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Comparison of Czech and Slovak Approaches to Euro Adoption

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Pronouncement:

I hereby declare that I created this bachelor thesis independently, using only the listed literature and sources.

Frankfurt am Main, July 1, 2010 .....

Michal Kühnel

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Abstract

The issue of monetary integration in Europe is currently hotly debated with very wide-ranging opinions. A clear demonstration of this is the difference in attitudes of Czech Republic and Slovak Republic in the matter of euro adoption. This thesis attempts to identify the reasons behind this difference. For that purpose we chose the following structure. First chapter summarizes pros and cons of a monetary union membership from a theoretical perspective. Second chapter describes the environment of the European Monetary Union and discusses its key features. Third chapter then provides a comprehensive analysis of Czech and Slovak economies in the spirit of the framework established by the previous two chapters. The results are not aligned with the expectations, as the economic performance of Slovakia with respect to monetary integration was not better than that of Czech Republic. We therefore identify alternative driving forces behind the differing approaches of Czech Republic and Slovak Republic toward the introduction of euro.

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Abstrakt

Problematika Európskej menovej integrácie je v súčasnosti horúcou témou, pričom názory na ňu sa často zásadne odlišujú. Jasným príkladom toho je rozdielnosť prístupov Českej Republiky a Slovenskej Republiky k otázke zavedenia eura. Táto bakalárska práca sa pokúša identifikovať príčny rozdielnosti postojov týchto dvoch krajín. Za týmto účelom sme zvolili nasledovnú štruktúru. Prvá kapitola zhŕňa klady a zápory členstva v menovej únii z teoretického hľadiska. Druhá kapitola opisuje prostredie Európskej Menovej Únie a rozoberá jej kľúčové súčasti. Tretia kapitola nakoniec poskytuje komplexnú analýzu ekonomík Česka a Slovenska v zmysle štruktúry vybudovanej dvomi predošlými kapitolami. Výsledky nie sú v súlade s očakávaniami, nakoľko z pohľadu teórie menovej integrácie nebola Slovenská výkonnosť lepšia ako tá Česká. Z toho dôvodu poukazujeme na alternatívne hnacie sily v pozadí rozdielnych prístupov Českej Republiky a Slovenskej Republiky k zavedeniu eura.

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List of Acronyms and Abbreviations

BuBa	Bundesbank
CB	central bank
CR	Czech Republic
CZK	Czech koruna
DEM	German mark
EA	Euro Area
EC	European Communities
ECB	European Central Bank
Ecofin	Council of finance ministers of the European Union
ECU	European Currency Unit
EDP	Excessive Deficit Procedure
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
EMU	European Monetary Union
ER	exchange rate
ERM	Exchange Rate Mechanism
ERM II	Exchange Rate Mechanism II
EU	European Union
EUR	euro
FDI	foreign direct investments
ForEx	Foreign Exchange
GDP	gross domestic product
GDPPC	gross domestic product per capita
HICP	Harmonized Index of Consumer Prices
MTO	Medium-term Objective
OCA	Theory of Optimum Currency Areas
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PIIGS	Portugal, Italy, Ireland, Greece, Spain
PPP	purchasing power parity
SGP	Stability and Growth Pact
SITC	Standard International Trade Classification
SKK	Slovak koruna
SR	Slovak Republic
TABS-MFI	total assets of the aggregated balance sheet of the monetary financial institutions
USD	United States dollar

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Introduction

The part of economic theory that focuses its attention at the issue of monetary integration is already about five decades old. If we generalize the issue, we find that the whole theoretical debate is even much older, as the monetary matters have held a prominent role throughout the entire economic history of mankind – both actual and theoretical. In comparison to this is the project of the European monetary integration relatively young, yet it represents an important breakthrough in the area. Originally, eleven countries decided to give up their sovereign monetary policies in favor of further economic integration in Europe. Later they were joined by another five, with eight more countries on the list of those that have committed themselves to do the same.

The whole issue however maintains its complexity in that the obligation to introduce the common European currency is a *de jure* one, but not a *de facto* one. With the founding of the European Monetary Union policy makers in most countries of the 'old' Europe have already bridged the gap between theory and practice. Yet, opinions on the issue remain diverse to say the least. And although the theory does provide guidelines for the contemplation of costs and benefits of membership in a monetary union, the decisive part – their weighing against each other – is always marked by subjective position of the author.

Those of the new EU member states that have already chosen to adopt the common currency are relatively small countries. The larger ones, in contrary, do not push the issue and rather hold back. Slovakia is so far the last EMU entrant, having joined the 'Euro Club' on January 1st 2009. Czech Republic, a country approximately double Slovakia's size, chose a different approach and keeps postponing the euro introduction. Despite many similarities the attitudes of the two countries are clearly different. This thesis asks the question:

What are the reasons behind contrasting attitudes of Czech Republic and Slovakia toward euro adoption?

In the attempt to answer this intriguing question we chose the following structure of the thesis. First chapter discusses costs and benefits of a monetary union from a broad theoretical perspective. It identifies attributes and characteristics that play a role in deciding on the issue in a general way. Second chapter goes into more detail, defining the specific environment of the European Monetary Union. Third and final chapter then builds on the framework constructed by the previous two. More precisely, it analyzes the economic but also non-economic justifications for the differences in individual attitudes of Czech Republic and Slovakia. From a purely economic point of view this thesis comes with a rather unorthodox reasoning that explains the attitudes and actions of the two countries in question.

1 Theory of Monetary Unions

Before the establishment of national states, legal governments and national currencies there was one particular means of payment that was universally accepted almost everywhere – gold. When governments took over the sphere of money, naturally they thought of gold as the base for their currencies. There were also bimetallic systems and places where gold was replaced by other precious metal, say copper. Still, the underlying notion is clear. The whole world, regardless of national boundaries, de facto shared one medium of exchange. Later however, currencies started to represent only a certain proportion of gold, exchange rates emerged and monetary policy gained a prominent role in the society. Disproportions on the international scale, once equilibrated by adjustments of basic economic factors such as prices and wages, started to be corrected via the tools of monetary policy.

Today we say that prices and wages are rigid. Perhaps they have been made so just by the usage of monetary tools, perhaps those tools were invented because wages and prices are rigid in their nature. Nevertheless, it is certain that excessive usage of these tools only made the system stiffer. In modern times, when money is no longer backed by gold or any other precious substance, it is so much easier (and politically more feasible) to devalue a currency rather than painfully adjust wages, prices, contracts, etc. Such behavior makes it more difficult to pursue business internationally though. Even now, the case for one money, one numeraire, is still potent and strong. It simply makes the whole system of exchange much easier. Just as money brought simplicity and new potential to barter economy, so monetary integration brings similar advantages to countries that are ready to reap the benefits. Nonetheless, there are also downsides to the whole business.

1.0 Optimum Currency Areas

In 1961 a Canadian-American economist Robert A. Mundell published an article dealing with exchange-rate regimes that keeps providing scholars with inspiration even half a century later. According to Google Scholar, as of June 2010 it has been cited more than 3200 times and Professor Mundell eventually even got awarded the Nobel Prize for his work in this field. The name of the article was *A Theory of Optimum Currency Areas* and it takes a rather critical approach to the monetary integration phenomenon.

The Theory of Optimum Currency Areas tries to identify the proper conditions that have to be met in order for a certain area to possess just one currency. Essentially, the outcome of Mundell's analysis is that there must be fair production-factors mobility in a region to make the sharing of a single currency meaningful. In other words, OCA defines labor and capital mobility as the necessary provision for smooth functioning of a monetary union.

Professor Mundell based his approach on a potential threat that a monetary union may be facing in the form of an asymmetric shock. Besides the so-called Mundell's test of factor mobility Dědek (2008) identifies also Kenen's test of product diversification and McKinnon's test of trade openness that both try to tackle the problem of monetary integration from different angles. These three make up the theoretical core of OCA and their message was also incorporated into the process of forming the European Monetary Union.

Critics of monetary integration often use the OCA theory as a base for their deliberations. An asymmetric-shock model is widely utilized to demonstrate the risks and disadvantages that a monetary union may hold. On the other side, advocates of the monetary integration argue that it is not an out of context whim, rather a well calculated continuation of a broader economic consolidation. A Hungarian-American economist Bela Balassa has precisely identified five stages of economic integration (Balassa 1961). These go in order from the shallowest to the deepest kind and according to this scheme, establishment of a monetary union is the fourth step, preceding only the last one, which is the formation of a political union. Monetary union should thus function as an upgrade of an already well-integrated organism.

"… if factors are mobile across national boundaries then a flexible exchange system becomes unnecessary, and may even be positively harmful…"

SOURCE: Mundell, R.: *A Theory of Optimum Currency Areas*, American Economic Review, Vol. 51, No. 4, 1961, p. 664

The citation above is from the already mentioned famous Mundell's article. He himself recognized that under specific circumstances floating exchange rate system may be a bad choice for countries which are to a certain extent already integrated. If a group of countries wishes to economically converge, they are likely to prefer some kind of a fixed exchange rate system to free float. However, these forms of incomplete monetary unions are prone to various kinds of speculation and, as the history has taught us, they may (though not necessarily) even produce more damage than benefits.[1] Their impermanent nature provokes speculative economic agents to constantly test their durability. From this point of view monetary union is a natural evolutionary step for a group of countries, bound together by their mutual economic interests.

At any rate, monetary union can be a very dangerous commitment, if operated unwisely. Even for those countries that are in position to share one currency, it will be neither costless, nor will it work as a magic cure for all problems. Nonetheless, the potential advantages that a monetary union can bring are not negligible. The purpose of this chapter is to review the costs and benefits that such a partnership brings to its members. For this intent the chapter is divided into two parts. The first one debates the costs associated with a monetary union and the second one examines the benefits. Both parts draw inspiration largely from Emerson et al. (1992) and De Grauwe (2005).

1.1 Costs of a Monetary Union

1.1.1 Loss of Sovereign Monetary Policy

The loss of sovereign monetary policy is in economic literature often presented as the biggest turnoff of involvement in a monetary union. Every country that has its own currency has the privilege of exercising its own monetary policy. The three principal powers falling under the classification of monetary policy are regulating the amount of money in circulation, setting the interest rates, in effect the cost of money, and also setting the conditions and rates at which the domestic currency

[1] For instance, the famous Gold Standard is by many blamed for turning a normal recession into the Great Depression. See Eichengreen & Temin (1997).

can be exchanged for foreign ones. A country joining a monetary union willingly gives up all of these 'privileges'.

It is natural that all the discussions about the profitability of a monetary union feature the point debating the cost of giving up sovereign monetary policy. Indeed, loosing such a powerful toolkit may seem like an unreasonably high price to pay for a monetary union membership. State-controlled monetary policy may serve the government in many useful ways. For example, by pumping large amounts of money into circulation it can induce an inflation that can serve the purposes of the political elite currently in power.

In year 1958 a New Zealand born economist William Phillips came up with the idea of a trade-off between inflation and unemployment. This is commonly depicted in the form of the famous Phillips Curve, which basically claims that additional employment can be bought up by increased inflation. In a country where the central bank is not independent this can tempt politicians to chase extra points for bringing down the level of unemployment. However, currently it is known that such intervention is only short-lived and in a longer run high inflation only worsens the economic situation of a country. Inflation also has the attribute of self-perpetuation and thus presents the country with the prospect of costly deflationary measures in the future.

Governments often try to stimulate the economic growth in order to remain in power. Through various political channels such a government can try to lower the interest rates to pump more money into the economy, thus inducing short-term supernormal growth. However, much like the previous example, this is at the expense of a higher inflation, which in the end produces exactly the opposite outcome to the one that was desired. Nowadays, economic theory knows these mechanisms very well, yet as illogical as it may seem, many politicians succumb to the temptation of prolonging their careers.

Controlling the rates at which the domestic currency can be exchanged for foreign ones and the conditions under which such transactions may take place is another aspect of monetary policy. During the period of time known as the Cold War countries of the Soviet bloc prevented their citizens from freely exchanging their domestic currencies for those of the western world. It served the political interests and the propaganda of the ruling Communist Party. This example alone shows how powerful the mere control of administrative aspects of a currency can be.

Controlling the exchange rates is also a hotly debated topic. Many governments all around the world prefer different regimes than free float. There are various kinds of exchange rate regimes and the aim of this paper is not to discuss them all. However, a few examples may serve to illustrate this colorful spectrum of monetary policy. For instance, China fixes its currency to the US dollar. The reason for this is clear – the support of domestic exporters. By keeping the Chinese Yuan 'weak' these can sell their products at very competitive prices all around the world. Therefore, it is not surprising that nowadays it would be perhaps close to impossible to find a person who would not own something with the label *Made in China* on it. Naturally, because of enormous economic growth there are very strong pressures toward the appreciation of Yuan, yet for now, the Chinese government stays the course of its fixed exchange rate policy, protecting its exporters from adverse influence of price competition. During the period of fixed exchange rates in Europe it was rather common that a country would devalue its parity vis-à-vis other countries' currencies to improve its balance of payments. However, this strategy of competitive devaluations often led to the so-called "beggar-thy-neighbor" policy, when countries were devaluating their currencies to stay competitive but in effect wreaked havoc on international trade relations and in the end all the neighbors were beggared.

While it is true, as was demonstrated, that the sovereignty of monetary policy provides countries with impressive tools, it is also true that there are limitations. A country cannot recklessly increase (decrease) the amount of money in circulation without fearing the consequence of inflation (deflation). It cannot arbitrarily change the interest rates at will because such action could cause an outflow of capital or high inflation, depending on whether the rates were decreased or increased. Also, a country cannot promote fundamentally 'wrong' exchange rate, especially if it is a small country, because it could seriously damage its macroeconomic situation and this policy could also quickly deplete its foreign exchange reserves.

With so many limitations associated with the sovereign monetary policy, one might ask why giving it up when joining a monetary union is then considered so costly? The answer is twofold. Losing any kind of competence is always perceived as a negative thing and in addition, there is the fear that the central authority will set the monetary policy so that it will not fit the needs of every country of the union. That would ultimately mean consequences similar to the situation where the monetary policy is misused by domestic authorities, such as high inflation or the opposite, slowed growth.

1.1.2 Fixing the Currency at a Wrong Exchange Rate

When the original 11 members of the Eurozone decided to irrevocably fix their currencies to one another, there arose the question, at what exchange rates should their currencies be bound. Generally, there were two possibilities how to approach this problem. They could either announce the fixed rates in advance or apply those rates that the market would converge to before the start of the monetary union. Both possibilities carried with themselves certain risks. If they determined the fixed exchange rates for the monetary union ahead of its start, there would be the risk of speculative attacks that, if strong enough, could endanger the very beginning or even existence of the monetary union. If they left the exchange rates to freely converge there would have been the risk of destructive speculation as well. Anyhow, the risk of fixing currencies at *wrong* rates was present in both cases.

This is a real threat to economies wishing to join the Eurozone also today. The currency ceasing to exist could be either fixed at a rate too high or too low, thus being undervalued or overvalued.[2] Such misalignment of real and nominal economy could cause big problems. If a currency were undervalued, it would on the one hand temporarily benefit the exporters via providing them the price competitiveness in the manner similar to a competitive devaluation. On the other hand, undervalued currency would decrease the overall purchasing power of the economy and also cause inflationary pressures. In the situation when the right to conduct independent monetary policy would no longer rest with the national authorities this inflationary pressures could pose a serious problem, unless the economy were large enough to persuade the central authority to step in. Should the currency be fixed at a rate of exchange that would overvalue it, it would cause a big competitiveness problem for the domestic exporters, the balance of payments would slide to red numbers and the whole economy would be stifled.

[2] In terms of DOM/FOR ergo the amount of the domestic currency has to be paid for one unit of the foreign currency.

Especially in current turbulent times it is of great importance to the prospective Eurozone members to fix their currencies with the *right* central parity to prevent any misfortunes mentioned above. The already gravid importance of this is strengthened even further by the fact that most of these countries are, in relative terms, small with little effect on the overall economic situation of the whole group. Therefore, should they encounter such problems, they would be left to fight them more-or-less alone, moreover, without the tools of monetary policy. Adjustment through standard means, i.e. prices, wages and structural changes would then be all the more painful.

1.1.3 Fear of Accelerated Inflation

People prefer stability and are generally averse to changes. Introduction of a new currency is quite a big change and so there is a fear of growing prices among the general population. This concern is based on two notions – businesses taking advantage of the new currency and the loss of exchange rate tool.

The concern of growing prices due to businesses taking advantage of the new situation seems to be somewhat legitimate. Transition to the new currency leaves the consumers in a relative disadvantage because they are not accustomed to new price relations. Therefore, in the process of rounding, the businesses may increase the prices above the initial level. Even though such actions are likely to take place, they are not likely to prevail. The principle of competition is the same under any currency and so even if there is an initial increase in inflation, it will only be temporary. Moreover, market mechanisms are further enhanced by the obligation to display prices in both the new and the old currency. Some countries may choose even more harsh measures, like the Slovak law, which criminalized increasing prices in association with the euro adoption.[3]

It is nothing unusual to see currencies of fast-growing economies appreciate. However, after joining a monetary union, there will no longer be any exchange rate and so there is the concern that the fast growth will transmit itself into an accelerated inflation. Again, this concern is legitimate but many economists argue that it should not be a cause for worries. In their famous articles Bela Balassa and Paul Samuelson identified the source of relatively higher inflation in countries whose economies are catching up. This so-called Balassa-Samuelson Effect justifies inflation differentials that the fast-growing economies may experience.[4] De Grauwe (2005) also stresses that should inflation be fueled by productivity growth, it works merely as an equilibrating mechanism of a monetary union and should not be feared. Chart 1.1 shows the average annual inflation and GDP growth of the original eleven Eurozone members and Greece for the period of years 1999 – 2008. There is a clear pattern of correlation between the two statistical values. It is only violated by a rather poor growth in Italy and Portugal, countries with a history of high inflation, and by high growth averages in Luxembourg and Finland.

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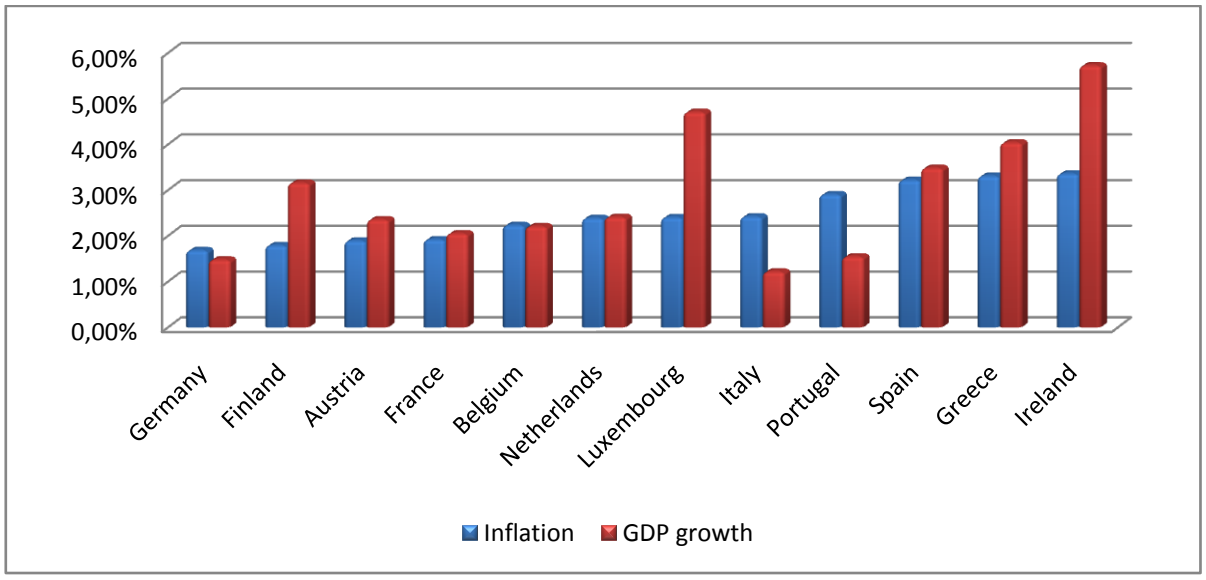
[3] Amending act no. 497/2008 to the criminal law of Slovak Republic.

[4] See the articles Balassa (1964) and Samuelson (1964).

Chart 1.1: Average inflation and GDP growth in countries of EA(12)



SOURCE: International Monetary Fund – World Economic Outlook Database, April 2009

1.1.4 Other Discomforts

One of the reasons why monetary policy is regarded not only as a powerful but also a very dangerous tool is the way it was often misused by governments and monarchs. Throughout the history of mankind those who controlled money were constantly tempted to abuse this power at the expense of stability, whether economic or political. When countries waged wars it was a common practice that the government would print out new banknotes to pay for its war machinery. This would however multiply the amount of money in circulation, often causing hyperinflation. Most well-known examples of such outcome are the states of after-WWI Europe, especially Germany, where the rate of inflation in 1923 reached 3.25×10^6 monthly, which meant that on average prices doubled every two days. In those times the banknote of the highest denomination was worth an unbelievable one hundred trillion Marks.[5] Similar measures were taken also before the widespread usage of banknotes. Kings, emperors and the like used to lower the amount of precious metals in coins in order to mint more of them to finance their affairs.

There are situations when high inflation is preferable for the government and in a broader sense for all debtors. Because of high inflation, money loses its value and thus all debts shrink in their actual magnitude. So to use and example, after the inflation of 1000% any debt would be in real terms reduced to mere 10% of its previous size. The matter is really simple and the term 'inflation' need not be necessarily used. If a government controls the money supply in its country, it can produce as much money as it pleases. Hence, it is no problem to repay debts by simply printing new money. This is called "debt monetization" and inflation is then only the secondary effect. Of course, the prerequisite for this is the legal-tender status of a currency, i.e. a lawful obligation of all creditors to accept banknotes as a payment for the credit, which they had extended.

[5] Figures cited from the internet encyclopedia Wikipedia: http://en.wikipedia.org/wiki/Hyperinflation

Nowadays it is not likely that any European country would alone engage in an armed conflict. However, all of the members of the European Union are indebted, some only a little, some rather heavily.[6] Joining a monetary union deprives these states of the possibility to pay off their debt by newly printed bills. This could be perceived as yet another negative aspect of joining a monetary union. With its emphasis on the inflation-targeting strategy and independent central banking the Eurozone really leaves no space for reckless misuse of monetary policy. As the economic mainstream began realizing that the Philips Curve trade-off only works on short-term basis and that in the grander scheme of things high inflation rather hurts the economy, so the countries of Europe started pursuing the policy of low inflation. This development will be described in more detail in the second chapter.

