under so called animal spirit i.e. that unexpected market sentiments were driving investors' waves of pessimism and optimism. Thus, these fundamentals which were reacting sometimes more but sometimes less reasonable caused the symmetric shock which was then translated asymmetrically due to labour rigidity and monetary incompleteness (De Grauwe, 2011). Similar explanation of symmetric shock with asymmetric implications also offers European Commission (2009).

According to some academic theories, what the EU needs is much more solidarity and risk sharing to even out different impacts of the crisis in the EU countries. Ideally, according to De Grauwe (2011), current state of the EU should be transferred into fully fledged political union with a bigger common budget and shared fiscal policies at the EU level. Mabbett and Schelkle (2015) on the contrary, would focus more on completing Banking Union as it would 'separate sovereign risk from banking risk, helping to break the diabolic loop that has affected Greece' (p.35).

Proponent of the Variety of Capitalism theory, Hall (2014), would, however, argue that the EMU was wrongly designed from the beginning, as Member States are operating in different institutional systems. Coordinated market economies from Northern Europe benefit in this system much more than the South due to their export-led growth, built on high levels of wage coordination (ibid.). Less developed non-market institutions and demand-led growth model of Southern Europe cause a difficulty in successful operation without capacity to devalue. Generally, what is Hall (2014) criticising about

the EMU design is its implicit demand that the countries of Southern Europe should emulate models of the North, as if there was only one way to have a successful economy (p. 25).

On the top of that, European Commission argues that the financial crisis highlighted the need for a better regulation and supervision of the financial sector and that is why nearly 30 sets of rules have been proposed since 2010. They are supposed to ensure that all financial actors, products and markets are adequately regulated and supervised (European Commission, 2014). European Financial Stability Facility (EFSF), created in 2010 and succeeded by the European Stability Mechanism (ESM) aimed to provide financial assistance for countries hit by the crisis most significantly; in this case those were Ireland, Portugal and Greece (ESM, 2018a). Current role of the ESM is to provide financial assistance for countries experiencing the most difficult financing problems. There are several lending toolkits ESM can operate with and few of them were already used, mainly in form of loans within a macroeconomic adjustment programme. (ESM, 2018b).

On the other hand, there were also number of policies accepted focusing on balanced budgets and fiscal surveillance rather than on fiscal provision. Fiscal Compact or Six- and Two- packs are the main examples of such proposals, the latter two aiming to strengthen the corrective arm of Stability and Growth Pact. This approach of one-size-fits-all policy has been criticised by some scholars as it does not recognize different needs of countries in troubles. Some academics are even strongly opposing these measures focused on reducing government debt during the recession, infamously

known as austerity[4], others at least emphasise a need to distinguish under which circumstances they can really work (Monastiriotis, 2014).

It is obviously difficult to say which explanation is the right one and the difference between scholars' approach and the one eventually used in practice is also significant[5]. Evaluating on these steps is not the aim of this work, however. Nonetheless, what data shows clearly is that despite all the effort taken from the EU as well as from the member states sides, this recession was deeper than any recession since World War II (European Commission, 2009). In the next chapter I will zoom in on a small and open economy of Slovakia and its crisis development within a single currency regime.

3.2 Crisis in Slovakia

As it was already mentioned, Slovak economy is even more export oriented than the Czech one and, therefore, it is also more dependent on a foreign demand. This means that any development happening in the country's main trade partners is translated into the domestic situation quickly. Moreover, the situation in Slovakia was unique also for the reason that the escalation of the crisis here occurred at the same time as did the single currency accession. According to study from INEKO (Institute for economic and social reforms), Slovak crown (koruna, SK) was fixed in 2008 on a strong level of 30,126 SK for one euro and due to the fact that this happened during the crisis onset,

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[4] For example, Boyer (2012) argues that there are four fallacies upon which austerity measures were based; false diagnosis of the crisis, assumption of the possibility or even generality of the so-called 'expansionary fiscal contractions', one-size-fits-all approach and the inadequate trust in so-called spill over effect.

[5] This is comprehensively explained in (Schelkle, 2013).

it has been difficult to assess the sole euro-impact on the Slovak economy (Goliaš, 2015). What was found, however, is that the conversion costs for the country were more than compensated by lower transaction costs according to NBS calculations. On the other hand, INEKO (2015) report repeats the need for a fiscal policy compensation due to the loss of national monetary policy as well as the need for a flexibility of labour and products markets. This argumentation is again in accordance with the theoretical background of the OCA theory, presented in the previous part of this work. These factors were challenged during the crisis and indeed Slovak government provided a fiscal stimulus to the economy in 2009 and 2010 which was translated into the high finance deficit of -7,8 and -7,5 % of GDP respectively (Statistical Office of the Slovak Republic, 2018). Slovak approach might have tamed the immediate shock on the economy, however, this approach was also criticized from some Slovak experts. They argue that because of a bigger governmental spending, governmental income had to increase as well, which caused a significant increase in taxation in post-crisis years (INESS , 2016).