When a country joins a monetary union it does not mean that the monetary policy of the whole area will just ignore this country's position. How much weight will be attached to the economic situation and requirements of this country depends on the decision-making mechanism that is rooted in the statues of the union. This particular subject is quite interesting and very important, as the outcome of political negotiations that precede the formation of monetary unions not always respects the economic theory. It generally holds that the bigger the country, the more impact it has on the overall economic situation of the whole single-currency area. Following this logic, it is understandable that relatively small countries may worry that in the union their voices will not be heard. Part 2.3 deals with the matter of European Central Bank and the ECB decision-making process is described more closely there.

Adjusting to a new environment is always costly, sometimes even painful. Adjusting to the environment of a monetary union is not an exception. The study of impacts of a monetary union by Emerson et al. (1992) argues that the costs of joining a monetary union are mostly transitory. Before a country may join such a single-currency club, it must make some fine tuning to its economy. This has to be done before joining the union and so it is the transition that carries with it the burden of change. For this paper the European Monetary Union is the benchmark, therefore it makes sense to discuss its conditions for acceptation of new members.

Detailed criteria of acceptance to Eurozone are analyzed in part 2.2. At this point let us discuss only the global implications of adjusting to those criteria. Countries wishing to join the Eurozone must fulfill two fiscal conditions concerning maximum size of government debt, budget deficit and their convergence. Acting in accord with these conditions curtails the powers of a national government even further. It may then not be able to go forth with its policies and depending on what kind of government it is, it might have to e.g. cut back on social programs at the expense of investments or vice versa.

The Inflation Criterion compels a prospective new member to keep the growth of prices within rather narrow bounds. As it has been already mentioned, for any country it is generally reasonable to keep its long-term growth of prices low. Achieving low inflation is however not such an easy task. Especially for countries with the history of relatively high inflation it is extremely painful to exercise disinflationary policies. In these so-called 'wet' countries governments must convince their

[6] By the standard of reporting the government debt as a percentage of a country's GDP, the smallest debt ratio of 7.2% has Estonia. Much higher figures are more common though, the highest being 115.8% of Italian origin. The average debt ratio in both EU and Eurozone is well above 60%. The source of this data is the statistical database of Eurostat. Figures reported here are for year 2009.

populace that they are not going to give in and cause an unexpected inflation to spur short-lived growth. Normal consequences of disinflationary policies, such as slowed growth and rise in unemployment are then strengthened by the fact that the population and businesses find it hard to believe the new commitment of the government and thus adapt to changed conditions with smaller flexibility.

One other condition for entering the Eurozone is to keep the fluctuation of the exchange rate limited. For an economy that shares similar structure, similar business cycle and similar inflation with the countries of reference this is not necessarily a problem. For other types of countries it might be more troublesome. Any currency could be subjected to increased speculative attacks. Such scenario indeed brings adverse byproducts to the whole economy. In addition, if a country commits itself to keep the exchange rates within certain limits, the eventual profit from speculation gets even bigger. In this kind of situation a country's central banking system could be seriously harmed by outflow of foreign exchange reserves.

1.2 Benefits of a Monetary Union

1.2.1 Less Exchange Rate Risk

Due to the existence of national currencies there are exchange rates to determine their relative value. One can observe a long history of international cooperation directed at fixing these rates. Even so, they fluctuate and so express the changing nature of the purchasing powers that different currencies have. Free market however has a tendency to overshoot and so its very praised equilibrating capacity can actually cause harmful wavering and situations when the nominal figures are completely disconnected from the reality. The reason for this is that the market is composed of individuals who operate under imperfect conditions of less than perfect information. As a result, governments step in, trying to stabilize the system. Unfortunately, these attempts often spur even more damaging reaction on the part of the private sector – harmful speculation. Easily observable resulting effect is the volatility on the ForEx market that is detrimental to the economy.

Monetary union with a single currency is the most permanent and the most stable system of fixed exchange rates. Unlike other methods of fixing exchange rates, monetary union utterly abolishes national moneys and for all intents and purposes replaces them with an international currency. This could be done in a purely administrative fashion or it can be taken all the way so that national currencies cease their physical existence as well. In this so-called currency union the costs of leaving it are fairly high. Not only would a country have to violate all the legal treaties and contracts of the establishment, it would have to come up with an entirely new money system for itself, including physical cash, too. Change of mood in the society would have to be exceptionally strong to force such actions. Being a firm entity, monetary union in theory eliminates all the threats of harmful speculation that other fixed-exchange-rates regimes have to face. That makes it a natural and safe upgrade for an integrated bloc of countries.

We have established that monetary union is a stable institution. Now let us consider why this stability is beneficial to the economy. Exchange rates are much more flexible than real factors of the economy, such as labor mobility, structure of production, trade relations, etc. Because of this, many producers and consumers often find themselves in a difficult spot and they alone cannot do anything to change the gloomy situation. Economic integration is all about removing obstacles and improving

the business environment within the integrated area and can never be fully achieved without incorporating the monetary matters. As it was described, fluctuations of exchange rates distort the internal market. Monetary integration simply removes these harmful distortions.

Businesses and entrepreneurs prefer stable environment for their undertaking. Unstable and complicated conditions force the economic agents to devote much of their resources to hedging, insurance and other means of self-protection. The simpler and more stable the environment, the more can businesses focus on the primary interest of their enterprises, having gotten rid of the side-costs. According to the survey by Ernst & Young done among European industrialists in 1992, nearly 90% believed that a single European currency will have a positive impact on the business climate with almost a half of them convinced the impact will be very positive. (Emerson et al. 1992)

Furthermore, Emerson et al. (1992) argue that apart from the above mentioned indirect beneficial effects of single currency there is also a very unequivocal effect that it would bring. Due to the elimination of exchange rates in the union, the risk of lending money to a subject in another member state will be more-or-less the same as lending it to a subject from the same country. Thus, it is logical that the drop in interest rates should follow, fostering a higher economic growth. The study estimates that a 0.5% decrease in risk premium could lead to a boost of as much as 5% of the GDP growth in the long run.

1.2.2 Less Transaction Costs

Among the prominent positives of membership in a monetary union, mentioned in all publications analyzing the subject, is the impact such a union has on the transaction costs. The notion is clear – a monetary union should decrease these costs and so benefit all the people living in such an establishment. The reason for this is the elimination of national currencies in favor of just one multinational medium of exchange. It can be argued that the full benefit of decreased transaction costs is reaped only if the monetary union is complete, i.e. it is also a currency union. In such case the drop in transaction costs stems not only from the accounting simplifications but also from the elimination of the necessity to exchange domestic for foreign money or vice versa. Very important is also the way, in which a currency union improves the competitive environment within the area.

Emerson et al. (1992) divide transaction cost that a monetary union eliminates into two types: *financial* and *in-house*. Financial transaction costs are, as the name hints, all the pecuniary expenses that agents in the economy incur in the process of exchanging currencies. If one wants to travel abroad, one has to exchange domestic for foreign money. Banks and financial businesses that provide these exchange services naturally charge fees for it. So for retaining the same value, only expressed in a different unit, one has to pay a price. In 1988 the European Consumers' Organization did a theoretical experiment that colorfully describes just how costly these services are. They supposed that a traveler sets out for a round trip of ten European capitals. Upon arrival in each country the traveler exchanges all of his money. At the end of the journey the losses on exchange fees amount to nearly 47%.[7] This means that the traveler lost almost half the money only due to

[7] Study published in Emerson et al. (1992)

financial transaction costs. Monetary union eliminates such detriments and so makes life for its inhabitants easier.

Unfortunately, transaction costs associated with exchanging currencies do not end with the financial sort. There are also the so-called in-house costs that include all the expenses that businesses have to meet because of operating in an environment where it is necessary to exchange currencies. Not only financial companies but also other businesses that work with different currencies have to keep departments and agendas that deal only with the matter of currency exchange. If a Czech-based company wishes to expand its business to, say, Slovakia, it has to start reckoning with these affairs. However, a company situated in Virginia that wants to expand to the market of North Carolina does not have to worry about any of that. The logic is pretty straightforward – sharing one currency makes the business environment simpler, reduces operating expenses and so in effect boosts growth.

It has been remarked above that a monetary union improves the competitive environment within its area. De Grauwe (2005) demonstrates the enormity of the price-barrier that a border between two countries with different currencies represents. On data from the European Commission he shows that *inter-country* price differentials for various kinds of goods between EU member states are often many times the size of the same type of *intra-country* price differentials. That is a demonstration of the fact that barriers such as different currencies are a huge obstacle for the arbitrage process that proposes the concept of one world-price for all tradables.

Engel and Rogers (1996) observed a similar phenomenon in North America. De Grauwe (2005) interprets their findings by stating that essentially the price differentials of the same kinds of goods between Detroit and Windsor are equivalent to those between New York and Los Angeles. The intriguing fact is that while there is a distance of 4000 kilometers between New York and Los Angeles, Windsor and Detroit are divided just by the Detroit River and actually make up a single urban area. The problem is that when one travels from Detroit to Windsor one must cross the border between the United States and Canada. Moreover, in order to purchase goods on the other side one has to obtain the currency of the other country. Of course there is also the issue of different taxes, nevertheless the notion is clear – currencies often provide a smokescreen for price comparison, acting as an obstacle to higher level of competition. By removing national currencies in favor of just one, transnational money, it is likely that the kind of price differences that are described here will diminish. Barriers that protected businesses from their rivals will be gone and so the salutary effects of competition will affect and benefit both sides of the border.

1.2.3 Monetary Union and Openness

Many authors agree that entering a monetary union would have a specifically profound effect on open economies. Under normal circumstances small economies generally tend to be open for obvious reasons. Thus, for them the issue of openness represents another positive factor when they are weighing the pros and cons of joining a monetary union. De Grauwe (2005) illustrates the relation between openness and boost to GDP on a following graph:

Chart 1.2: “Benefits of a monetary union and openness of the country”

SOURCE: De Grauwe, P.: *Economics of Monetary Union (6th edition)*, Oxford University Press, 2005, New York

In his famous article, Andrew K. Rose, an American economist, published the results of his econometric study of the trade impact that a common currency has on those countries that share it. He estimated the magnitude of the impact, i.e. how much a common currency boosts trade, to be more than 200% (Rose 2000). This rather controversial finding sparked a lot of response from many economists, who were mostly trying to prove that the true size of the effect is much smaller. Professor Richard Baldwin wrote a summary of those attempts and added his own thoughts to the topic. He claims that even though a complex issue like this will probably never have a clear-cut result, it is likely that the relationship between openness of a country and the benefits it gains by joining a monetary union is positive. Moreover, he adds that in his opinion the boost that a common currency provides for a country is between 5 – 10 percent and may even double over time (Baldwin 2006).

1.2.4 Integrating Effects of a Monetary Union

Before the European Union went forth with its prodigious project of monetary integration there was a disagreement on how this issue should be approached. One group, called the ‘Economists’, believed that before integrating currencies, economies of the member states should be tightly converged. On the other hand there was the opposition in form of ‘Monetarists’ who proposed that first there should be monetary integration and economic convergence would follow. In the end, the approach toward a full monetary union was based on a compromise between the two opposing camps. In the beginning of this chapter it was remarked that a monetary union is not a magic cure for all woes, however it does span effects that are auspicious for further economic integration.

When capital mobility is enhanced by a monetary union, unrestrained capital flows within the community are further intensified, which integrates the financial markets even more. De Grauwe (2005) presents a research carried out by a Portuguese economist Carlos Marinheiro, in which he

compares the redistributive powers of the financial markets in USA to those of EU. His results show that should any of the US states be hit by a negative asymmetric shock, financial markets would redistribute 48% of the GDP it would have lost back to that state. In the European Union the private capital markets would redistribute merely 15% of the impacted output back to the suffering member state. The conclusion that can be drawn is that there is an apparent relationship between the level of integration of financial markets and the size of social benefits that such integration brings. Moreover, monetary union and the integration of financial markets are linked as well. Hence, a monetary union should encourage redistribution of wealth and risk among its members, making the whole union more homogenous and the integrated financial markets more efficient.

Deeper integration of the financial markets means that funds and their allocation within the union are more flexible. National borders become less eminent, forcing those countries of which the union is composed to compete with one another for private investments. This rivalry not only improves the business environment but also compels all the member countries to converge even further. Emerson et al. (1992) state that this is "the economic justification for act of harmonization or establishment of minimum standards of public goods or tax rates in appropriate cases." (Emerson et al. 1992, p. 23)

Among the benefits of a single currency Dědek (2008) lists also the fact that it strengthens the feeling of being European and makes it easier for people to associate with the community. Nowadays the process of integration in Europe is rather costly and time consuming. One of the reasons behind this is that people don't see themselves as Europeans. It is much easier to find differences between nations than it is to look for similarities. A common currency is something that citizens of all members of the monetary union would share. It would incent people to identify themselves as members of one big entity, instead of secluding to overrated national pride. After all, a nation is a nation because its members share some commonalities like territory, government, history, language and also currency. Therefore, letting different nationalities share the same currency brings them somewhat closer. Instead of looking for differences, people with the same currency (among other things) have a common ground that they can build on and all in all, that is one of the most basic and principal motivators of the European integration.

1.2.5 Macroeconomic Gains

Benefits of a monetary union are numerous and even though it is often said that while the costs are macroeconomic and the benefits are microeconomic, there happen to be also some large-scale positives. Entering a monetary union is always a deep commitment for any country. For this reason those countries that make up the union seek to make its institutional framework as firm as possible. We shall demonstrate that this allows for the best of all the member states to be transmitted to the rest of the union. These positive macroeconomic impacts are then beneficial especially to those countries that have rather lax legislation or lack strong commitment on the part of political elites in important economic questions. European Monetary Union exhibits the traits described below.

Countries of any monetary union will never be exactly alike and there will always be at least slight differences among them. Let us consider the issue of inflation. To a very large extent the price level development is in the hands of the central banking authority. There are various types of central banks, some more independent, some controlled directly by the government. Those countries that

posses the latter tend to be so-called 'wet', i.e. they are biased toward a relatively high inflation environment. Even though the people in charge may realize that in the long-run a smaller inflation would benefit them more, long high-inflation history makes deflationary measures too costly. Furthermore, the institutional framework of the central bank makes it too tempting to use the monetary tools in the spirit of the short-term Philips Curve.

However, those countries that have already achieved a low level of inflation will no doubt wish to keep it so. Hence they will be reluctant to enter a monetary union that does not guarantee responsible central banking and a low inflation. Because of that a strong and committed common central bank can be expected to emerge. Since it would be an international institution with a clear mandate to preserve low inflation, economic agents from the wet country will have no reason to doubt the sincerity of its intentions. They will adjust their expectations and so allow for relatively easy import of low inflation.

In a well-elaborated monetary union the question of fiscal responsibility is likely to be a matter of some agreements as well. De Grauwe (2005) and Emerson et al. (1992) agree on the notion that countries running their budgets to high deficits can be potentially dangerous for the whole union. Emerson further distinguishes three latent threats. First, the independence and/or the low-inflation commitment of the union's central bank could be endangered if one of the member states found itself on the verge of going bankrupt. Second, integrity of the union might be in jeopardy if the indebted country saw an exit from it as the only solution to its fiscal woes. Third, the above mentioned possible menaces would pressure the governments of the other members of the union to help their indebted neighbor and to bail the country out. Such precedent would however significantly increase the risk of fiscal irresponsibility and moral hazard within the union.[8]

For these reasons the future members of a monetary union are likely to furnish it with some sort of safety mechanism that would curb the freedom of its members in fiscal policy matters. In theory, this would be yet another positive of a monetary union because it protects its inhabitants from reckless budgetary policy of national governments. As it was mentioned in the previous subchapter (see footnote number 6), some European countries are rather heavily indebted and so a safety provision like the Stability and Growth Pact is likely to be welcomed as a favorable influence of the monetary union.[9]

1.2.6 International Currency Benefits

If a monetary union is large and stable enough, its money may develop into a major international currency, which can bring additional benefits to the union. Chart 1.3 shows the breakdown of all allocated ForEx reserves in the world. US dollar is clearly the predominant international currency (as it has been for decades) and as such reaps the benefits that are identified below. However, it can also be seen from the graph that the euro is emerging as a strong rival to the dollar, which corroborates the notion expressed in the beginning of this paragraph.

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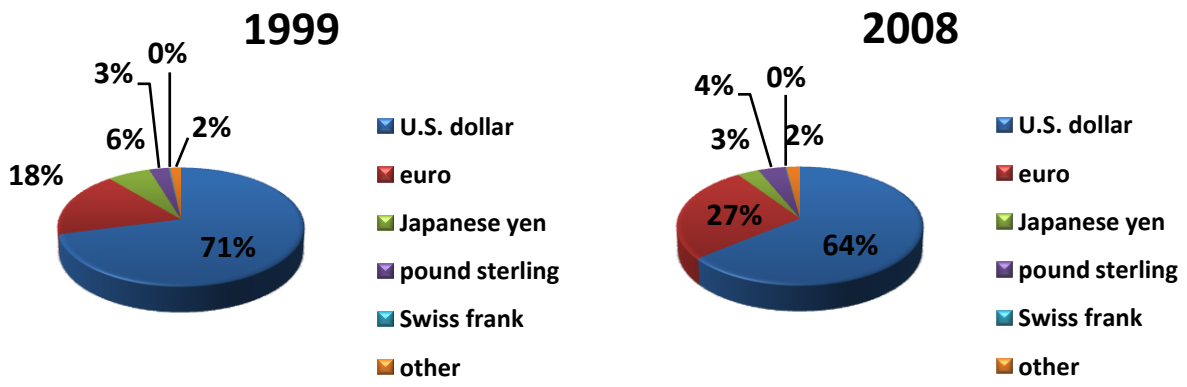
[8] Eurozone is currently fighting precisely these problems. The evolution and progress of this struggle is further deliberated in the following two chapters.

[9] For more on the Stability and Growth Pact see subchapter 2.4.

Chart 1.3: Allocated world foreign exchange reserves in different currencies



SOURCE: International Monetary Fund - Currency Composition of Official Foreign Exchange Reserves

De Grauwe (2005) mentions two particular benefits of an international currency. Firstly, it is the seigniorage that the emitter of the money, in this case the monetary union, gets from subjects demanding its currency. The more domestic money is demanded by foreign subjects, the more can the residents of this monetary union enjoy free profit, de facto financed from abroad. Secondly, a larger demand for the domestic currency will boost the activity on the financial markets of the union. This will foster the economic growth, spur creation of new jobs and so benefit the union in general.

Emerson et al. (1992) agree with De Grauwe and add another possible gain for the monetary union. Provided the currency of the union becomes a so-called vehicular currency in international financial settlements, it will mean more stability for the businesses of the union. When the domestic money becomes an internationally used medium of exchange it is likely that more and more revenues and also expenses of domestic firms will be denominated in this, for them domestic, currency. In accord with the principles of asset and liability management, this will eliminate potential losses from fluctuation of exchange rates and so bring forth more safety for the domestic companies.

2 European Monetary Union

2.1 History and Evolution

As we have already mentioned in the first chapter, when talking about a truly international monetary system, one has to start with the Gold Standard. It evolved as early as the 18th century in Great Britain but became a truly international system only about a hundred years later, in the second half of the 19th century, when it was legalized in the United States, Germany, France and others. Gold Standard was a system far from perfect. It had its ups and downs, which often resulted in its alteration, hence also various kinds of gold standard, e.g. classical, gold-bullion, gold-exchange.[10]

The fall of Gold Standard and the Great Depression were followed by the bloodiest conflict in the history of mankind, the Second World War, which utterly destroyed economies of many of the involved countries and plunged their production figures back to the levels from decades ago. Before the end of the war, leaders of the allied nations had met in USA and agreed on the creation of a new international monetary system that would be called simply Bretton-Woods, after the town where the agreement was reached. This was an establishment somewhat similar to the Gold Standard and it too eventually collapsed under pressure. This subchapter recalls the highlights of evolution of monetary matters in what later became known as the European Union from the time of the end of Bretton-Woods to the start of the European Monetary Union. Inspiration here is drawn largely from Dědek (2008) and Gros & Thygesen (1998).

2.1.1 Werner Report and its Failure

Before Bretton-Woods collapsed in the beginning of 1970s, Western Europe enjoyed two decades of fast growth, an era now known as the golden age of post-war Europe. This was all taking place under the monetary rules of Bretton-Woods and so people associated the economic progress with fixed exchange rates. From this favorable environment sprang the first notion of creating an even tighter monetary cooperation in Europe. Turbulences foretelling the end of Bretton-Woods, e.g. pound sterling devaluation in 1967 or French franc devaluation and German mark revaluation in 1969, provided the incentive for monetary integration to European politicians. In December 1969 The Hague European Council expressed its will to undertake a project of Economic and Monetary Union and appointed a committee led by the prime minister of Luxembourg, Pierre Werner, to work out a plan how to achieve it.

Werner Report, officially known as *A Report to the Council and the Commission on the Realization by Stages of Economic and Monetary Union in the Community*, was published in October 1970 and officially approved by Ecofin and the European Council in 1971 and 1972 respectively. The report elaborated three stages of moving toward the monetary union and was a compromise between ideologies of Economists and Monetarists (briefly mentioned in the first chapter). Moreover, it announced that the monetary union would become a reality by 1980. The report called for close coordination of both monetary and fiscal policies of all included countries, as well as for

[10] See for instance Kindleberger (1993) or Officer (2010).

creation of a strong supranational monetary authority. This however was not met with much enthusiasm on the part of national authorities and so the institutional framework that was set up for the union was rather weak.

Nevertheless, the community went forth with the plan but as early as in 1973 their progress was interrupted by the definite fall of Bretton-Woods. What followed was the test of commitment of the member states to their cooperation, a test which they failed. In 1973 the first oil shock hit the western economies and initiated the period of so-called 'stagflation', with greatly reduced economic growth and yet staggeringly high inflation figures. European countries did not manage to face the situation with coordinated moves, but instead their economic policies diverged, as did their exchange rates. Marjolin Report of 1975 to the European Commission states: "Europe is no nearer to EMU than in 1969. In fact, if there has been any movement, it has been backward. The Europe of the 1960s represented a relatively harmonious economic and monetary entity which was undone in the course of recent years; national economic and monetary policies have never in 25 years been more discordant, more divergent, than they are today." (Gros & Thygesen 1998, p. 20)

Originally it was intended that the fixed but adjustable system would simply converge to the full monetary union in 1980. During the convergence period the exchange rate policy of the European states was working along the lines of the so-called 'snake in the tunnel'. Dědek (2008) explains that it was a mechanism, which bound European currencies to one another and to the US dollar and allowed them to fluctuate within predetermined narrow bounds. The exchange rate for dollar worked as a tunnel, inside which exchange rates of European currencies could fluctuate up and down, like a snake. In the beginning of the Werner plan, European countries narrowed down the bounds of fluctuation to ± 0.75% for the tunnel and ± 0.6% for the snake. However, because of the Smithsonian Agreement of 1971 the fluctuation band of the tunnel was widened to ± 2.25% and so, four months later, governors of European central banks widened the fluctuation band of the snake to ± 2.25% as well.

In March 1973 the tunnel disappeared, as the U.S. dollar started to float and the snake was left alone. The credibility of this establishment was constantly attacked by countries entering and exiting its framework. For example, France left the snake in January 1974, only to come back in July 1975 and exit again in March 1976. Furthermore, different approaches toward inflation made it even harder to keep exchange rates fixed. Because of OPEC's embargo on oil its price soared more than 550% from approximately $2 to about $12 per barrel. While Germany was committed to prevent its inflation from rising, other nations decided not to fight it because they feared the consequence of lowered growth and increased unemployment. Therefore, while British inflation did not fall below 15% for four years (1974 – 1977), German inflation remained around 5% over the course of the whole decade. As a result, realignments of central parities within the snake mechanism were fairly common.

2.1.2 European Monetary System

During the years of snake there were several initiatives that wanted to introduce new concepts and give a new breath to monetary cooperation in Europe. Dědek (2008) lists four different ones: *Fourcade's Plan*, *Duisenberg's Plan*, *Jenkins's Initiative* and the proposal of *parallel currencies*. Neither of them was met with much enthusiasm and it wasn't until year 1979 that the full scale European cooperation in monetary matters started again in the form of European Monetary System.

EMS was based on three cornerstones – the European currency ECU, the Exchange Rate Mechanism and the European Monetary Cooperation Fund. ECU was a basket currency that was made up of all EC currencies in different proportions. It was originally crafted to tend to needs of the Common Agricultural Policy, where the so-called European Unit of Account was being used since 1974. It was renamed ECU during the preparations for EMS in 1978 and served as a reserve currency and also as a tool for fixing the parities of national currencies. Private sector created its own *ecu,* on the basis of which all sorts of different financial products and transactions were being carried out.

Exchange Rate Mechanism was the second and perhaps the most important groundwork of EMS. It effectively fixed central parities of all participating currencies and, similarly to the 'snake', allowed them to move within ± 2.25% fluctuation band. Currencies not participating in the snake were allowed to join ERM using a widened fluctuation band of ± 6%. Italian lira, which was arguably the weakest currency, prolonged this wide range until as late as 1990. While the parities were adjustable, and it will be demonstrated below that they were altered many times, ERM also incorporated an elaborate system of interventions. It was in place to defend fixed exchange rates against exaggerative temper of the market. The system required the central banks of both the weakening and the appreciating currencies to intervene in defense of central parity.

Third cornerstone of EMS, the European Monetary Cooperation Fund, played an important role in facilitating the interventions. As Dědek (2008) remarks, it was also responsible for credit instruments of 'Very Short-Term Financing' and 'Short-Term Monetary Support'. EMCF had been actually established already in 1973 as a part of the Werner plan. According to that, EMCF was supposed to be the predecessor to the European Central Bank. However, in the more modest framework of EMS, which did not aspire to invoke another attempt at a monetary union, it was merely an institution dependent on the decisions of Ecofin.

First five years of EMS were marked by divergence of national economic policies, which mirrored itself in numerous realignments of central parities. The participating countries essentially formed two blocks - those whose currencies tended to appreciate and the others, whose currencies were inclined to lose their value. Members of the first group were determined to limit their inflation and had to revalue their currencies against those of the other group. Members of the other group were countries that kept on using inflation in the spirit of short-term Phillips Curve, described in the previous chapter. Because of this fundamental difference, the average price-level growth in those countries was higher than in the first group, putting their currencies under constant pressure of devaluation. Countries with a traditionally reluctant mood toward inflation were predominantly Germany and Netherlands. They kept their currencies bound together much more tightly than the other ones and indeed, since 1981 every time German mark revalued its central parity, Dutch guilder underwent the same realignment and also by the same proportion. The second group of countries was represented mainly by Italy, which had never revalued its currency over the entire course of EMS existence. France too belonged to this group, as it devalued its currency three times during the first four years, altogether by more than 11%.[11]

Over the years it was becoming evident that higher inflation did not boost growth, instead it made the macroeconomic situation of a country worse. Additionally, frequent realignments of the weak currencies fostered speculation, which only added to already strong depreciative pressures. Under the weight of empirical evidence EMS members started to turn their thinking around and converge more to the German model. Although the next four years brought also four more

[11] See Table 2.1

realignments, the atmosphere changed and the discussions about resetting the parities were headed more in the direction of what austerity measures will be taken to prevent further destabilization of the system. All of this contributed to the end of the Eurosclerosis era, which was marked by the Cockfield Report of 1985 and the signing of the Single European Act in 1986 (Dědek 2008).

From 1987 to 1992, as the new approach to coordination of economic policies started to bear fruits, there were no realignments of the central parities save for one. Dědek (2008) argues that this reset was however merely a 'technical' devaluation of the Italian lira, which finally started to use the normal fluctuation band of ± 2.5%. During this period the German mark started to pose as an anchor of the system with the other currencies de facto pegged to it. Through this mechanism German low inflation was transmitted to the other members and truly, for the period of years 1987 – 1996, the average inflation in the ERM countries was only 2.5%, while during years 1983 – 1986 it was 5.6% and during 1974 – 1979 it was more than 10% (Gros & Thygesen 1998).

In 1992 – 1993 EMS was hit by a crisis. During eight months five realignments of central parities were done – frequency thus far unprecedented. In a way the crisis bore resemblance to the end of the Bretton-Woods establishment. There were two parallels drawn – one between the central role of USD and DEM, the other between American expansion and German restriction – both partially responsible for the fall of the two respective systems. Economic literature states three main reasons that caused the sudden swing in the confidence of the market: the loss of flexibility of the system, costly German unification, and uneasy ratification process of the Maastricht Treaty (Baldwin & Wyplosz 2006).

Since the central parities of ERM had not been reevaluated for five years, speculation concerning fundamental misalignments of participating currencies grew. Dědek (2008) claims that contradictory studies about the fundamental position of exchange rates strengthened the force of the speculative attacks. In the end, not only those currencies that were widely considered to be overvalued (e.g. Italian lira, pound sterling or Spanish peseta) but also those that seemed to fit the real economic situation well (e.g. French and Belgian francs) were assaulted by the markets. The only way that EMS was able to react to the growing chaos, further enhanced by economic policy disagreements between France and Germany, was by finally increasing the ERM fluctuation band to ± 15% in year 1993.

After the fall of Berlin Wall in 1989, West and East Germany were reunited in October 1990. At first it was believed that the unification would be beneficial to the newly established Federal Republic of Germany. Fiscal stimuli aimed at building the infrastructure and providing a boost to the businesses from the east were supposed to spur the economic growth while lower prices and wages in Eastern Germany were to encourage competition, thus keeping the overall inflation figures down. However, things did not go according to the plan and the monetary unification of Germany at the rate of 1.8 eastern marks for one western mark proved to be fundamentally wrong. In 1991 50% of East German labor force was either unemployed or employed only part-time (Dědek 2008). Attempts to equalize s standards of living between the two parts of the country destabilized German public finances. All this contributed to an inflation spike to which Bundesbank responded by sharp increase of interest rates. In the situation where all the other EMS currencies were attached to German mark this triggered a deep discord in the opinions on the monetary policy of the community and showed the ever-present plight in establishments of this type, the so-called N-1 problem.

In 1992, the year when the crisis hit, the process of European monetary integration was already underway. The factor that prolonged the crisis was the uneasy ratification of the Treaty on European Union, the Maastricht Treaty. In June 1992 Danish referendum resulted in a very close NO,

with 50.7% of people voting against the Treaty (Dědek 2008). It was followed by another referendum in France and in both France and Great Britain the opposition to the treaty was gaining strength. Market began doubting the commitment of European countries to further monetary cooperation, bearing consequences of what Dědek (2008) calls 'destabilizing convergence game', i.e. cash-flows exalting further pressure on the weakening currencies.

However, this time the countries of Europe were firmly committed to their common goal and even in spite of gloomy situation the Treaty on European Union did in the end get ratified. Moreover, the experience this crisis brought demonstrated that for the European Community a full monetary union truly seemed to be the best option, since under such establishment no speculative attacks of this type would be possible. In the end, the widened ERM fluctuation band of ± 15% kept the de jure institutional framework of EMS intact and in despite the fact that four countries – Great Britain, Italy, Ireland and Sweden – either left ERM or suspended their membership, the chaos eventually ceased and stability was restored. Table 2.1 depicts the realignments of central parities done over the course of EMS existence.

"Behind dull information there are hidden colorful stories that tell about how the responsible ministers of national governments, grouped in the Ecofin Council, together with central banks' governors took the exchange rate matters, contrary to the invisible hand of the market, into their own, visible hands…"

Translation from Dědek (2008)

Table 2.1: Realignments of ERM central parities

		BEF	DEM	DKK	ESP	FRF	GBP	IEP	ITL	NLG	PTE
The period of regulated parities (initial turbulence)											
1	24.09.79		+2.0	-2.9							
2	30.11.79			-4.8							
3	23.03.81								-6.0		
4	05.10.81		+5.5			-3.0			-3.0	+5.5	
5	22.02.82	-8.5		-3.0							
6	14.06.82		+ 4.25			-5.75			-2.75	+ 4.25	
7	21.03.83	+1.5	+5.5	+2.5		-2.5		-3.5	-2.5	+3.5	
The period of regulated parities (calming)											
8	22.07.85	+2.0	+2.0	+2.0		+2.0		+2.0	-6.0	+2.0	
9	07.04.86	+1.0	+3.0	+1.0		-3.0				+3.0	
10	04.08.86							-8.0			
11	12.01.87	+2.0	+3.0							+3.0	
The period of quasi-monetary union											
12	08.01.90								-3.7		
The period of crisis											
13	14.09.92	+3.5	+3.5	+3.5	+3.5	+3.5	+3.5	+3.5	-3.5	+3.5	+3.5
14	17.09.92				-5.0						
15	23.11.92				-6.0						-6.0
16	30.01.93							-10.0			
17	13.05.93				-8.0						-6.5

The period of preparations for the common currency			
18	06.03.95	-7.0	-3.5

SOURCE: Dědek, O.: Evropská měnová integrace: od národních měn k euru, C. H. Beck, 2008, Praha

2.1.3 Delors Report and European Monetary Union

All the previous establishments of more-or-less fixed exchange rates were only as steady as the countries that participated in them and their commitment to cooperation. More than once these establishments had been tested and more than once they had faltered (e.g. Gold Standard and Bretton Woods). In the beginning of the 1970s the benefits of a monetary union in Europe had already been anticipated but the first oil shock was another test, another one that the involved countries did not pass. All these setbacks however taught economists and politicians a valuable lesson – while a monetary union maintains the benefits of a fixed exchange rate system, it eliminates the impermanent nature of less firm establishments. In 1987 Padoa-Schioppy Report enriched the theorem of 'impossible trinity' by liberalized trade, making it a quartet of conditions that cannot coexist simultaneously. It also suggested a remedy – a full monetary union.

In 1988 a committee of experts, led by then the President of the European Commission, Jacques Delors, was charged by the European Council with a task of elaborating a possible plan of achieving a full monetary union in Europe. The assignment not unlike the one that Werner's group worked on almost two decades ago took the Delors committee only ten months and the resulting document became known as the Delors Report. Just the sole fact that the European leaders contemplated the notion of a monetary union again is a sign of the changed mood, described on the previous pages.

Although charged with basically the same task, the results that Delors committee came up with were different from those of Werner. The propositions of the latter were marked by Keynesian thinking and recommended powerful supranational authorities, much larger budget and centralized decision-making for not only the monetary policy but also the fiscal and economic policies in general. In contrary, during the time when the Delors Report was published the economic mainstream favored rather liberal approach. That mirrored itself in more modest demands on the centralization aspect of monetary integration. While a supranational European central-banking authority was to be established, the report did not push for centralization in fiscal matters safe for budget-deficit constraints. Just like Werner, Delors also suggested three stages of convergence towards a full monetary union. During the first stage, countries were supposed to augment and adjust their national legislations to the needs of the union. Stage two was to serve as a transition time during which countries were to get accustomed to tighter cooperation in monetary matters. The last stage was then the actual beginning of the union.

The argument between economists and monetarists was resolved by the timing of stage 3. It was decided that that it could start as early as with the beginning of year 1997. If the countries would not be ready by then a fixed date of the 1st January 1999 was set to be the ultimate beginning of the union. Not everything went precisely according to the plan and the cooperation of the member-states could have been better. The newly established European Monetary Institute, which transformed from the EMCF, did not really take charge of organizing the matters of common monetary policy. In 1996 when it was time to assess the possibility of starting the union in January

1997, only three countries met the necessary conditions (Denmark, Luxembourg and Germany). A union of only three countries would be merely a limping torso of the intended scheme and so the European countries decided to wait until the ultimate date of January 1st 1999. From today's perspective it seems that the countries of Europe needed a certain threat of a deadline upon them. In two years time they indeed managed to achieve much in terms of convergence and the firmly set date also helped financial markets to converge to the predetermined exchange rates that irrevocably fixed the values of national currencies to the new international one.

The above mentioned date, January 1st 1999, marked the beginning of a new era in Europe. The process of economic integration, defined by Balassa (see the introduction to the first chapter), reached a higher level with eleven countries forming the European Monetary Union.[12] This respectable number was also a result of a rather creative approach to the fulfillment of the convergence criteria, as both Italy and Finland had not been ERM II members long enough at the time of the formal deciding, only at the actual start of the union. In addition, only three of the eleven met the 60% figure of the debt criterion and Ireland had revalued its currency prior to the accession. However, all of these nuisances were de jure in accord with the legal rules and so nothing prevented the triumphant beginning of the EMU.

Delors Report suggested that ECU was to become the common European currency. This was objected by Germany since there ECU was perceived as a weak currency. That is because over the course of its existence it lost approximately 40% of its value to German mark due to mark's revaluations. In 1995 it was thus decided that the name of the currency would be euro, technically only a final actual name for the acronym ECU (Dědek 2008). In 2001 EMU was joined by the twelfth member, Greece and one year later the monetary union became also a currency union. National coins and banknotes were withdrawn from the circulation in three phases and without any problems. Nowadays, the European Monetary Union, also known as the Eurozone, consists of 16 members. Slovenia joined it in 2007, followed by Cyprus and Malta a year later, with Slovakia becoming the so far last member on January 1st 2009. Eurozone is currently inhabited by close to 330 million people and its gross domestic product for the year 2009 was almost € 9 trillion.[13]

2.2 Convergence Criteria

With the drafting of the Maastricht Treaty on European Union, in the beginning of the last decade of the 20th century, legislators gave birth to the famous Convergence Criteria, often referred to also as the Maastricht Criteria. These are five conditions of nominal economic convergence that every candidate economy hast to comply with, in order to be accepted into the European Monetary Union. Issing (2008) claims that the creation of the criteria themselves was a part of a compromise between the already mentioned camps of Economists and Monetarists, pushed for by the two strongest political players at that time, the German Chancellor Helmut Kohl and the French President François Mitterrand. In short, monetarists got the firmly set irreversible deadline for the start of the monetary union, while the economist received the preconditions for the actual entry.

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[12] Those countries were: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.

[13] Source of the number of population: Wikipedia – Eurozone. Source of the GDP figure: Eurostat – statistical database.

2.2.1 Inflation and Interest Rates

The Inflation Criterion stipulates that the inflation rate of a country wishing to enter the Eurozone must be no more than 1.5% higher than the average of the three EU countries with the lowest inflation rates and must be sustainable. The same three countries then also form the benchmark for the Interest Rate Criterion, which states that the nominal long-term interest rates of an entering country must be no more than 2% higher than the average in those countries. Both of these conditions aim at lessening the disparities between the potential Eurozone members, in order to insure its functioning is as smooth as possible. While the latter of the two does not attract much attention, the first one is the cause of many a heated debate.

There are several issues associated with the Inflation Criterion. As a phenomenon and a part of the economic theory inflation was already debated on the previous pages. To use De Grauwe's terminology, along the path toward monetary unification in Europe, there was a clear conflict between the so-called 'wet' and the 'hard-nosed' countries. While the first group of states was used to an environment of a rather high growth of the price level, the other group preferred the policy of stable prices. Under these diverging positions on a matter so critical in a single money area, introduction of one currency was unimaginable. The history itself has shown us however that the second approach is better for a stable economic development, as all European countries either really started to or at least tried to converge to the German model.[14] Thus there was the need to converge the inflation rates and even more importantly, to credibly lower the inflation expectations across what was to become the Eurozone. Only that would prevent future conflict of interest among the individual members and satisfy the 'hard-nosed' countries. Of course, good preparation was only a part of the way and more on this topic is discussed in subchapter 2.3, which deals with the European Central Bank.

Very often the critique of the Inflation Criterion is aimed at the way it restricts the catching-up process of the fast-growing economies. De Grauwe (2005) and Dědek (2002) both indicate that for these countries it is perfectly natural to experience a relatively faster growth of prices. As indicated by the name of the process, such economies are catching up with the advanced ones. This phenomenon, best described on the theoretical basis of the Balassa-Samuelson Effect, is accompanied by the convergence of the price level of the catching economy to that of the developed one. Dědek (2003) elaborates on the problem further and claims that the whole process is relatively slow and long-lasting, and thus the limitations of the inflation criterion don't really present any serious danger to a fast-growing economy in question. Moreover, in current situation, all new possible Eurozone entrants are small economies that, even if all put together, represent only a fraction of the whole Eurozone. Therefore, although with a strong growth potential, they do not have to fear any serious sterilization efforts of the ECB, as their relative weight is too small to cause a major shift in the monetary policy.

A practical problem connected with the inflation criterion has to do with the way it is formulated. Dědek (2006) refers to the problem as to 'aiming at a moving target'. That is because the entrants don't know what precise level of inflation they should pursue. Indeed, a lot of criticism is aimed at the very definition of this and the other criteria and many propositions for improved

[14] Issing (2008) and Zweig (1970) argue that it was most of all bad experience with inflation what opened the door for Hitler's regime and later made the D-Mark into a symbol of price stability.

formulations have been voiced. Dědek (2002) too recognizes the problem of the criteria being somewhat outdated, nonetheless, he maintains, that the relative freedom in the interpretation of these rules makes up for that. Furthermore, in his already mentioned article from 2006 he surmises that an eventual rephrasing of the convergence criteria would be far outmatched by the risks associated with the opening of the Maastricht Treaty.

2.2.2 Exchange Rate

Another of the famed Convergence Criteria is the Exchange Rate Criterion. It states that a country must be a member of the ERM II, without having experienced devaluation during the two years preceding the entrance into the monetary union. ERM II was established with the beginning of the Stage 3 of the introduction of the common European currency and it kept the broad (± 15%) fluctuation boundaries. Now it remains the only tool for fixing the so-called 'Ins' and 'Outs' and although the adoption of Euro is an obligation for all new members of the European Union, membership in ERM II, one of the necessary conditions for the entry, stays voluntary.

As with the Inflation Criterion, there is a critique associated with this one as well. De Grauwe (2005) and Dědek (2006) point out that the members of ERM II may be exposed to speculative attacks, testing their commitment to remain fixed vis-à-vis Euro. De Grauwe further adds that with high capital mobility, the likelihood of devaluation grows, increasing also the likelihood of speculation. What's more, even though devaluation is, so to speak, forbidden, revaluation is not and even the sheer possibility of it may feed speculation too.[15]

In addition, many economist warn, that the synchronous effect of the Exchange Rate and the Inflation Criteria may be deterring to the faster growth of the potential new monetary union members. As their economies are catching up, the only channels of real appreciation are nominal exchange rate appreciation and higher relative growth of the price level. Theoretically, both criteria could pose a problem to the catching-up process. However, Dědek (2006) argues that fulfilling both criteria should not be overly troublesome, mostly because of wide exchange rate fluctuation borders. One could even generally call this criterion not very strict because of the way it was treated in the very beginning of the European Monetary Union. It is no secret that by the time of deciding which countries would be eligible for the Eurozone membership, Italy and Finland have not been members of ERM II for two years. It was argued that even though this is true, they complied with this condition upon the actual start of the monetary union. Baldwin et al. (2001) nonetheless claim, that the rule has been de jure violated, as it says, that that the potential Eurozone members have to be participating in ERM II for at least two years 'before the examination'.

[15] Slovakia even revalued its central parity twice before finally switching to Euro. Upon joining ERM II, in November 2005, it was set to 38.4550 SKK for 1 EUR. In March 2007 the first revaluation occurred, changing the central parity to 35.4424 Slovak Crowns per Euro, with the final change being done in May 2008, revaluing the central parity to 30.1260 SKK per EUR.

2.2.3 Fiscal Criteria

Last, but certainly not the least important of the convergence criteria are the two that concern the fiscal position of candidate countries. On the one hand, a country wishing to join the European Monetary Union should have a budget deficit of no more than 3% of the value of its GDP. On the other hand, its debt-to-GDP ratio should not exceed 60%. The formulation of these two rules is also rather loose, leaving plenty of space for 'creative approach' to them. This is very well observable on the fact that in 1999, upon the very birth of the Eurozone, six out of eleven founding member states had their debt-to-GDP ratios greater than the limit of 60%. Issing (2008) states clearly that while the progress achieved by the future Eurozone countries in the last decade of the 20th century in terms of slashing the budget deficits was impressive, with reference to public debts it was modest at best.