INEKO report (2015) also contrasts export possibilities of Slovakia and the Czech Republic and summarises that due to inability to devalue the single currency in Slovakia, exporters' costs had to decline. This was reflected in a higher unemployment of manufacturing in Slovakia than in the Czech Republic, driving up the overall unemployment rate (ibid.). As it was already mentioned, Slovak development was significantly determined by the situation of its main trade partners' economies; in case of Slovakia those are in addition to Germany, operating in the single currency regime, also the Czech Republic, Hungary and Poland – all three having their own currencies. Thus, strong depreciation of these currencies led to overvaluation for Slovakia making its products more expensive in those markets. On the other hand, their appreciations

in 2011 led to real exchange rate undervaluation providing stimulus to the Slovak exporters which, according to INEKO report (2015), is the main reason for Slovak's avoidance of the recession in later years as well as for their fastest growth in the export volume among Visegrad countries (ibid., p.4).

What can be seen from this analysis is that the crisis development in small and open country such as Slovakia is highly dependent on its trading partners and their economic situations. Having three significant trade partners operating with their own currency meant that some exchange rate volatility was imported also to this country. Another reason for sharp decline in Slovak economy in 2009 could be found in gas crisis happened simultaneously with the global crisis and the Eurozone accession. Given all these events occurring at the same time, it is rather striking that Slovakia was able to get back on pre-crisis level earlier than the Czech Republic and that it was also able to keep its position sustainably high. One of the reasons for such development was also more effective production in response to declining export level (National Bank Slovakia, 2012). It can be partially summarized here that the combination of rather relaxed fiscal policy and more effective production during the crisis escalation helped Slovakia to recover even without the ability to depreciate. From a broader perspective, it was repeatedly calculated that thanks to the euro accession, Slovak GDP increased around 10 % (Žúdel & Melioris, 2016)[6]. On the other hand, some measures estimated that if Slovakia was operating with its own currency during the crisis, it would have been temporarily better off by roughly 2 % (ibid., p. 16).

[6] This paper was published as OECD paper as well as an official analysis of Ministry of Finance Slovakia summarizing the positive effect of the euro on Slovak economy.

4. Discussion: Comparison of the crisis development and post-crisis stabilisation in the Czech Republic and Slovakia

Two countries examined in this work which are significantly similar in their economic structure also experienced rather comparable crisis development on a first sight. This puzzle was the main focus of the analysis explained in this work formulated in the research question as well. What I tried to examine in this paper was indeed this striking similarity of crisis- and post-crisis development of two countries with highly similar economies but with completely different monetary regimes. The last part of this work will be devoted to the comparison and summarisation of the main findings of my analysis. I will subsequently bring my conclusion to the research question and the puzzle observed.

Even though the crisis development was significantly similar in these countries, there were some structural differences which, understandably, caused that their development was not completely alike. These countries' specifics also imply that this analysis should not be generalised for any other pair of countries or the Eurozone as a whole. ECFIN Economic Brief paper (2011) mentions some of these differences mainly in a manufacturing production of the countries and Slovak gas crisis, which was certainly an asymmetric shock experienced only in one of the countries in question. This report, moreover, offers slightly different view on the comparison of these countries and their crisis development than those considering flexible exchange rate mechanism as an effective tool in coping with recessions. Despite the opinion that exchange rate flexibility of Czech koruna might have been used as a pillow for the immediate shock, here it is noted that this depreciation did not have a boost effect to the relative performance of the Czech export. On a contrary, exchange rate volatility

might have represented a cost for the exporters. Moreover, it is implied, Slovakia was somehow able to benefit from a strong monetary policy response of the ECB while also enjoying relatively higher financial market stability (ibid., p.10).

It is surely difficult to isolate particular events from each other in a crisis; this work it also showed that different reports offer different outcomes. For instance, the flexible exchange rate of the Czech Republic could be perceived as a pillow useful in taming the immediate shocks from a macroeconomic perspective while at the same time it could act as a source of vulnerability for exporters and private sector generally. According to some, the inability to adjust exchange rates for Slovakia has been a cost of entering single currency regime which is in direct contrast of others' analysis emphasising stability guaranteed for Slovakia as a part of the Eurozone.