The importance of setting fiscal rules upon countries that share a single currency is twofold. Firstly, those countries which are highly indebted or on a high-deficit path are likely to be biased toward high inflation, in order to effectively cut their deficits, since they can neither devalue their currency nor monetize their debt. Secondly, with such countries on board there is an increased likelihood of moral hazard, presented in the form of possible pressures for a bailout. In theory therefore, only countries in a sound fiscal position should be admitted to a monetary union. European legislators were apparently aware of these risks when they were drafting the Maastricht Convergence Criteria. With hindsight we can argue that they did not fail completely, rather it was the matter of implementation of the rules that is now causing big problems. More of this is discussed in subchapter 2.4 that deals with the Stability and Growth Pact.

Limitations presented by the two fiscal criteria are often criticized as being arbitrary. While this is to a large degree true, there is still logic behind the figures. Debt-to-GDP level of 60% was obviously chosen because it reflected the approximate average of indebtedness of the EU countries at the time when the legislation was being drafted. Assuming 5% constant nominal growth of the GDP, budget deficits of 3% would eventually stabilize the level of debt at precisely 60%. If we accept this to be the wished-for level of indebtedness, we are still left with the puzzling assumption of 5% nominal GDP growth rate. On this account one can only presume that for political reasons this was the best way to define the so important fiscal convergence criteria.

2.3 European Central Bank

"Not all Germans believe in God, but they all believe in the Bundesbank."

Jacques Delors, SOURCE: Issing, O.: The Birth of The Euro, Cambridge University Press, 2008, Cambridge, p. 23

Concept of the European System of Central Banks was created by the Delors Report, with the European Central Bank being its main and central component. ECB was based on the model of the prominent German Bundesbank, which was a highly praised institution, as hinted by the citation above. This was a logical outcome of a long process of economic convergence in Europe, at the end of which the German model clearly dominated the Anglo-French one, as De Grauwe (2005) points out. There were altogether many reasons why ECB was fashioned after the design of BuBa, not least

of which was that it had to please the German public, rightfully proud of its central bank, monetary policy and its currency, which it only reluctantly gave up. For this purpose, another concession made by the European community was setting the seat of the new institution in a symbolic location of Frankfurt am Main, where BuBa also resides.

National central banks of the member states of the European Union make up the already mentioned European System of Central Banks. However, only central banks of those countries that are also members of EMU form the so-called Eurosystem, which, in connection with ECB, functions on the hub-and-spoke principle. In effect, the purpose of these CBs is largely restricted to implementing the policy of ECB and some other, more or less secondary tasks. ECB officially started its existence on June 1st 1998, taking after the European Monetary Institute.

2.3.1 Objectives, Strategy and Tools

Issing (2008) identifies three pillars on which ECB rests to be *prohibition of monetary financing*, *primacy of price stability* and *central bank independence*. The first pillar makes it clear that as an institution, ECB cannot be misused to monetize the debt of any country. Issing colorfully comments on such strict position toward possible exploitation of monetary policy by saying "there are a lot of corpses in this 'graveyard'", referring to currencies that were 'lost' due to irresponsible government behavior (Issing 2008, p. 54-55). The second pillar could be considered the goal of ECB, while the third one a tool for achieving this goal. These two are more closely examined in the following paragraphs.

Even though price stability has primacy among the objectives of ECB, it is not the only one. As laid down in its statue, ECB also has to "support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union," however, without compromising the primary goal. [16] There is little doubt, that a low-inflation environment has a positive effect on the stability and growth of the whole economy. Provided that the central bank manages to generate an atmosphere of trustworthy long-term stable prices, the uncertainty for the economic agents decreases significantly. This in turn leads to a more effective allocation of resources and an overall higher economic performance. Making the ECB (or for that matter any central bank) susceptible to political pressure, often motivated by short-term goals, inconsistent with the imperative of long-term price stability, would be a bad move. It would be especially harmful in the case of ECB, since it might lead to spurring even more instability due to differing wishes of the political elite of the Eurozone. In the worst case scenario it might even cause the dissolution of the whole monetary union. Therefore, on the top of the independent status of ECB, it has also a clearly stated mandate of maintaining a stable price level, from which it cannot divert. The objective of supporting the economic policies of the Union then works indeed only as a secondary, fine-tuning rule.

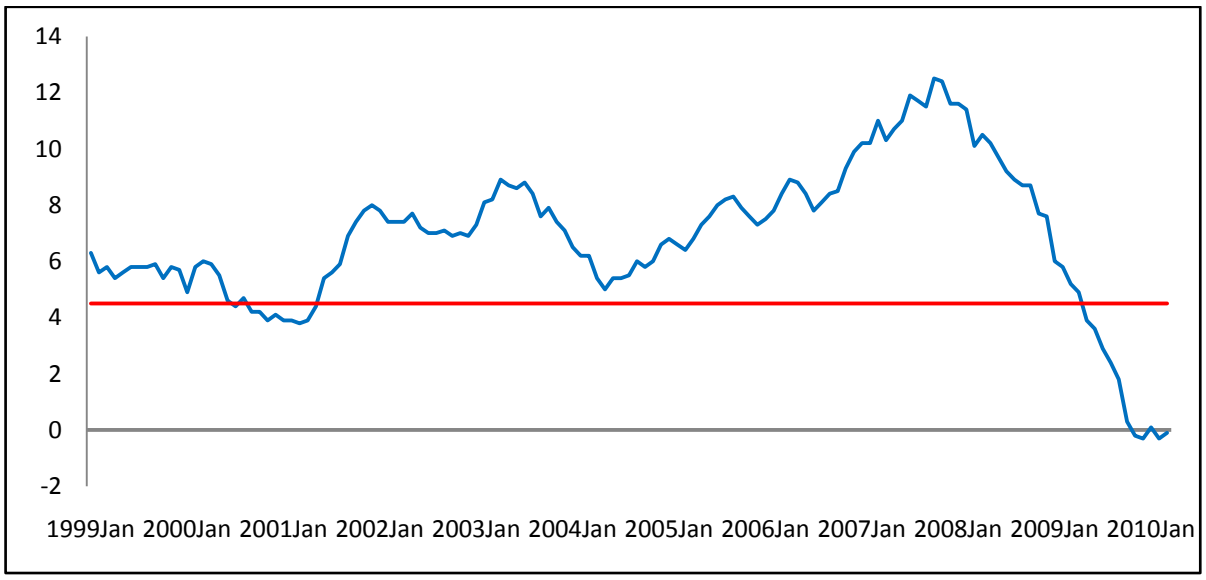
Although ECB has a goal that tells it rather unmistakably on what it has to focus, the actual explicit interpretation of this goal was left to ECB itself, and so the inflation target of 'less than but close to 2%' was created. Issing (2008) argues that ECB does not pursue the strategy of inflation targeting, even though its approach shares important similarities with it. Rather it opted for a system

[16] Citation of the internet source "Official Journal of the European Union"

that rests on two key elements of *inflation* and *money growth*, and also recognizes the existence of short-term price fluctuations that cannot be fully controlled by monetary policy.[17]

He describes the inclusion and the alleged prominence of the monetary pillar as a consequence of the "overwhelming empirical evidence – between the growth of the money supply and inflation," building on Milton Friedman's famous statement, that inflation is always and everywhere a monetary phenomenon (Issing 2008, p. 92-93). Wyplosz (2005), however, voices strong criticism of the monetary pillar by declaring that money aggregates are in general very bad predictors of inflation, even going further, saying that the two-pillar scheme made ECB look 'outdated'. According to him "Eurosystem was only paying lip service to the first [monetary] pillar" to satisfy the German public, which perceived the money growth rule to be the cornerstone of BuBa's success (Wyplosz 2005, p. 28). Despite defending the two-pillar strategy, Issing himself notes, that the first ECB president Willem Duisenberg "emphasized that he could not say which of the two [pillars] was the stronger or the thicker one," even though the monetary pillar was beforehand supposed to be the prominent one (Issing 2008, p. 99). The fact remains, as Wyplosz (2005) also remarks, that the actual growth rate of the key variable, money aggregate M3, was barely ever even close to the reference value, set by ECB at 4.5%.

Chart 2.1: Money (M3) growth rate in the Eurozone in percent



SOURCE: Statistical database of the European Central Bank

The economic pillar analyzes all other information and encompasses all kinds of variables such as wages, exchange rates, energy prices, etc. Inflation is then merely one of these observed factors, being projected into the future, with frequent changes caused by constant variations of assumptions. The most notable distinction between the two pillars is the time orientation. While the monetary pillar is concerned with the medium- to long-term development, the economic pillar evaluates rather short-term risks for the stability of prices.

[17] Issing(2008) provides quite an in-depth discussion of the possible alternatives and the actual strategy chosen by ECB.

As for the inquiry into the tools of ECB, the focus here lies on the theoretical features, rather than on the actual instruments like interest rates, minimum reserves, and so on, which are not a vital dimension for the purposes of this subchapter. The central point of the discussion deals with the concept of central bank independence. It had been established that an economy benefits from low inflation and that a CB, in case of the Eurozone the ECB, is responsible for conducting monetary policy with the aim to keep the inflation low. The question then is, who decides what this policy will be, put differently, who calls the shots?

Authors of economic literature generally acknowledge the importance of central bank independence.[18] The argumentation goes as follows. In order to keep inflation in check, monetary policy has to be responsible and its first and foremost goal must be to keep the prices stable. In addition, this resolve has to be trustworthy, so that economic agents really believe the central bank will give the pursuit of this goal its best. In other words, a central bank has to be credible. Unless economic agents deem the statements of a CB credible, there will be a persisting risk of them changing and adapting their price-growth expectations, leading to increased inflationary pressures. In turn, the job of the central bank would be that much more difficult and if it indeed wanted to remain true to its word it would only be at a significantly higher cost to the economy. Therefore, one-time loss of credibility seriously damages the reputation of CBs from which they sometimes never recover. Thus it is clear that having an explicit mandate of maintaining price stability is not enough, it also has to be credible to produce the desired results.

Central bank independence functions as a tool that, in an ideal world, can guarantee its credibility. The key issue is to make sure that a central bank is not vulnerable to outside influence, be it from the government, labor unions, businesses or any other source. Naturally, because of historical reasons and reasons of power, the greatest and most common fear is that a central bank would fall under the influence of the government. In that case its policy would likely be overly expansionary and would only bring about higher inflation, as it would follow the short-term goals of politicians, rather than long-term price stability.

"As a politician, I have often been annoyed at the decisions of the Bundesbank. As a German citizen, I am pleased and thankful that we have a central bank free from political influence."

Helmut Kohl, SOURCE: Issing, O.: *The Birth of The Euro*, Cambridge University Press, 2008, Cambridge, p. 235

Regarding independence, German BuBa was a highly esteemed institution.[19] Over the decades of its existence it had proved its case and helped shaping the structure of ECB. Concerning the matter of independence, ECB has been built on even more solid ground than BuBa. While changing the statute of the German CB only requires a simple majority in the parliament, to change the statue of ECB, the entire Maastricht Treaty, which defines ECB as a body free of political influence, would have to be reopened. Agreeing on a move if this sort would require a unanimous agreement of all 27 EU member states, which makes it virtually impossible to change the ECB statute. Thus, the independence of ECB is guaranteed truly firmly (De Grauwe 2005).

With respect to the issue of independence it is also important how the people in charge are appointed. As it is described on the following pages, the main decision body of ECB, the Governing

[18] See for example Emerson et al. (1992), De Grauwe (2005), Dedek (2008) or Issing (2008).

[19] Issing (2008) mentions that BuBa was modeled to be independent because of the insistence of the Allies of the Second World War. German Chancellor Konrad Adenauer supposedly resisted the idea at first.

Council, consists of the members of the Executive Board and the governors of national central banks of the Eurozone, which are also required to have an independent status. Members of the Executive Board are appointed to their positions by "common accord of the Heads of State or Government of the euro area countries" for a period of 8 years, with the term being nonrenewable.[20] This system of appointing the most important monetary-policy makers in the Eurozone seems to be quite successful at keeping them shielded from political influence. Governing Council then makes decisions concerning monetary policy in the Union, without the need of approval from any other political body or institution. This makes ECB truly independent of outside influence.

However, there are not only those who praise the ECB independence, but also determined critics of it. They usually argue that ECB suffers a deficit of transparency and accountability. At least those are the official claims. In case of critics-politicians one can assume that they (also) have other motifs. With regard to the two official points of criticism, Wyplosz (2005) states that the European Monetary Union at first seemed to be a "technocratic construct suffering from a democratic deficit," even calling it "opaque". (Wyplosz 2005, p. 28) He adds that in comparison with Fed, ECB faces very little accountability, as the requirements for the communication of its decisions and plans are rather weak. Issing (2008) counters this criticism by arguing that the form and frequency of ECB communication is just transparent and accountable enough so that it does not jeopardize its primary goal and purpose. He adds that publishing minutes from the Council meetings would be counterproductive to the primary goal, as it would only draw a wedge between members with contrasting positions, even changing their behavior, knowing that all their actions and positions would be public. De Grauwe (2009) claims that in case of ECB, publishing minutes might even be incompatible with the law.[21]

While the academic debate about transparency and accountability deals more or less only with fine tuning in the area of central banking, political critique is far more intriguing. Indeed, one can see that it does not enjoy firm theoretical background and is rather motivated solely by political reasons. An example of this is the initial questioning of Professor Issing by the European Parliament before he was appointed to the Executive Board, where the legislators showed exceptionally strong interest in the issue of independence and accountability. A member of the party of European Socialists, Torres Marques, voiced a particular discomfort with the idea of ECB being independent of the decisions and stances of the European Parliament.[22] In the future, ECB will no doubt remain under the pressure of politicians and interest groups. The way it is institutionalized however, it is unlikely that it will yield to these forces.

2.3.2 Structure and Reform

For the members of the European Monetary Union one of the most key issues about ECB is the structure of its decision-making organs. From the political point of view it shows how much weight in the whole process their individual voices carry, how much power each member state has. This part of the subchapter therefore begins with the depiction of the Executive Board as well as the

[20] Cited from the ECB website: http://www.ecb.int/ecb/orga/decisions/eb/html/index.en.html
[21] For a rather detailed discussion on the methods of ECB communication see Issing (2008).
[22] Issing (2008) provides a complete transcript of his hearings in the European Parliament.

Governing Council, it then tackles the precarious topic of committee decision-making and ends with the description of the recently enacted Council reform.

As the name suggests, the Executive Board is the managing body of ECB that sets its agenda, implements the decisions of the Council and is also responsible for other functions and operation of the Bank, such as economic research, compilation of statistics and so on. Executive Board also participates in the decision-making process of the Council and one could argue that as a group it possesses the largest portion of the voting rights. In fact, De Grauwe (2005) identifies it as the median voter on the Council. It consists of the President and Vice-president of ECB plus four other members, each being in charge of particular directorates or directorates general. Governing Council of ECB is made up of the members of the Executive Board and CB governors of the Eurozone member states. The role of this body is to make the decisions concerning monetary policy in the Eurozone. It meets twice a month and each member has only one vote, regardless of the country of his origin, its size by population or economic importance. In fact, individual members of the Governing Council do not serve as representatives of their respective national countries but as the most qualified experts of the entire monetary union. In case of a tie the President casts the deciding vote.

The way that decisions in ECB are made is often loudly criticized as being too slow, ineffective, or costly, due to its committee nature. Had only one individual been in charge, her decisions would supposedly be made in a brisk fashion and her resolve would be stable and, of course, unilateral. Critics of ECB claim that decision-making process in a committee is too lengthy and opinions on what kind of policy is needed are often divided. Berger (2006) acknowledges the critical claims, adding that centralized decision-making is likely to provide for less volatility in monetary policy. However, she also says that making decisions in a committee prevents policy changes from being too frequent or too extreme. Furthermore, she agrees with Issing (2008) that a committee is likely to be equipped with better and greater-picture information, stating also that governors of national CBs on the Governing Council add to the independence of the whole Bank, as their sheer involvement increases the cost of exerting political influence. According to Issing (2008), monetary-policy making in a committee is clearly superior to a one-person arrangement and it is by no account slower. He argues that, decisions by the Council are made on the consensus principle, rather than by simple voting. He explains that this, however, does not mean that each decision would have to be agreed on unanimously: “Consensus as practiced by the Governing Council means, formally speaking, no more and no less than that at the end of the discussion, in which each member has been able to express his or her opinion and thus the preferences for the policy decision to be taken are all clearly on the table, the chair person formulates the group will as a decision by the Governing Council. […] But consensus also means that one or more members who at the time would have preferred a different decision […] are able to live with the ‘consensus’, that is, they acknowledge the weight of the arguments in favor of the decision.” (Issing 2008, p. 154) After a discussion is over and a particular decision has been agreed on this is then a shared responsibility of the whole Council, i.e. of all its members individually as well. From this point on, put in a slightly exaggerated way, the success of ECB policy stands and falls with the manner how it is presented and explained by the individual governors in their respective countries and national languages.

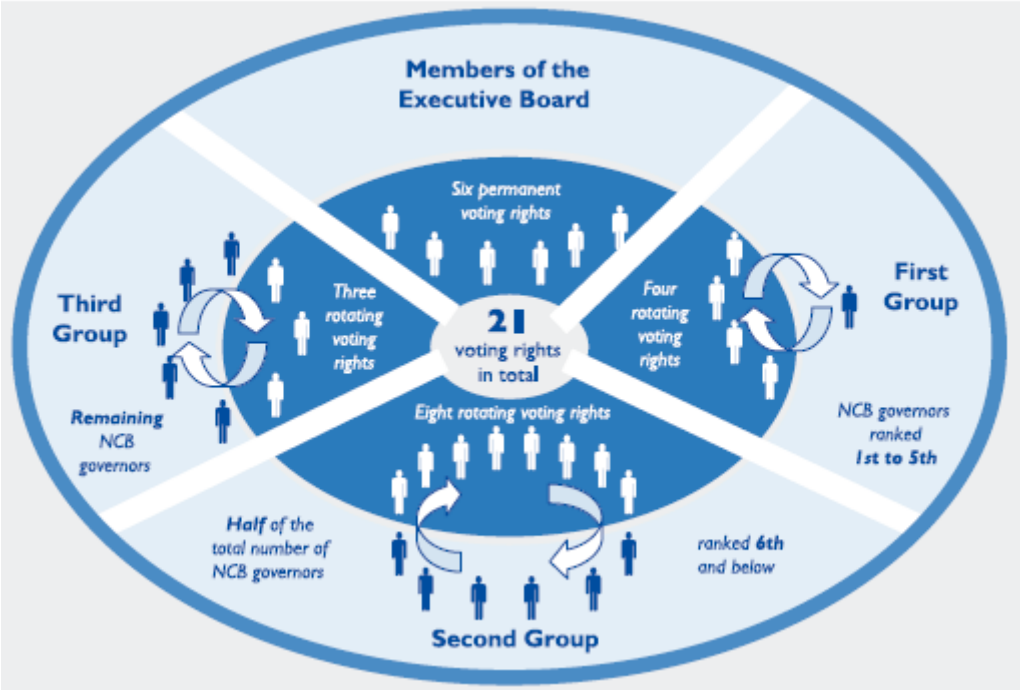
Ullrich (2004) supports what seems to be the general opinion, stating that if the Council members act as experts working with aggregate Eurozone data, rather than national representatives, their number should not be a limiting factor for the overall Council efficiency. Nonetheless, De Grauwe (2005) reasons that in the real world, with the prospect of the size of Eurozone increasing up to 24 members, possibly more, fears were present that smaller converging countries would deform

the monetary policy in the Union. Therefore, on May 1st 2004 a voting reform took effect, essentially limiting the number of national CB governors with active voting right to 15. The reform consists of two stages. In the first stage two groups of countries will be created and in the second one there will be three groups. Scheller (2006) identifies two criteria based on which countries will be assigned to their respective groups:

i. the share of the country in the aggregate gross domestic product (GDP) at market prices (weight of 5/6),
ii. the share of the country in the total assets of the aggregated balance sheet of the monetary financial institutions (TABS-MFI; weight of 1/6).

The first stage defines the Council setting after the number of governors exceeds 15 and the second one after it exceeds 21. The basic principle of the reform is a predetermined rotational scheme, according to which governors will be in- or excluded from the right to participate in the decision-making process. However, all governors retain the right to take part in the discussions that precede the actual making of the decision. Based on this model, the smaller a country is, the less will it affect monetary policy in the Union.[23]

Chart 2.2: "The three-group rotation system for the ECB Governing Council"



SOURCE: Scheller, H. K.: *European Central Bank: History, Role and Functions (2nd revised edition)*, European Central Bank, 2006, Frankfurt am Main

[23] For more on the reform see for example De Grauwe (2005) or Scheller (2006).

Most of the critique of ECB is based on more-or-less solid ground. Yet Wyplosz (2005) identifies it as being clearly secondary to the first and foremost goal of ECB, which is "delivering a stable currency, underpinned by [...] price stability." (Wyplosz 2005, p. 27) He agrees with Issing (2008) that this goal has been met, as the inflation expectations have successfully been anchored, delivering low long-term rates, from which both the public and the private sector benefit. In wake of the current uneasy situation in many countries of Eurozone it will be even more interesting to see how ECB reacts. It has already made large concessions and the political pressure keeps rising. Next subchapter turns attention to these woes, discussing Stability and Growth Pact and fiscal policies in the Eurozone.

2.4 Stability and Growth Pact

The two main kinds of economic policy are monetary and fiscal. Previous part made it clear that the independent European Central Bank is in charge of the monetary policy in Eurozone. Fiscal policy however, has not been centralized and remains in the sovereign hands of national governments. Because of the complex nature of the mutually intertwined relationship between the two, such an unbalanced arrangement may cause serious problems, not the least of which is the resulting unending conflict between the national fiscal-policy makers and their international monetary counterparts.

De Grauwe (2005) identifies two basic alternatives regarding fiscal policy in a monetary union - centralized or decentralized. The first one means in principle establishing a federal budget, controlled by a federal authority, like in the United States. Such an arrangement would, in case of an asymmetric shock, provide pecuniary help in form of transfers from one member state to another. However, with the European Union built on rather confederative principles, the other, decentralized arrangement is the reality. Without federal funds that could function as automatic stabilizers in case where individual member states would be hit by an asymmetric shock, countries have to finance their extra expenditures by issuing debt. Hence, transfers in the European Union work on basis of inter-generational solidarity, rather than on inter-national one.

In the framework of economic policy it is an undisputed fact that although on the short-term basis governmental fiscal stimulation may be beneficial, in the long-run it distorts the market. Unless it allows for adjustments of wages and prices and for labor mobility, it could create whole regions or countries dependent on subsidies. Such outcome would not be preferable under any circumstances and if it occurs within a monetary union, it could easily endanger its existence. The main problem is that those in charge of making fiscal-policy decisions are motivated by goals other than keeping the government finances in a sound state. It is a frequent phenomenon that politicians who consolidate state finances do not get reelected, as opposed to those, who finance their political agenda with budget deficits, effectively endangering the future of their country. Wyplosz (2005) remarks that with budget deficits close to or in surplus, automatic stabilizers should be sufficient to deal with shocks and fine-tuning in form of pork-barrel funding could be completely avoided. Otherwise the debt financing becomes self-perpetuating and a short-term solution only turns into a long-term problem. Excessive government spending is therefore undesirable for any country and the fact that it is still a major problem of today's world only exposes the clash between economics and politics. Why is this issue even more pressing in a monetary union?

Issing (2008) classifies the problem by plainly stating that in a single currency area benefits gained from deficit spending are enjoyed exclusively by national players, while the costs are born by all members of the union. Wyplosz (2005) supports this view by saying that a country may very well find it convenient to let its debt rise and even get out of hand, knowing that other members would eventually come to its rescue. Indeed, some of the thoughts presented in literature written years ago may seem as though they had been perceive through a crystal ball. Others strike as being rather too optimistic, even naïve. For example, Emerson et al. (1992) mention that a monetary union should induce public budget consolidation. Not the least important reason for this kind of optimistic thinking is the existence of the so-called 'no bailout clause'. On this account Issing (2008) wrote that it is very likely that in case of a real threat to the Union it would be circumvented. In terms of Game Theory one would say that the threat of no bailout is not credible. Nonetheless, some progress in this field has been achieved as the members of the Eurozone all agreed to be subject to sanctions if they did not comply with the restrictions of the Stability and Growth Pact.

2.4.1 The 'Old' Pact and Its Criticism

Dědek (2008) mentions that in contrast with Werner's approach, Delors Report did not demand fiscal centralization in the spirit of Keynesian framework. However, it did propose setting limits on deficit spending and also called for sanctions that could be imposed on sinners, in order to avoid the risk of moral hazard in the Union. Thus, in the Treaty on European Union the already mentioned fiscal criteria were incorporated along with the so-called Excessive Deficit Procedure and in 1997 the Stability and Growth Pact was agreed upon.

The most important figure in the 'old' Pact was the 3% deficit-to-GDP ratio limit. This applied to all European Union members, but only those countries that share the single currency were liable to sanctions if they did not comply with the Pact. Sanctions were financial and could amount up to 0.5% of a country's GDP, had it failed to consolidate its budget in a satisfactory way. Furthermore, countries also had to submit yearly programs on how they were planning to tackle the question of deficits. For the Eurozone members these were called 'stability programs', with the other EU members having to submit so-called 'convergence programs'. As a part of these programs countries also had to come up with a Medium Term Objective of consolidating their public finances so that they would achieve surplus in the budget balance or would at least get close to it.

One must admit that the Stability and Growth Pact represented a significant progress in the field of fiscal policy in the European Monetary Union. For instance, Wyplosz (2005) states that empirical studies confirm that the Convergence Criteria and SGP ended the pro-cyclicality of discretionary fiscal policies in the Euro Area. Nevertheless, the Pact remained subject to voluminous scrutiny and criticism for many of its aspects and from both sides of the spectrum. Some argued it was too strict, for others it was not a guarantee enough to provide for responsible budgeting. De Grauwe (2005) represents one point of view, claiming that although the idea behind SGP was good, its design was rather faulty, being too inflexible. In good times it did not force governments to consolidate budgets as much as would be desirable and in bad times it restricted them too much in their efforts to counteract economic downturn with expansionary fiscal policy. As usually, the 3% deficit limit was at the center of discord. On the other side, Issing (2008) provides a rather vigorous defense of this criterion, claiming that the critics fail to see the greater picture, overlooking the most basic principle of the Pact, which was to consolidate public finances of the Eurozone member states.

Moreover, the Pact provided for exceptions to the 3% rule in case of extraordinary economic situations and for Issing that is flexibility enough.

There were also other causes of concern in relation to SGP. On a more theoretical note Wyplosz (2005) reasons that trying to deal with domestic issues through institutions and pressure from abroad may, simply put, alienate Europe to national electorates. Trying to shield themselves against the opposition to fiscal restrictions, politicians could easily spread the message that Europe is to blame for tightening of belts. Perceiving Europe to be the originator of often painful and definitely unpopular austerity measures could in turn lead people think negatively of the European institutions and so put the whole integration process in jeopardy. Another problem of SGP is with its enforceability. Issing (2008) formulates it aptly by asking: "How can one expect potential transgressors to pass judgment on actual transgressors?" (Issing 2008, p. 199) And indeed some countries, including Germany and France flouted the Pact, raising the question in other countries, why should they play by the rules when others do not.

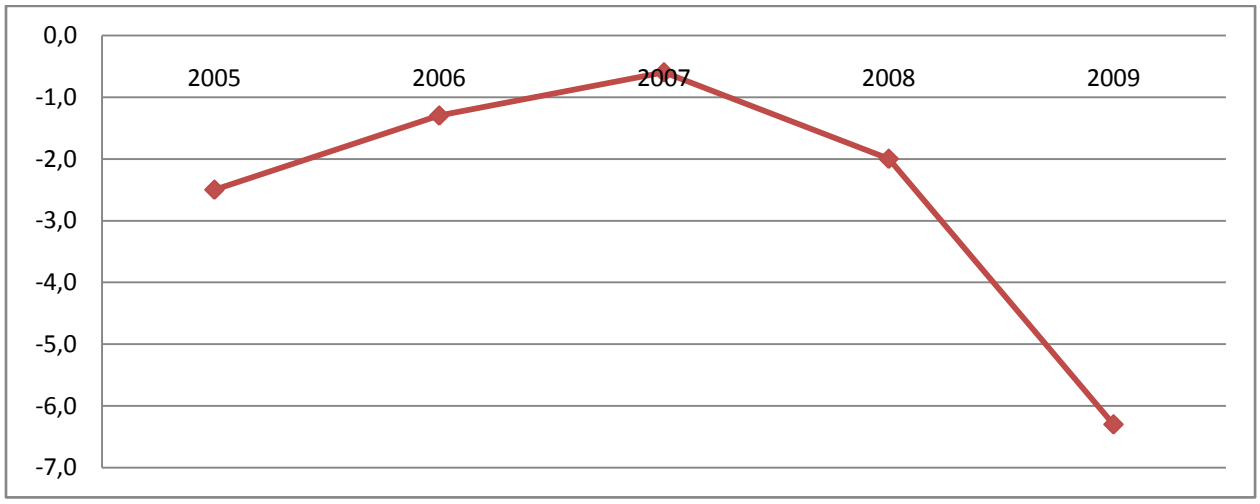
2.4.2 The 'New' Pact and Current Woes

As claimed by Artis & Nixson (2007), European legislators were at first reluctant to alter the Pact but eventually gave in and heeded the criticism. In June 2005 changes were officially passed and the 'new' Pact began its existence. Yet, chances are that it has only made the situation worse, as Morris et al. (2006) identify it as being less well-defined, less simple and less transparent. They further state that in March 2005 the Governing Council of ECB warned against making changes to the Pact that would relax it and so undermine the fiscal framework within the Euro area, as it could pose a significant blow to the Union.

Indeed, when analyzing the Pact reform, one observes a rather loose formulation of the new principles. Overall, the rules connected with the Preventive Arm are more relaxed, allowing Medium Term Objectives to be more individual and adjusted with respect to economic cycle. In addition, they provide for exceptions in case of implementation of structural reforms and lift up the requirement of MTOs' deficit targets to be close to or in surplus. In case of the Corrective Arm, rules have also been loosened up. This is particularly obvious in connection with broader definition of an economic downturn with respect to EDP, as well as specification of the 'other relevant factors' and last but certainly not least, extension of all important deadlines.

From the purely economic perspective these changes make sense, since tuning fiscal requirements and goals so that they fit individual-country demands certainly does not hurt. However, practically it only creates more obstacles on the road of public finance consolidation, making it easier for the Eurozone members to duck imposing unpopular policy measures. The reform of SGP also aimed at lifting some of the weight off the deficit condition and shifting it over to the debt criterion. Morris et al. (2006), as well as Artis & Nixon (2007) however argue that this goal has not been achieved, since no clear quantitative agreement on the subject could be reached.

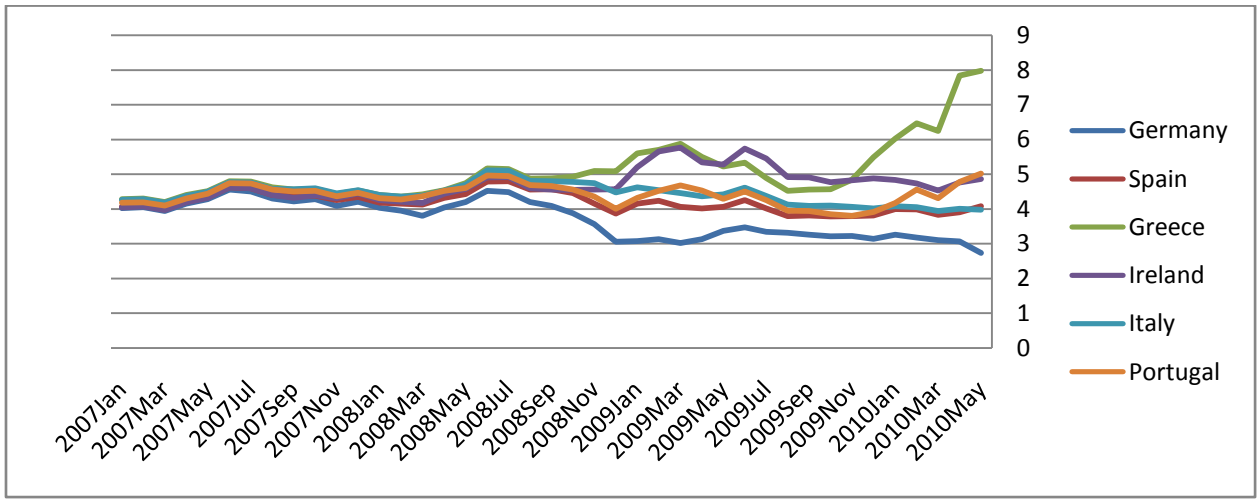
Chart 2.3: Eurozone deficit-to-GDP ratio



SOURCE: Eurostat

Empirical check reveals that in the first year of the 'new' Pact's existence fiscal responsibility of the Eurozone members improved, even decreasing the average indebtedness by approximately 420 basis points, equaling to nearly 6% of the total debt in the first two years. However, first transgressors started to emerge as soon as 2007, with Greece increasing its budget deficit from 3.6 to 5.1 per cent of GDP despite the yearly growth of economy of around 4%.[24] In the following year, with the financial crisis and the worldwide economic recession emerging, the average Eurozone deficit rose by more than 300% (in terms of deficit-to-GDP) on yearly basis, with the trend continuing also in the next year. Currently, all of Europe is facing a debt crisis, with the consequences possibly threatening the very existence of the EMU.

Chart 2.4: Interest rates on 10 year sovereign bonds

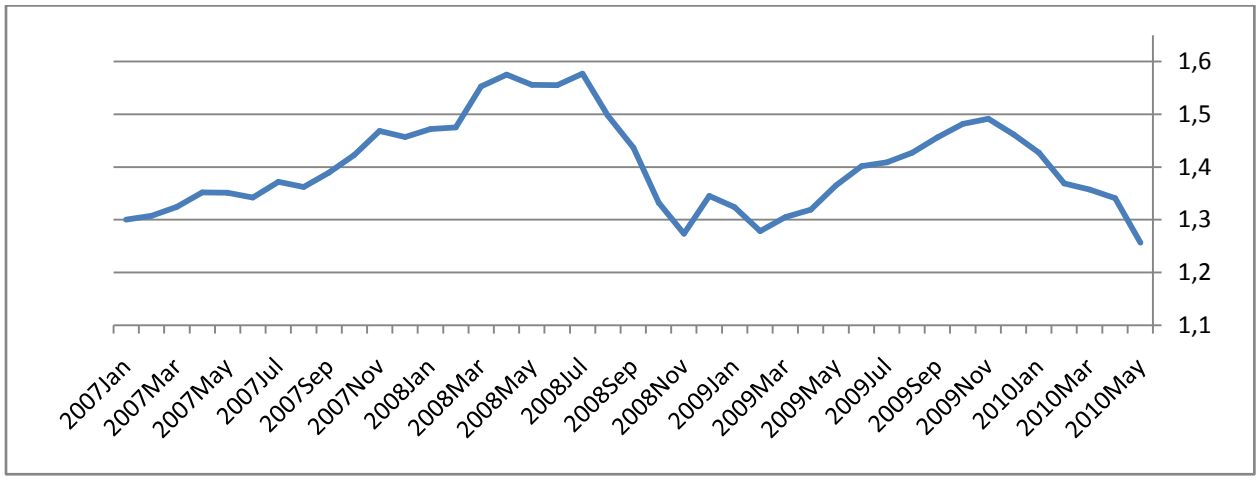


SOURCE: ECB

[24] Deficit figures – Eurostat data, growth figure – IMF data.

At this time a group of countries, ironically referred to as PIIGS, is at the center of the world's attention. Led by Greece, their fiscal indiscipline has brought the Eurozone to its knees, so to speak, and the end of the tunnel is nowhere in sight. Spreads on long-term government bonds in case of these countries have been rising sharply, with the biggest culprit, Greece, even having to be bailed out. Cascade of events associated with these fiscal woes have also significantly impacted the Euro exchange rate and despite huge efforts from EA lawmakers, investors keep selling the European currency, causing its value to fall to levels from years ago.

Chart 2.5: Historical development of the USD/EUR exchange rate



SOURCE: ECB

Neither the huge multi-billion Euro emergency fund, nor the so-called 'nuclear option' of ECB purchasing Eurozone bonds (on the secondary market) have been able to calm markets down and reverse the trend of slipping euro exchange rate. Then again, one can only speculate what would have happened, had the politicians not reacted as they did. Seemingly dire situation can in the long-run however prove to be exactly the kind of wake-up call that the Eurozone needed. In face of extraordinary circumstances lawmakers' backs are against the wall, as they are pressured to create a new institutional setting that would once and for all shield national government budgets from misuse. Like in many other cases, Germany leads by an example, having passed a new constitutional law called Schuldenbremse that restricts it to deficits of maximally 0.35% of GDP and prohibits taking on any more debt after 2020.[25]

At this point, the future of the present form of SGP is uncertain to say the least. However, there is hope for better times in Europe, though it remains to be seen how the politicians will react. If they fail to act, the common currency will keep tripping over the same problem again and again. Should they choose to institutionalize the way of fiscal responsibility and do it in a truly enforceable fashion, chances are that euro will emerge stronger and more stable than ever. EMU indeed finds itself at a crossroads and the path taken will likely determine the future of the entire integration process.

[25] Translation of 'Schuldenbremse' is 'Debt Brake'.

3 Czech Republic and Slovakia at EMU Doorstep

In the previous two chapters we have discussed the theoretical fundaments of a monetary union in general and also examined specific features of the European Monetary Union in particular. Through this we have constructed the framework, within which we can now analyze the prospects of the two countries of our interest – Czech Republic and Slovak Republic. As we know, Slovak Republic has already adopted euro as its currency more than one and a half years ago, becoming only the fourth of the new member states to have done so. In contrary, Czech Republic has not rushed the issue and its position in this matter remains reserved. To find out what the reasons for the two contrasting approaches are we first conduct a two-part economic analysis and then turn our sights to the role that politics and popular sentiment play.

3.1 Macroeconomic Analysis

The aim of this subchapter is to provide an economic analysis of the position of Czech Republic and Slovakia, with respect to the outlook of joining the European Monetary Union. The analysis itself builds on the theoretical framework introduced in the first chapter of this paper, chiefly on the Theory of Optimum Currency Areas. It is divided into four main parts, with each tackling the prospects of the two countries from a different angle. The goal is to draw a comprehensive picture of their economic situation in the first decade of the third millennium. The subchapter consists of four main parts, namely the analysis of business cycle correlation, discussion about the mobility of labor and capital, investigation into the international trade of the two countries and finally, their real convergence progress and regional differences.

3.1.1 Business Cycle Correlation

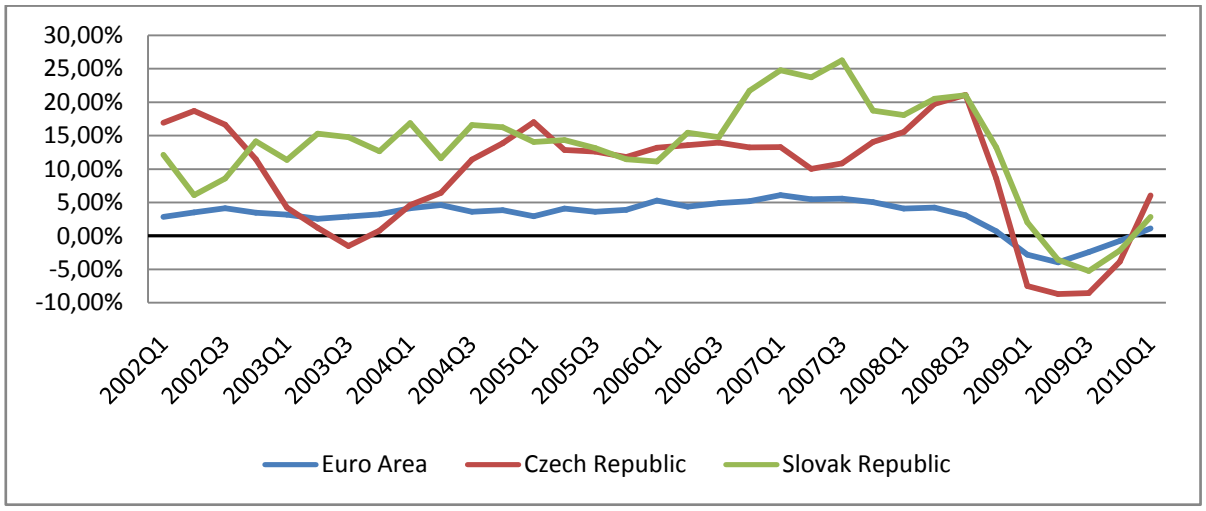
OCA analyzes the readiness of a country to join a monetary union based on its ability to cope with an asymmetric shock within the union. There are countless shapes and sizes of possible asymmetric shocks and also reasons why they may occur. Thus, even if the business cycles in two countries are perfectly aligned, it does not guarantee that they are safe from a shock of an asymmetric nature. Yet the logic of OCA is pretty straightforward, as it reasons that the more similar the two economies are, the more similar are then also the effects of a shock. Moreover, with highly correlated economic development it is likely that both countries would be prone to usage of similar economic-policy tools. Therefore, it is clear that observing the correlation of economic development between EMU and the possible entrants does indeed make sense. The analysis that follows will focus on the development of five macroeconomic fundaments, specifically growth of the gross domestic product, pattern of consumption expenditures, export, import and unemployment.

We start by looking at the growth of the GDP in Czech Republic, Slovak Republic and comparing it to that of the Euro Area. The latter is defined so that the data for years 2001 – 2006 are aggregated for the twelve countries that then made up the Union, data for year 2007 incorporate

also Slovenia, followed by inclusion of Cyprus and Malta in 2008 and Slovakia in 2009. For this part of the analysis we consider the year-on-year change in quarterly gross domestic product, measured in current market prices. The currency of denomination is Euro and the data is not seasonally adjusted. Source of the data is the statistical database of Eurostat.

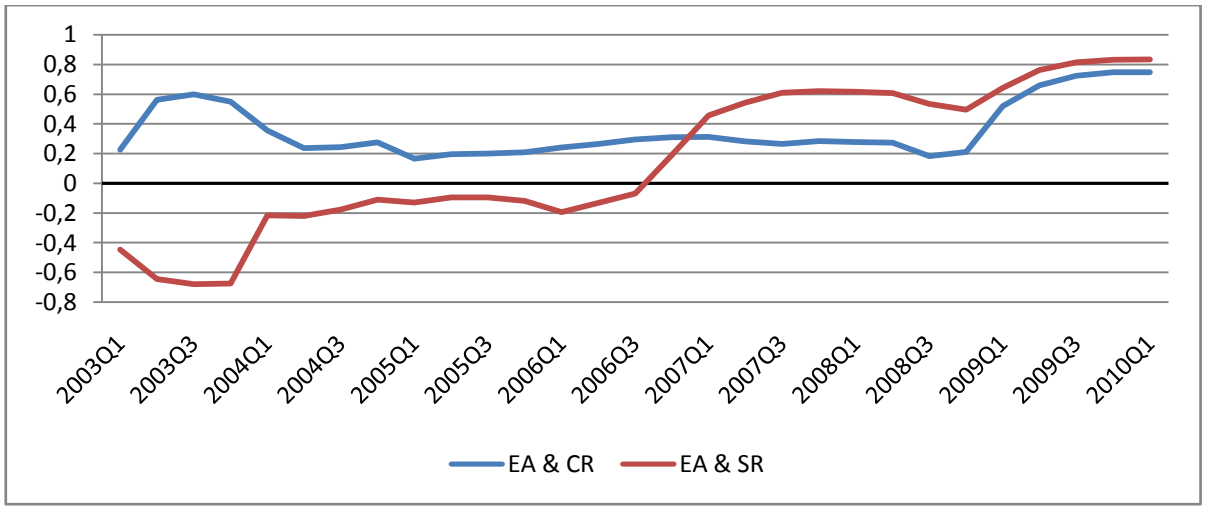
Since the period of observation begins with the first quarter of the year 2001, the first growth figure is for the first quarter of the following year. The period of observation ends with the first quarter of year 2010. Chart 3.1 depicts the development of the observed parameter in time. Using the methodology described we constructed time series of correlation between the development in EA and the two observed countries. First observation is for the first quarter of year 2003, representing the correlation of the growth data for the time interval 2002Q1 – 2003Q1. Every following figure begins with the same point in time but takes on the next one. That means that for instance the correlation figures for 2006Q3 are constructed using the growth data from the time interval 2002Q1 – 2006Q3. Development of correlation defined in this way is shown in Chart 3.2.