What we have observed during the partial analyses in this work, it is more a matter of a perception to answer the question about the role of a monetary regime during the crisis using the example of Slovakia and the Czech Republic. For some, the pillow created for immediate shock in the Czech Republic together with the ability to intervene in later years to enhance the export position were enough to be persuaded about positive impact of a monetary sovereignty prevailing over its costs. This is a view held by the Czech National Bank (2015) as well as by the Czech government, emphasising still ongoing negative impacts of the recent recession (Ministry of Finance Czech Republic, 2017). This consistent view of the Czech leaders in 'waiting and observing' strategy is in direct contradiction with Slovak experience. It has been proved by number of analyses that there have been generally beneficial impacts of the single currency on the Slovak economy (Žúdel & Melioris, 2016). Also, it was shown that the crisis development was adverse only in a short period of time followed by a quick recovery. Slovak example thus shows that even without direct boost for exporters in the country

with the highest export to GDP ratio, it is possible to recover from the crisis quickly and to remain stable for already a decade after the crisis.

In other words, this analysis implies an answer for my research question asking about the role of monetary regime in crisis- and post-crisis development with focus on Slovakia and the Czech Republic and their surprisingly similar development. The answer I found is that in a small and highly open economy with strong macroeconomic fundamentals, monetary regime is not a main determinant of the crisis- and post-crisis development as it might be suggested by proponents of flexible exchange rate mechanism. What seems to be more important for countries with such profile is an external demand and positive economic development of their main trade partners. It is not, therefore, clear cut if the single currency would help the Czech Republic during the crisis or if Slovakia would be surely better off if operating in a sovereign monetary regime.

At the very end of this discussion part it should be noted that in addition to the economic reasons considered in this work, there is an important part behind the economic rationales; the politics. It was already outlined in the beginning of this work that different approaches from the political parties leading the countries in question might have been part of the reason why they have resulted in divergent monetary regimes as well. Similarly, the politics has a lot to do with the crisis and post crisis development and current attitude towards the euro. The Czech Republic is known for being one of the most Eurosceptic country in the EU, repeatedly demonstrating negative attitude towards the single currency. For instance, recent results of the Eurobarometer (2017) shows that 73 % of the population is against the EMU with a single currency (p.20). With the majority of the population perceiving the EU development ‘going in the wrong direction’ (ibid., p. 66) and with populist parties currently leading the government, the

European integration is not getting any positive response from the Czech electorate. This factor was also considered in the analysis of Pechova (2012) who explains that such attitude has been developed in this country since 1990s mainly due to the Eurosceptic prime minister (1993-1997) and later also president (2003-2013) of the country, Vaclav Klaus (p.18-19). Czech attitude thus remains to be against the single currency despite the findings explaining positive sides of the accession for a small, open, pro-export country such as the Czech Republic surely is. This work, therefore, partially aimed to bring a new light into this complex discussion. There is indeed a lot to consider for a country when entering the Eurozone, however, the Czech Republic has a unique position of a country whose neighbour can be used as an appropriate laboratory helping with its future decisions.

Conclusion

Main aim of this work was to examine the role of monetary regime during the crisis using the example of the Czech Republic and Slovakia. This was done in four chapters in total, where important factors such as economic structure of the countries as well as their experience with the flexible exchange rate mechanism were considered. The puzzle triggering this research was a similarity observed in a post crisis development in the Czech Republic and Slovakia, operating in different monetary regimes. The structures of their economies are, on the other hand, very much alike. What was concluded in my analysis is that their openness and export-led growth seemed to be the reasons behind the similarities in the crisis and post-crisis development. With such structure of the economy, it is only very little the country can do to adjust its economic development. Even though it was shown that the Czech Republic might have influenced their monetary policy, this happened only few years after the crisis and with still rather ambiguous implications for the Czech economy. In case of Slovakia it was showed that the Eurozone accession, taking place during the crisis, was a right step for the country which experienced fast and sustainable post-crisis recovery. The pillow created on the Czech side caused slightly less rapid fall in the outbreak of the crisis, however, the recovery took a longer time and does not seem to be boosted by their flexible exchange rate.

Overall, what can be concluded from this work is that the crisis management and post-crisis development of a particular country depends on more factors, not only on its monetary regime. For the concrete examples of the Czech Republic and Slovakia it seems that the external demand and domestic policy reforms resulted in rather similar development of two countries operating in different monetary regimes. Contrary to the

beliefs that the monetary sovereignty of the Czech Republic is the most important determinant of the country's post-crisis development, this work tried to argue that this might be less significant for countries with open economies dependent on the foreign demand, particularly for the Czech Republic and Slovakia.

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