Chart 3.1: Growth of GDP in CR, SR and EA



SOURCE: Own analysis based on Eurostat data

Chart 3.2: Development of GDP growth correlation



SOURCE: Own analysis based on Eurostat data

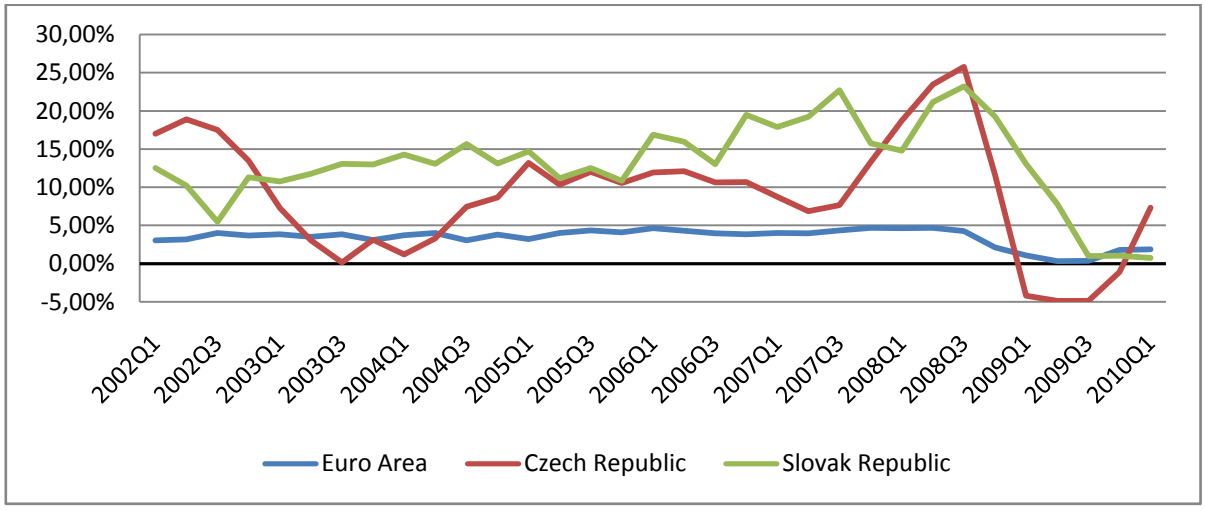
From the first chart it is clearly observable that the growth of GDP in the Eurozone, although somewhat increasing, was rather stable. In contrary, curves of Slovakia and Czech Republic tell a different story. The average growth in these two countries has been considerably higher but also much more volatile. Table 3.1 summarizes the observed average growth rates as well as their volatility, measured by sample variance of the time series. While observing the exceptionally high growth rates in CR and SR, one has to bear in mind that those are nominal rates measured in Euro and are therefore influenced significantly by national currency appreciation. Moreover, especially in case of Slovakia the average inflation was much higher than that of the Eurozone, which also negatively influences the real GDP growth. Both inflation and exchange rates will be discussed at the later stages of this chapter.

Chart 3.2 provides us with a truly intriguing development of correlation between the GDP growth rates in the Eurozone and the two countries in question. As far as the Czech Republic is concerned, the correlation between its growth and that of the Eurozone remained consistently low, hovering around the value of 0.3 in years 2004 – 2008. On the contrary, Slovak correlation coefficient grew from approximately -0.7 in 2003 to 0.6 in 2007 and fell to 0.5 at the end of 2008.

The story gets interesting with the coming of the world recession at the end of year 2008 when the growth rates of all three observed subjects started to decline steeply, ending up deep in the red area and staying there for about a year until the beginning of 2010. This turn of events caused the correlation coefficients to jump to the unprecedented level of around 0.8. At this point we therefore observe high correlation of growth trends between CR, SR and EA. The question is whether it will remain high or decrease again with time. Chances are that with the restructuring of economy that follows after every recession and with the continuing integration process the patterns in growth trends will converge even more.

The next determinant of business cycle correlation we consider is the development of final consumption expenditures. Again, we observe year-on-year changes of quarterly data, within the same time interval and for the same subjects as before. Source of the data is the statistical database of Eurostat. Expenditure figures were reported in Euro and were not seasonally adjusted. We also provide a correlation analysis, performed in the same fashion as the previous one. Chart 3.3 summarizes the growth rates and Chart 3.4 depicts the evolution of the correlation coefficients.

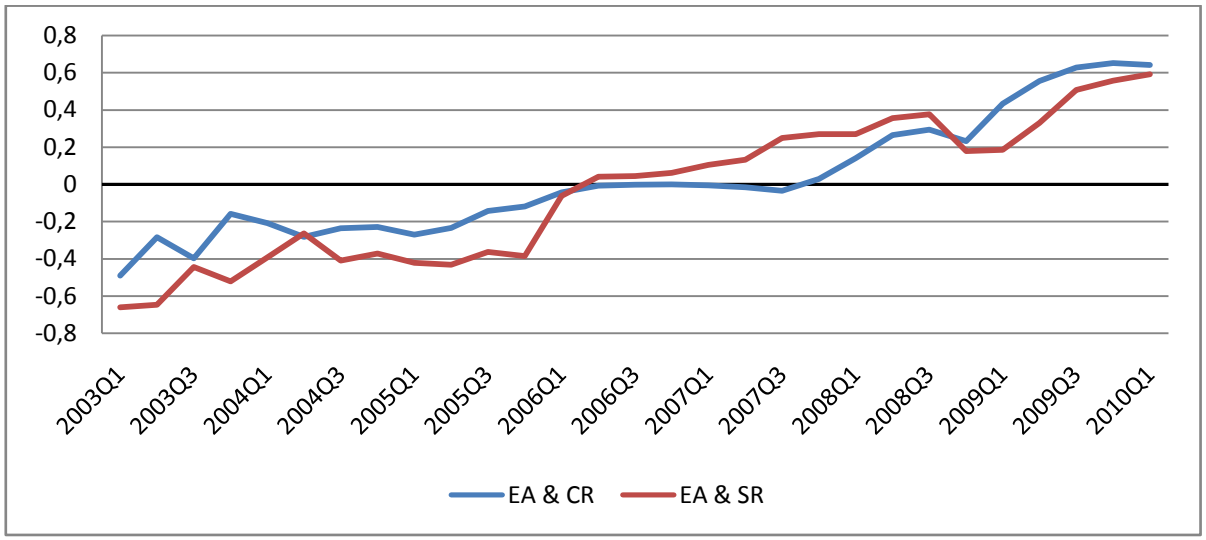
Chart 3.3: Growth of final consumption expenditures in CR, SR and EA



SOURCE: Own analysis based on Eurostat data

One can see that the patterns of consumption expenditures are very similar to those of the GDP growth. In case of the Eurozone we observe a more-or-less steady curve that does not cross the 5% threshold. Interesting is that while the recession caused the GDP growth to fall into the negative numbers, it did not have that kind of impact on the consumption expenditures, which kept on growing also in year 2009. Slovak figures, although of a much more volatile nature, did not cross into the red spectrum either. Czech Republic, however, reported the largest drop in the consumption expenditures growth, falling well below the 0% line. Average growth rates and sample variances are summarized in Table 3.1.

Chart 3.4: Development of final consumption growth correlation

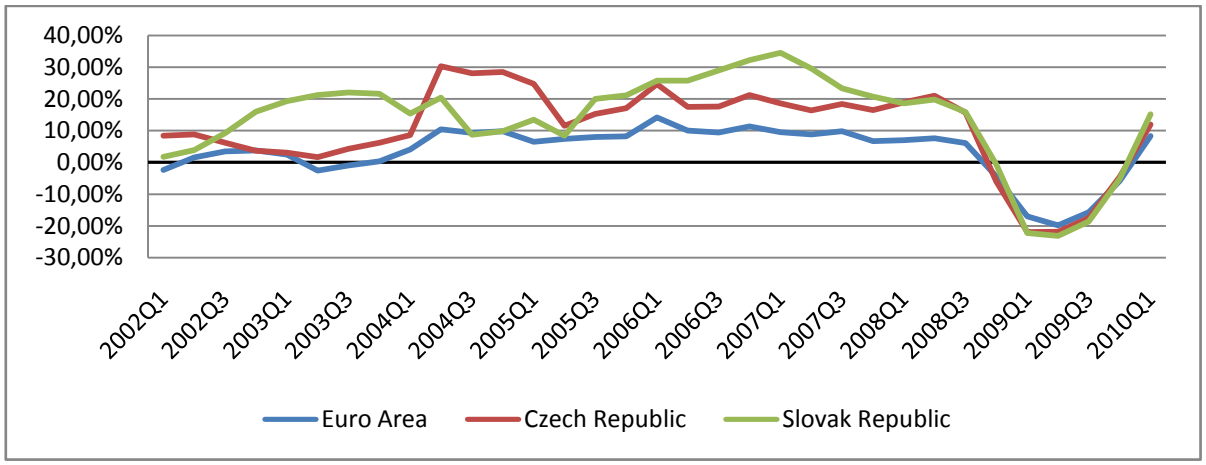


SOURCE: Own analysis based on Eurostat data

As we can observe from the above chart the correlation of consumption expenditures between Czech Republic, Slovakia and the Eurozone has undergone a positive development of more or less the same kind in both of the two cases. Similarly to the correlation of the GDP growth both curves took a minor plunge in 2008, only to recover to an unprecedentedly high level of 0.6 thanks to the effects of the world economic recession. Notable is also the fact that in the beginning of year 2010 the trend in growth of consumption expenditures of CR, SR and EA is not as highly correlated as in the case of the GDP growth.

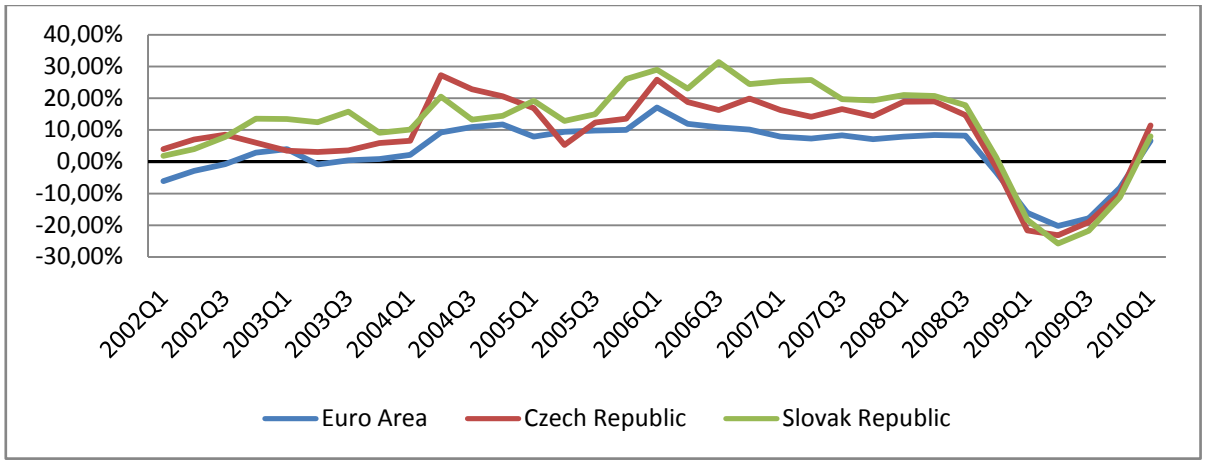
Next two factors illustrating the correlation of business cycles in CR, SR and EA are the growth of exports and the growth of imports. The analysis in this instance is carried out in the exact same way as the two preceding ones. This time, the observed indicators are the year-on-year growth rates of quarterly figures representing export and import of goods and services to and from other countries. Eurostat is the source of data, which is measured in Euro and is not seasonally adjusted. Time interval and country subjects remain the same. While Charts 3.5 and 3.6 show respectively the growth of export and import over time, Charts 3.7 and 3.8 portray the development of corresponding correlation coefficients. Average growth rates as well as sample variances are traditionally reported in Table 3.1.

Chart 3.5: Growth of exports of CR, SR and EA



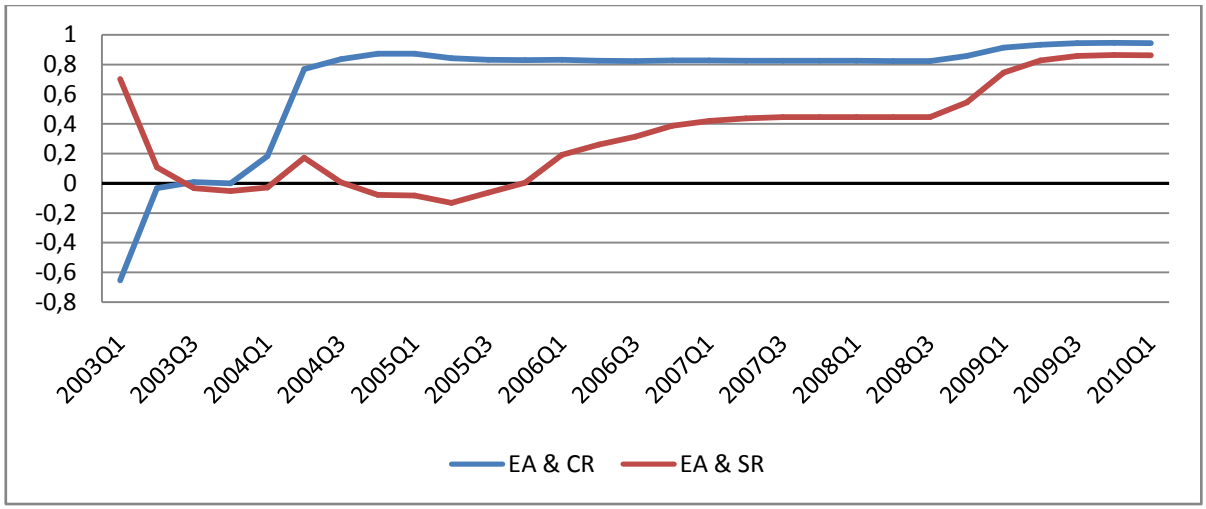
SOURCE: Own analysis based on Eurostat data

Chart 3.6: Growth of imports of CR, SR and EA



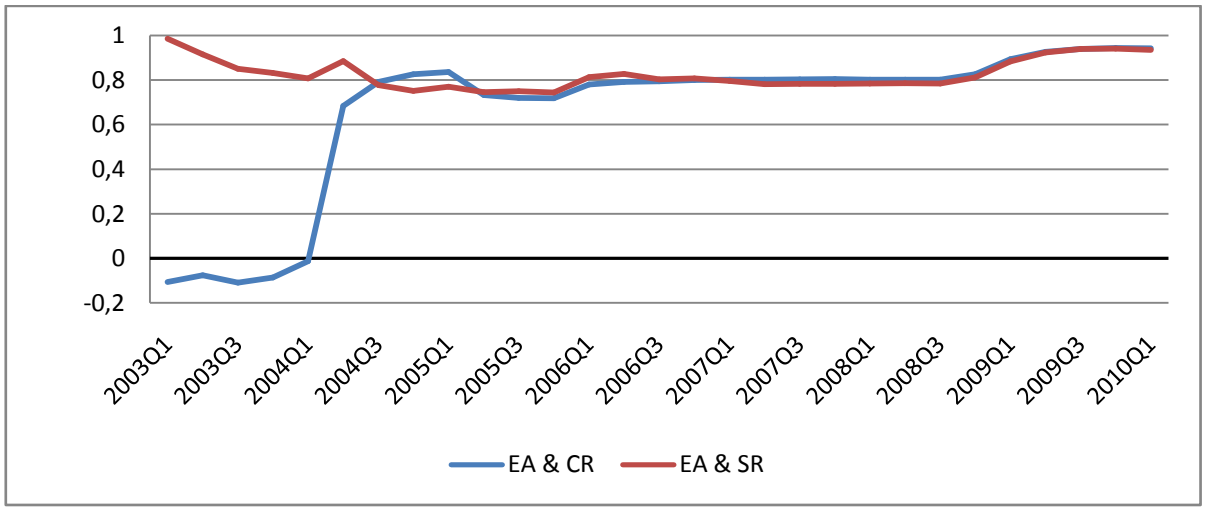
SOURCE: Own analysis based on Eurostat data

Chart 3.7: Development of export growth correlation



SOURCE: Own analysis based on Eurostat data

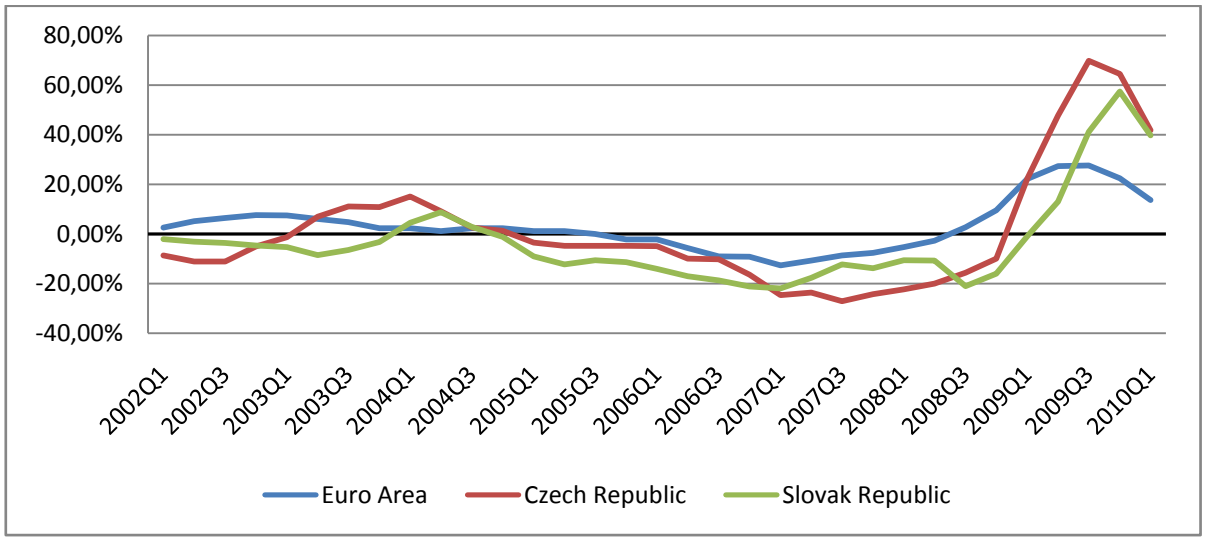
Chart 3.8: Development of import growth correlation



SOURCE: Own analysis based on Eurostat data

The last but certainly not the least important one of the business cycle correlation factors mentioned here is the change in unemployment rates. The analysis here is again almost identical to the ones presented above. This time however, unemployment rates are the basic data series from which the year-on-year quarterly changes are computed. Source of the data is Eurostat and the unemployment figures were seasonally adjusted. Chart 3.9 illustrates the rates of change in the unemployment and Chart 3.10 depicts the corresponding correlation development. Averages and sample variances are once more reported in Table 3.1.

Chart 3.9: Growth of unemployment rates in CR, SR and EA

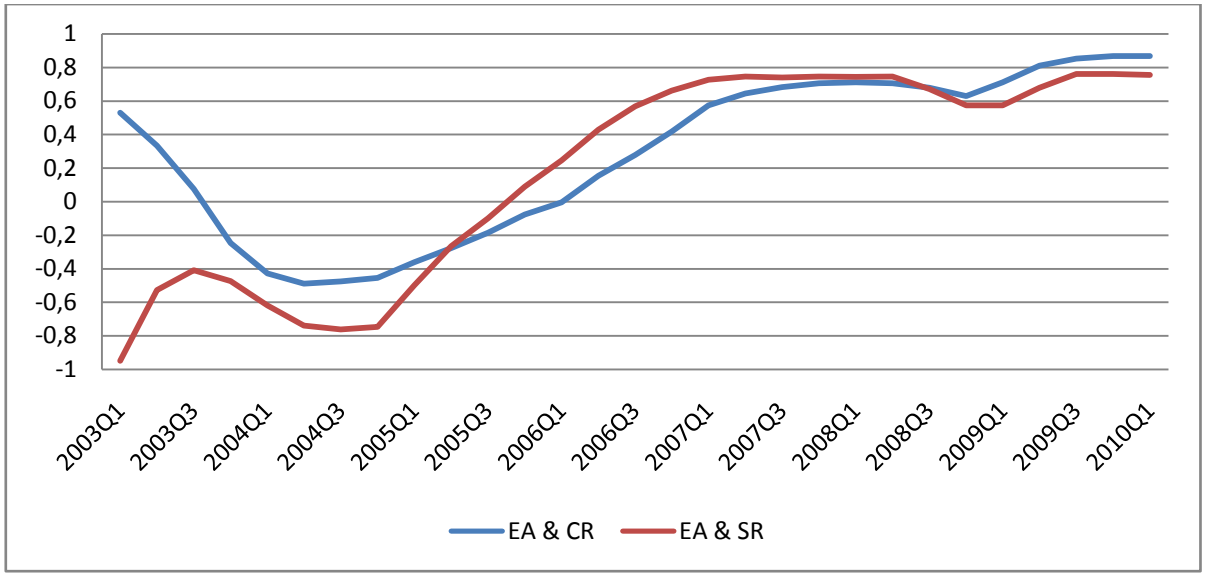


SOURCE: Own analysis based on Eurostat data

In year 2005 all three subjects started to consistently reduce their levels of unemployment. However, economic recession took its toll and the unemployment started to rise again, in EA sooner

than in CR or SR. On the other hand, the speed of both decrease and growth of unemployment was considerably smaller in the Eurozone, which mirrors in the corresponding sample variance statistic. Ever since 2007 the development of unemployment in CR, SR and EA seems to be rather steadily highly correlated, hovering around the correlation value of 0.8. The issue of unemployment will be discussed again at the end of this subchapter.

Chart 3.10: Development of unemployment growth correlation



SOURCE: Own analysis based on Eurostat data

Table 3.1: Selected-variables' growth averages and sample variances

	Eurozone	Czech Republic	Slovak Republic
Average GDP growth rate	3.09%	9.20%	13.10%
Sample Variance	0.0006	0.0067	0.0059
Average growth of consumption expenditures	3.43%	9.12%	13.22%
Sample Variance	0.0001	0.0057	0.0031
Average growth of export	3.46%	10.66%	13.69%
Sample Variance	0.0069	0.0180	0.0210
Average growth of import	3.50%	8.97%	12.10%
Sample Variance	0.0080	0.0160	0.0197
Average growth of unemployment	3.11%	1.15%	-3.35%
Sample Variance	0.0106	0.0587	0.0327

SOURCE: Own analysis based on Eurostat data

3.1.2 Mobility of Production Factors

It has been established that the OCA analysis of the readiness of countries to form a monetary union rests largely on the scrutiny of the effects of an asymmetric shock. It has also been mentioned that in order to make a monetary union function smoothly, production factors within it, namely capital and labor, must be mobile. As De Grauwe (2005) points out, the more dissimilar the union countries are the more flexibility is required to make the union work properly. The logic behind this is fairly simple. Labor force must be able to migrate from places with high unemployment to places where the unemployment is lower and capital must be allowed to move freely so that it can help flattening the regional disparities within the union.

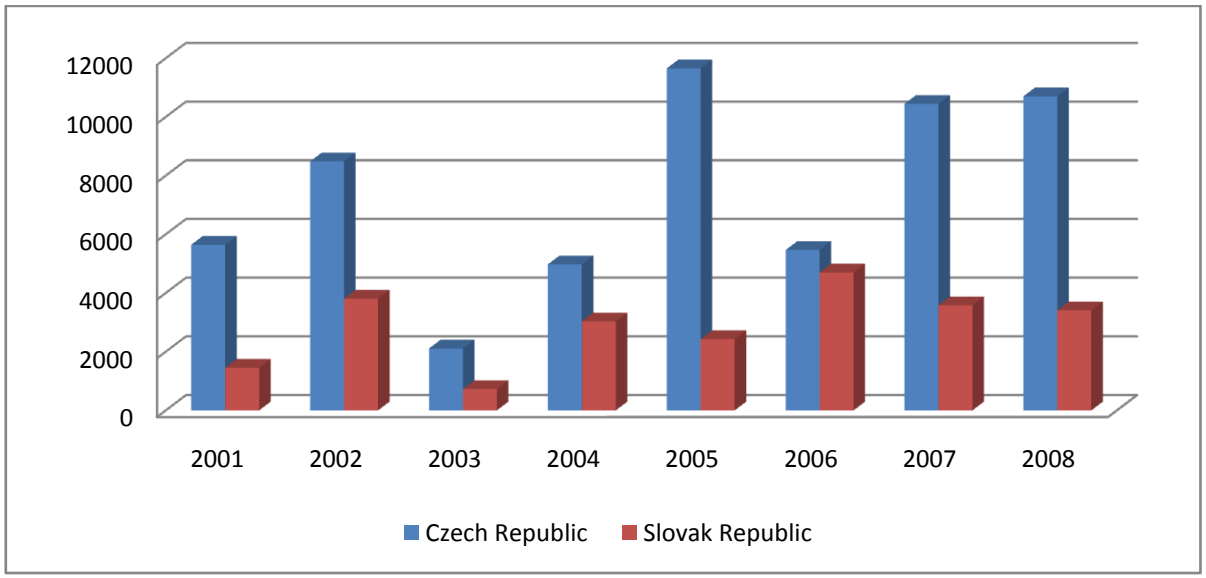
There are many aspects to the mobility of capital and labor that are not quantifiable or are hard to identify and can escape the attention of the observer. For example, barriers to the migration capabilities of people are practically countless and in the end it always comes down to individual people or families making individual decisions, which are often based on emotions and can easily seem irrational from the economic perspective. Moreover, the issue is more complex and encompasses more than just the geographic dimension, since it is also important for people to be able to migrate among different occupations or sectors of economy.

Comprising statistics that would provide economists with *relevant* information of *sufficient quality* is immensely time consuming, difficult, perhaps even close to impossible. That is the case especially in today's European Union where there are no more border controls and only a few international work restrictions left in place. These are however the results of policy measures aimed precisely at increasing the mobility of labor. The fact remains that workers in United States of America are more mobile than their counterparts in the European Union. This is of course due to many reasons of historical and cultural nature, not to mention that in the United States there is only one official language, while in EU almost every nation has its own language. Because of this, the increase of labor mobility is a long-term process. Nevertheless, progress in this matter in Europe is being achieved through removing restrictions and also through emphasizing education in English and other foreign languages. Furthermore, exchange programs like Erasmus allow people to meet European citizens from other countries and show them that life abroad is not much different from what people are used to at home.

Mobility of capital is also crucial for good functioning of a monetary union. In smoothing the disparities between regions it can even act as a substitute to the labor mobility, providing for job creation in places where the unemployment and prospects of growth are relatively higher. To demonstrate the financial ties between Czech Republic, Slovakia and the Eurozone we use a proxy of Foreign Direct Investments. The total inflow of FDI into CR and SR is shown in Chart 3.11. Source of the data is the statistical database of OECD and the values on the vertical axis are in millions of US dollars.[26] The sum of all FDI inflows into CR and SR between years 2001 and 2008 equals to approximately 60 and 23 USD billion respectively.

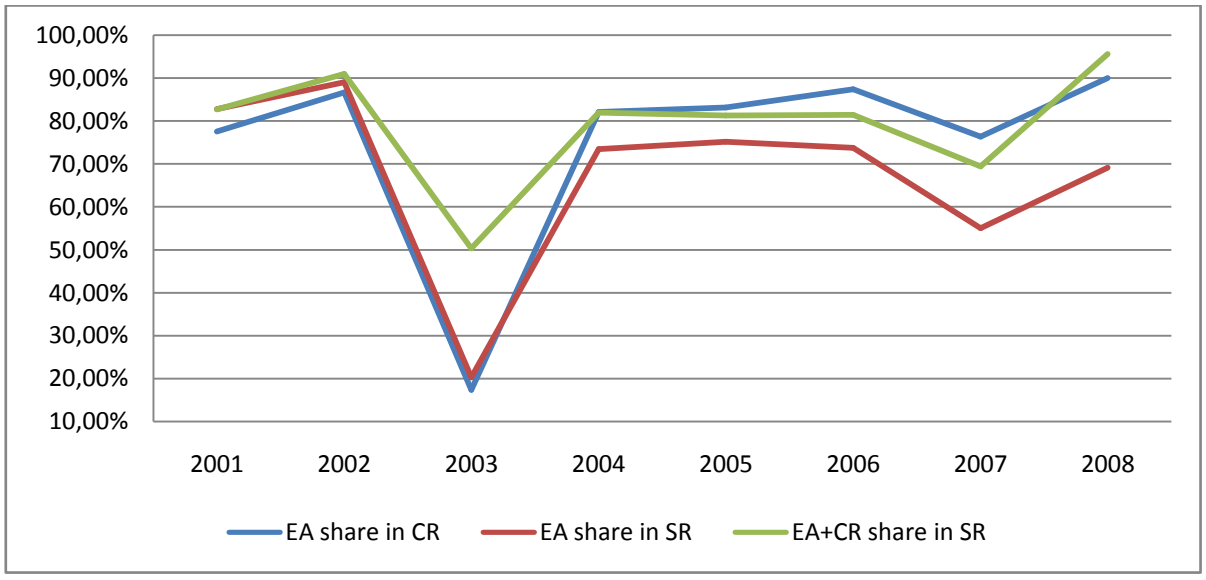
[26] For an unknown reason OECD did not provide figures of FDI inflows from individual countries into CR in year 2002. Therefore we used the corresponding data provided by the Czech National Bank for that year. Sum of FDI from Austria, Belgium, France, Germany, Italy and Netherlands serves as a proxy for the FDI inflow from EA.

Chart 3.11: Total FDI inflows into CR and SR



SOURCE: OECD

Chart 3.12: EA share of total FDI inflows into CR and SR



SOURCE: OECD and the Czech National Bank

Chart 3.12 summarizes the proportion of FDI originating from the countries of Eurozone on the total FDI inflow into CR and SR. Here the Euro Area stands for all of the present 16 members even despite not all of them having shared a single currency at the time of observation. The blue curve represents the share of EA originated FDI on the Czech total and the red one on the Slovak total. The green curve stands for the share of the combination of FDI stemming from EA and CR on the Slovak total. This demonstrates the strong ties between SR and CR, reflected also in the fact that in 2007 and 2008 CR was the largest single source of FDI inflow into SR, with the amount in 2008 being almost as much as the sum of FDI from the second and the third largest donors, Italy and Germany.

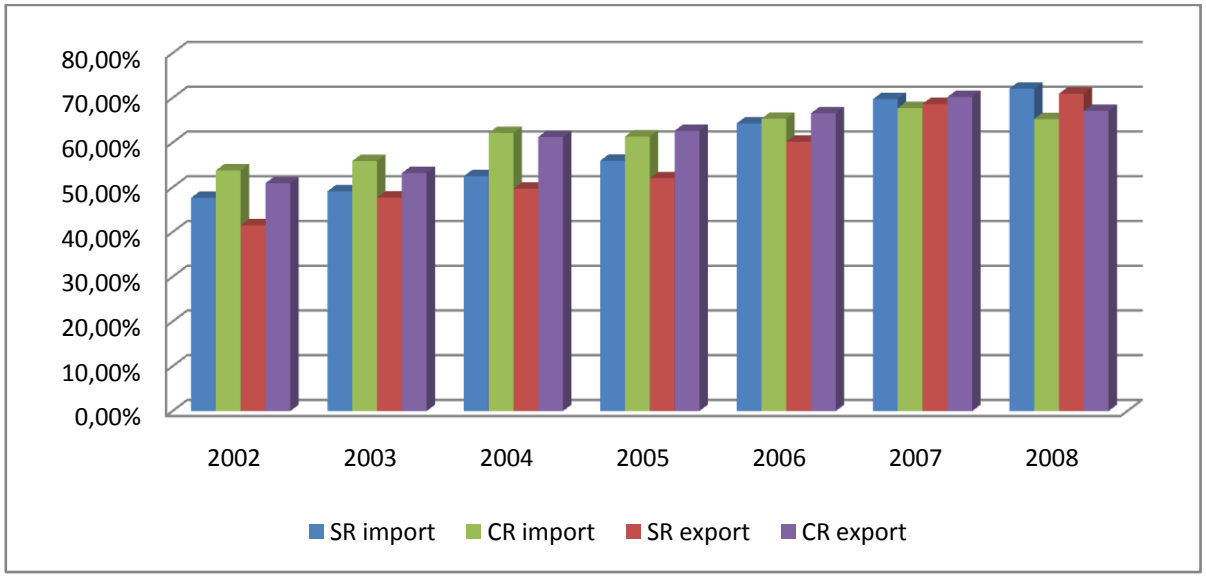
We observe that since joining EU in 2004 the Eurozone share of FDI inflows into both CR and SR remained high and relatively stable.

3.1.3 International Trade

In the first chapter arguments have been presented which reasoned that there is a positive relation between trade openness of a country and the benefits that it is able to reap from membership in a monetary union. In this section we examine the international trade of Czech Republic and Slovakia in a threefold manner. First we look at the overall size of trade of these two countries, then we determine who their most important trade partners are and finally we inquire into the structure of these countries' exports. Date sources for this analysis were the statistical databanks of the Slovak Statistical Office, Czech Statistical Office and Eurostat.

Slovakia and Czech Republic are often identified as being 'small and open economies'. In comparison to the large countries such as the United States, China or Germany there is no doubt that the production in both CR and SR is much smaller. As far as openness is concerned we judge it by looking at the relative size of international trade of a country, compared to its GDP. From Chart 3.13 we may conclude that CR and SR are indeed open economies with the share of both their exports (X) and imports (M) on GDP being very high. By observing the time series we see that in the interval of years 2002 – 2008 shares of M and X on GDP have been growing in cases of both states and while the Czech shares of M and X have dominated the Slovak ones in the past, in year 2008 they have been surpassed by them. Another noteworthy thing is also the fact that Slovakia has been maintaining a negative balance of payments, whereas the Czech balance has been in surplus ever since 2005.

Chart 3.13: Imports and exports of CR and SR – share of the GDP

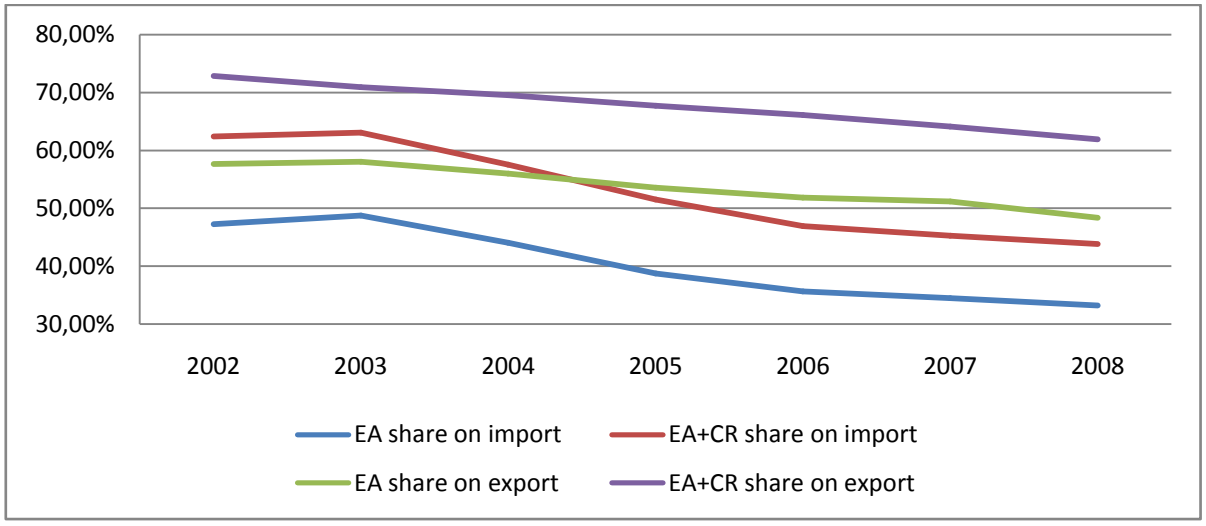


SOURCE: Czech Statistical Office, Slovak Statistical Office, Eurostat

With the issue of openness being resolved, one has to ask who the major and the most important trade partners of the countries in question are. Here, we analyze the share of Euro Area X

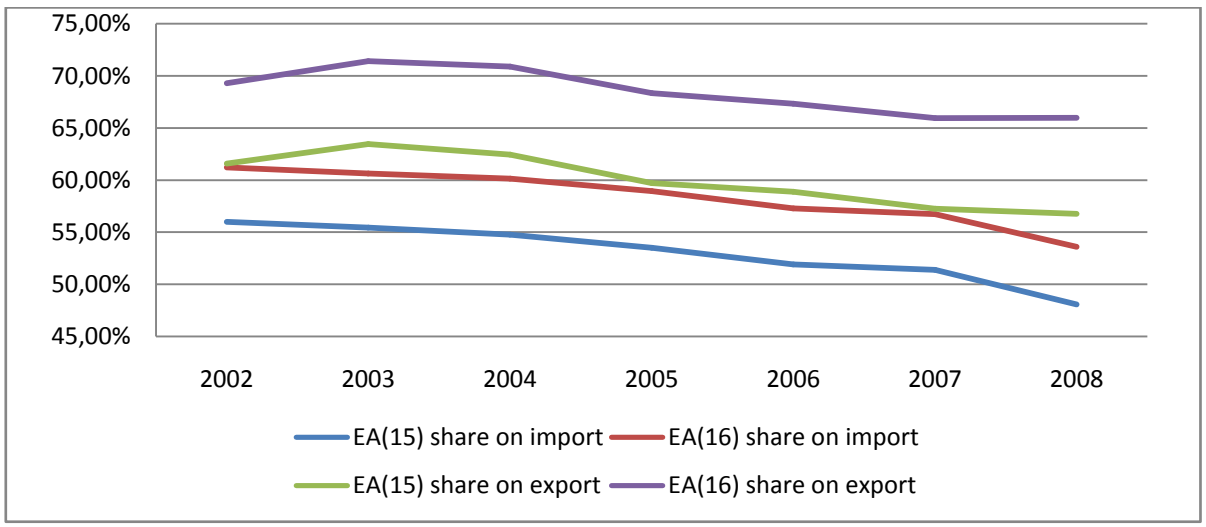
and M on the Czech and Slovak totals. The larger is the scope of the trade between the subject country and the Union, the larger the boost of accepting the Euro would be. In cases of both CR and SR we observe very high volumes of trade with the Eurozone. However, the shares are surprisingly declining in time.

Chart 3.14: Trade Ties of Slovak Republic



SOURCE: Slovak Statistical Office

Chart 3.15: Trade Ties of Czech Republic



SOURCE: Czech Statistical Office

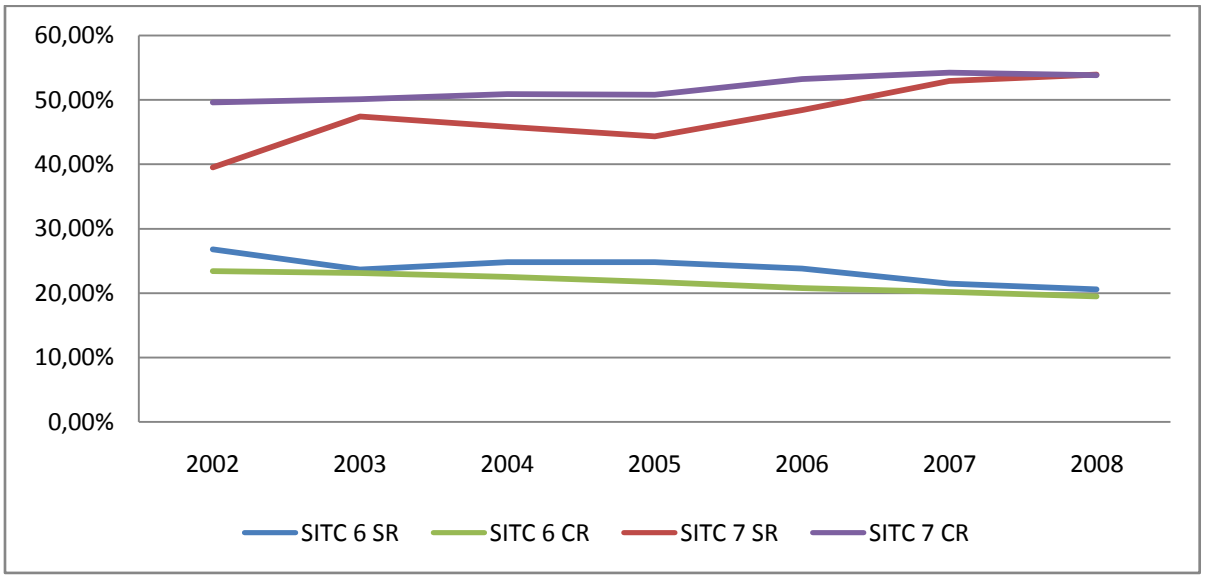
Positions of CR and SR from this point of view are very similar, both having very intense trade relations with the countries of Euro Area, with Czech ties to the import and export markets of the Eurozone being somewhat stronger. Similarities are also visible on the fact that both CR and SR sell to EA more than they buy from it. Moreover, from the above charts it is recognizable that there are very strong trade ties between Czech Republic and Slovakia. Slovak membership in the EMU can be

therefore perceived as an extra temptation for the Czech Republic to accept the introduction of the common European currency too.[27]

Analyzing the product structure of Czech and Slovak export, one discovers that nearly three quarters of the total fall within the groups 6 and 7 of the Standard International Trade Classification. Group 7, which represents machinery and transport equipment, is clearly dominant in both countries, having encompassed more than a half of all X in 2007 and 2008. This is especially thanks to the production of cars and electronics, which is a crucial part of the economy in Slovakia as well as in the Czech Republic. In fact, on January 27, 2008 the Slovak newspaper Pravda has reported Slovakia to have been the biggest producer of cars per capita, followed by the Czech Republic, which is where the well-known auto make Škoda comes from (Pravda – internet article). Group 6, which comprises manufactured goods classified chiefly by material, is in a strong position largely because of metal production.

There are many who criticize the narrow production spectrum in CR and SR. They claim that it makes these states more vulnerable, should the above mentioned industries be hit by a negative demand shock. On the other hand, this view is in conflict with the Theory of Comparative Advantage, which argues that an overly diversified economy cannot be truly effective. In case of small and open economies such as CR and SR it is then understandable that specification leads to a lower diversification of production. Chart 3.16 illustrates the development of export in SITC groups 6 and 7 in the two countries over time.

Chart3.16: Share of SITC groups 6 and 7 on total exports of CR and SR



SOURCE: Czech Statistical Office and Slovak Statistical Office

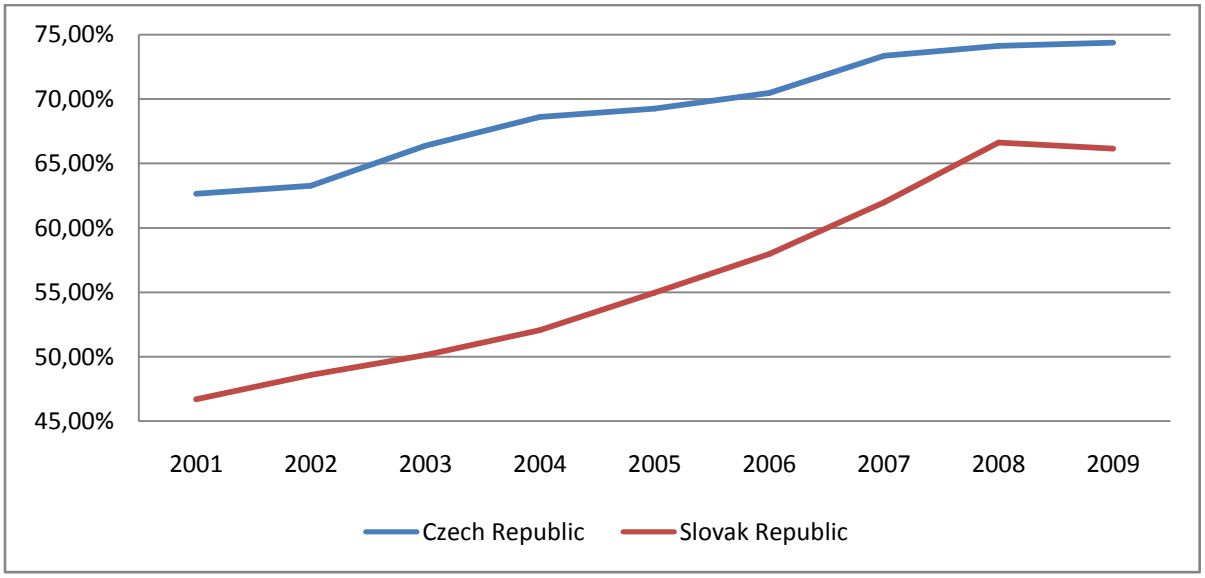
[27] Note on the terminology: EA(15) stands for all the present members of EMU except Slovakia and EA(16) then includes Slovakia as well.

3.1.4 Real Convergence and Regional Differences

In this part of the analysis we chose two macroeconomic statistics as the indicators of convergence and measures of regional disparities. These two statistics are gross domestic product per capita and unemployment rate. Both Czech Republic and Slovakia are relatively fast growing economies that, in a manner of speaking, are in the middle of the catching-up process. Therefore, it makes sense to evaluate their progress, as it has wide-reaching consequences for the decisions they make with regard to the European monetary integration. After examining how CR and SR are moving toward the averages of the Euro Area we draw parallels among regional differences within the three subjects. These should provide a hint as to whether the Eurozone is indeed so very different from CR and SR in terms of enveloping regions with different living standards.

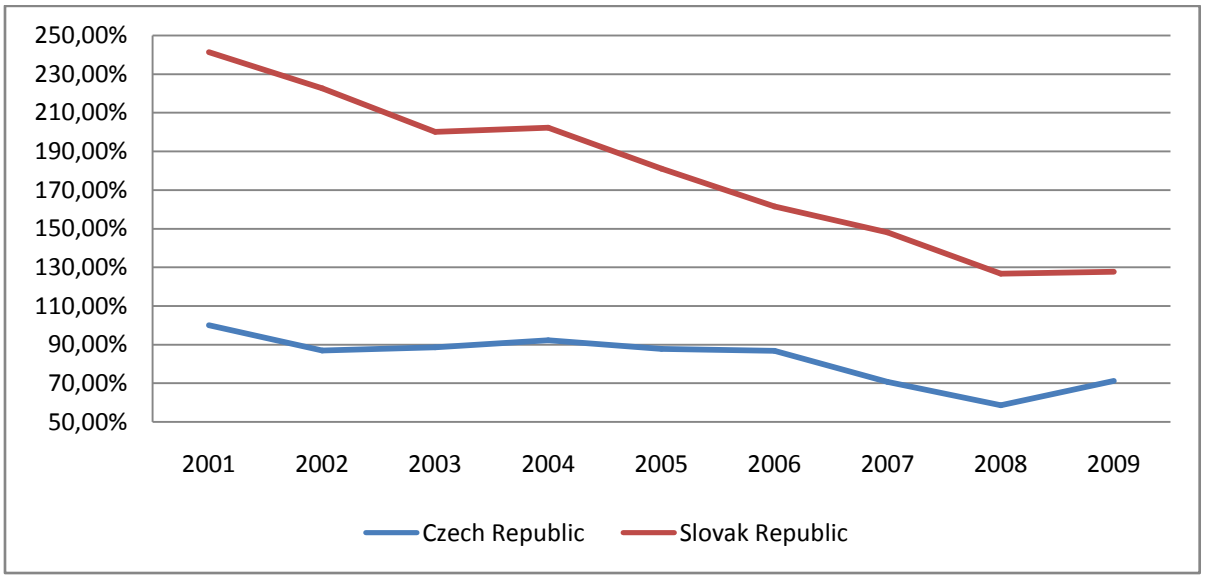
As it has been outlined above, we use GDPPC to measure the real convergence of CR and SR toward the Eurozone levels. Data was measured annually in current prices by the purchasing power parity approach to compensate for different price levels. The source is the statistical database of OECD and Euro Area figures are for the entire 16 member Union. Chart 3.17 shows the size of Czech and Slovak values relative to those of the Eurozone. Projection of the data below is interesting because of two reasons. First, one can see that the difference between Czech and Slovak values was and still is rather significant and although SR has been converging at a relatively higher pace, the gap remains present. Second, from the chart it is apparent that the effects of the financial crisis and the world recession did not impact CR and SR more than EA. To a minor extent Czech Republic improved its position even in the crisis year 2009.

Chart 3.17: Development of GDPPC by PPP – shares of CR and SR on the EA average



SOURCE: OECD

Chart 3.18: Development of unemployment rates – shares of CR and SR on the EA average



SOURCE: Eurostat

Development of the relative unemployment is even more intriguing. Again, we see both CR and SR slashing their unemployment figures, with Slovakia making a rather drastic progress. Chart 3.18 shows the Czech and Slovak unemployment rates relative to that of the Euro Area. It is interesting that while Slovak jobless figures were still well over the Eurozone ones even in 2008, Czech Republic was performing much better than EA. In that same year it reported the level of unemployment of only 4.4%, which was well below the Eurozone average of 7.5%. On the other hand, while the tempo of layoffs in Slovakia and the Euro Area in 2009 has been almost identical, the Czech position worsened considerably, which comes as a surprise, when compared with the relative GDPPC figures from the previous chart. Nonetheless, in Czech Republic the level of unemployment remains noticeably lower than in the Eurozone, whereas Slovakia still has a way to go until it reaches the average of the monetary union, which it is now a part of.

In terms of regional disparities Czech Republic clearly outperformed its eastern neighbor in both criteria of GDPPC and unemployment. We see that regional inequalities measured in CR are similar to those of the Eurozone, whereas in Slovakia they are the cause of a much greater concern. As far as unemployment goes, EA had made a big progress 'leveling the playing field', decreasing the sample variance statistic from 18.4 to merely 4.8 in just seven years. CR and SR also recorded progress in this area, however not as significant as the Eurozone. Looking at the GDPPC figures however, one comes across a different story. Over the same period of seven years the 'scissors' have been opening, which means that poorer regions have been getting poorer and the richer ones have been getting more rich. Tables 3.2 and 3.3 summarize the findings, listing sample variances for all three observed subjects.[28]

[28] Regional disparities were measured in the following way. CR and SR were divided into parts, with each part reporting figures of GDPPC and unemployment rate separately. SR incorporates Eastern Slovakia, Central Slovakia, Western Slovakia and Bratislava District. CR consists of Prague District, Central Bohemia, Southwest, Northwest, Northeast, Southeast, Central Moravia and Moravia-Silesia. In case of EA, individual member states were considered to be separate regions. The measure of disparity is sample variance, computed for each of the

Table 3.2: Regional disparities in GDPPC

	2001	2002	2003	2004	2005	2006	2007
Euro Area	0.23	0.24	0.25	0.25	0.28	0.31	0.32
Czech Republic	0.18	0.20	0.20	0.18	0.19	0.20	0.22
Slovak Republic	0.46	0.51	0.50	0.52	0.68	0.59	0.62

SOURCE: Eurostat

Table 3.3: Regional disparities in unemployment rates

	2001	2002	2003	2004	2005	2006	2007
Euro Area	18,4	16,0	12,6	12,1	9,1	6,3	4,8
Czech Republic	12,0	12,2	12,9	14,5	15,8	12,4	6,2
Slovak Republic	45,6	38,1	44,6	53,6	62,3	43,2	29,3

SOURCE: Eurostat and OECD

3.2 Maastricht Adherence

In the previous subchapter selected macroeconomic statistics were used to draw up a picture of the positions in which Czech Republic and Slovakia found themselves with respect to the eventual Eurozone membership. Using arbitrary criteria we tried to ascertain how meaningful for CR and SR is the membership in the Euro Area. Here we judge predominantly the macroeconomic readiness of both countries to be accepted into EMU, following the course outlined by the Maastricht Convergence Criteria. This subchapter is thus divided into two parts. In the first part we analyze the convergence of CR and SR from the monetary perspective and in the second one we do it from the fiscal point of view.

3.2.1 Monetary Readiness

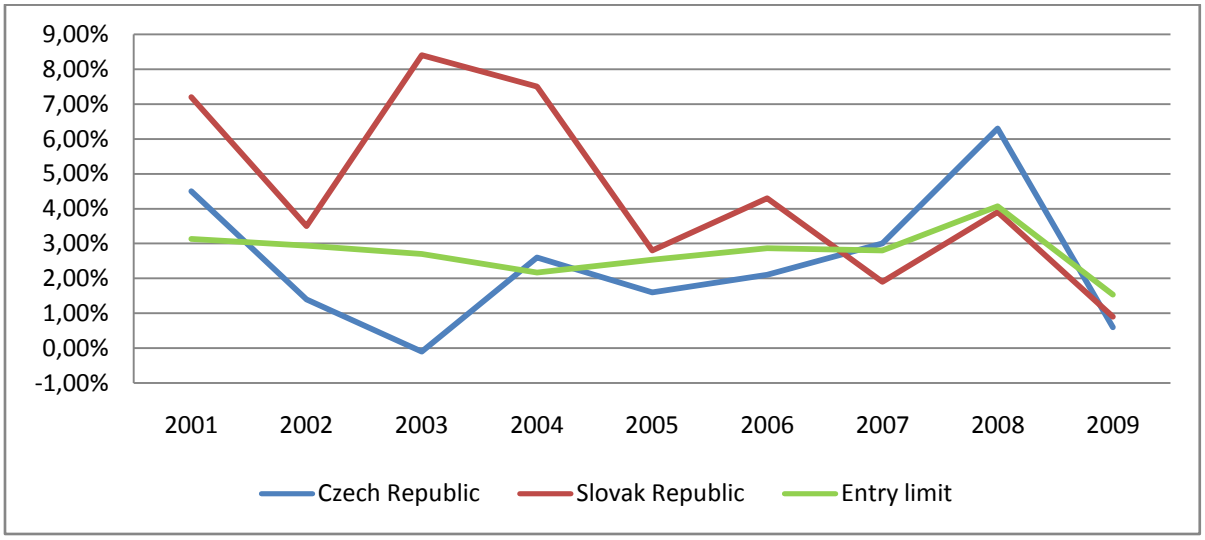
Out of the five Maastricht Criteria, two could be considered monetary, namely the Inflation Criterion and the Exchange Rate Criterion. Both set boundaries within which values of the two observed variables may fluctuate but cannot breach. These have been sketched out in subchapter 2.2. This analysis is enlarged by also looking at other factors that could be considered monetary. Therefore, in addition to inflation and exchange rates we also evaluate the evolution patterns of interest rates set by the central banks of the three subjects and we examine how much voting power would CR and SR have, had EMU consisted of 27 members.

First of all we look at how the two republics have been doing with respect to fulfilling the Inflation Criterion. We do this by a simple graphic analysis, analogous to those of the previous subchapter. Source of the data is the statistical database of Eurostat. Reported figures stand for the

three subjects. Unemployment rates of CR and SR were provided by the statistical database of OECD. Source of figures of GDPPC, reported in current Euros, and unemployment rates of EA is Eurostat. In case of GDPPC we took percent data as the base for sample variance computations. (This means for example that GDPPC in Prague district was reported as 215% of the CR average, GDPPC in Central Moravia as 78% and so on.) With unemployment, the actual rates were used as the base for computing sample variances.

average yearly inflation rates measured by changes in the Harmonized Index of Consumer Prices. The entry limit was computed as the average of the three lowest inflation rates in the EU, increased by 150 basis points, as defined by the Maastricht Treaty.

Chart 3.19: Inflation development in CR and SR vis-à-vis the EMU entry limit



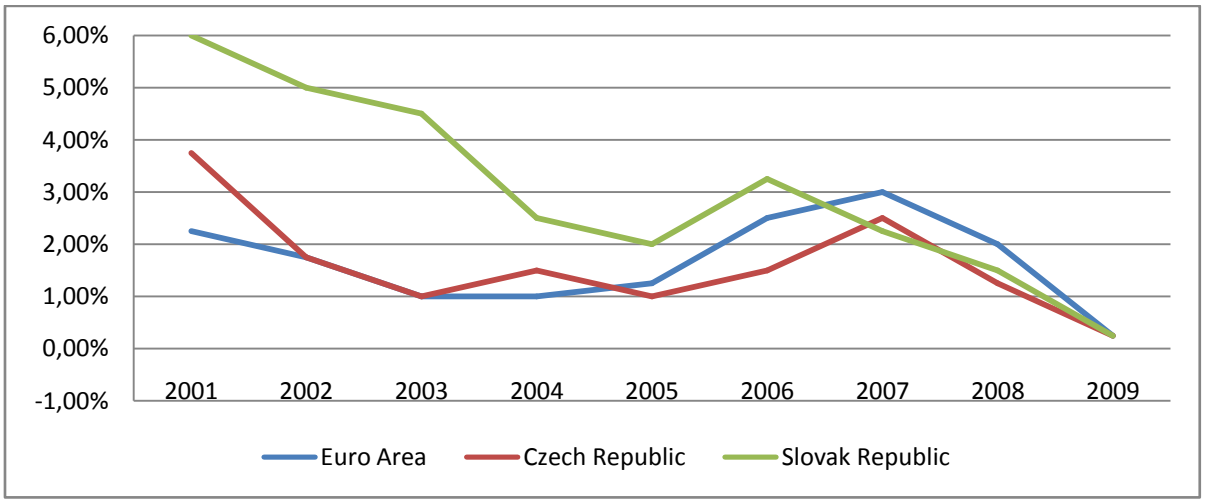
SOURCE: Eurostat

Looking at Chart 3.19 that depicts our observations, we see Slovakia continually pushing its inflation fluctuation zone lower, contrary to the Czech Republic, which saw increasing rates of inflation from 2005 up until 2009, when the growth of prices slowed in all EU countries, with quite a few even registering deflation.[29] It is interesting that in the years preceding 2007 CR was used to quite a slow growth of prices and in years 2002 – 2007 their inflation exceeded the EA entry limit only once. In contrary, years 2007 and 2008 were so far the only when Slovak inflation was both below the EA entry limit and also lower than Czech inflation.

When observing the historical central-bank interest rates, one can see a clear pattern of convergence that hints at the point stressed out by many economists, i.e. that small countries cannot afford to set their interest rates independently of their large neighbors, especially not in the environment of liberated capital flows. Charts 3.20 and 3.21 display respectively the official deposit and lending rates in EA, CR and SR as reported by Eurostat. Besides increasing convergence in time one also observes relatively higher correlation between the rates of CR and EA, which indicates more similarities between monetary policies of the two subjects over the considered period of time.

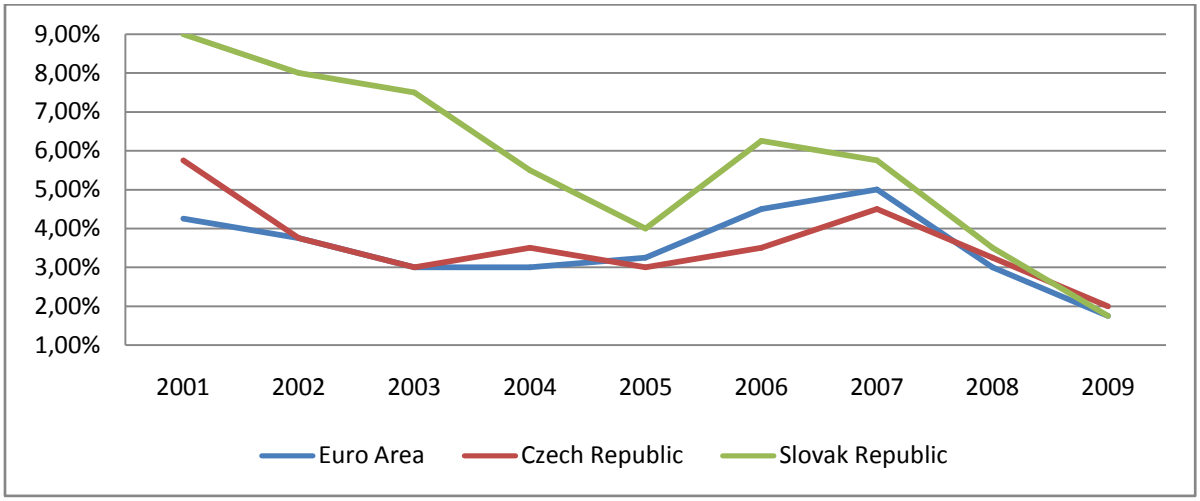
[29]Methodological note: For computing the entry limit in 2009 deflation rates were of course not considered, instead we used the lowest rates of inflation, which were 0.0% in Belgium and Luxembourg and 0.1% in France.

Chart 3.20: Official deposit rates



SOURCE: Eurostat

Chart 3.21: Official Lending Rates



SOURCE: Eurostat

Just like the Inflation Criterion, the Exchange Rate Criterion has also been defined in subchapter 2.2. However, because Czech Republic is not a member of ERM II and because the currencies of both CR and SR have clearly been appreciating (which per se is not a violation of this criterion) we choose a different approach. Rather than looking at the mere development of exchange rates between the currencies of CR, SR and EA, we examine volatilities of both Czech and Slovak korunas and compare them with the volatility of euro. The basic dataset consists of average monthly exchange rates. The source of EUR/USD ER is Eurostat. Rates of exchange between USD, EUR and SKK were downloaded from the website of the National Bank of Slovakia and ER between USD, EUR and CZK come from the database of the Czech National Bank.

Using the average monthly ERs we first computed the month-on-month changes, ending up with five different time series of monthly appreciation or depreciation of EUR vs. USD, CZK vs. EUR and USD, and SKK vs. EUR and USD. The next step was computing volatilities of individual ER time

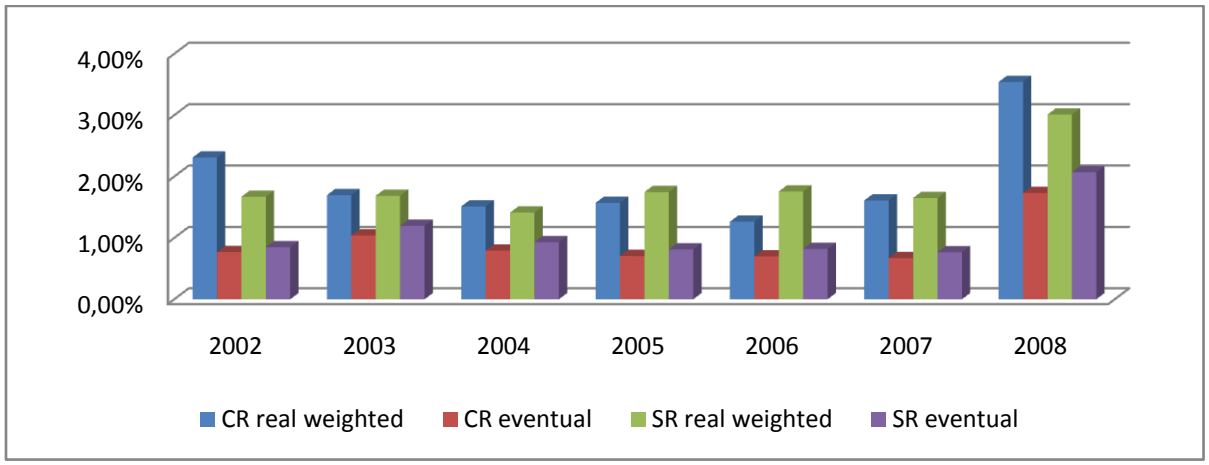
series for every year in time period of 2002 – 2008, measured by sample standard deviations. We thus ended up with seven sample standard deviation statistics for each time series, i.e. the total of 35 figures. The next stage was weighing these measures of volatility by destination of exports. This was done in the following way. In subchapter 3.1 we presented the analysis of trade ties of CR and SR. We used the findings of that analysis as weights in this one so that for each year the volatility measure of the ER between CZK and EUR was multiplied by the share of Czech exports to the EA(15) (that is the share of the total exports) and the volatility measure of the ER between CZK and USD was multiplied by the share of Czech exports to the rest of the world. For the Slovak Republic we did the same. At this point it is clear that the ERs between CZK and USD and SKK and USD serve only as proxies that simplify the whole analysis.[30] Let us use an example for the sake of clarity. Assume that the volatility of ER between CZK and USD measured by the sample standard deviation in year 2002 is 2.98%. The volatility of ER between CZK and EUR in that same year is 1.89%. The share of Czech exports to EA(15) in that year amounts to 62% (of the total exports) and the share of their exports to the rest of the world them sums up to 38%. The weighed volatility of the Czech Crown in year 2002 is then equal to 2.98% multiplied by 38% plus 1.89% multiplied by 62%, i.e. 2.30% (which is a weighed sample standard deviation measure). Analogous computations were done for all years 2002 through 2008 and for both CR and SR.

For comparison we additionally computed eventual ER volatilities that both countries would face, had their currency been Euro. That is where the volatility measures of the ER between EUR and USD come to play. We namely took these figures for each year and multiplied them by the share of Czech (or Slovak) exports to the rest of the world, as used before, giving us the eventual ER volatility that CR (or SR) would face. Let us again use an example to clarify. We already know that the share of Czech exports to the rest of the world in year 2002 amounted to 38% of the total. Assume that volatility of the ER between EUR and USD in this year was 2.00% as measured by the sample standard deviation. Then the eventual ER volatility of Czech Republic in year 2002 would be equal to 38% multiplied by 2.00% plus 62% multiplied by 0.00% (due to no ER volatility within the Eurozone), summing up to 0.76%.[31] The analysis of ER volatility, performed step by step as described here yielded unsurprising results, summarized in Chart 3.22. The bottom-line outcome is that if the currency of CR and SR in these years were euro, export oriented industries in these countries would face much lower overall ER volatility. It is also noticeable that the eventual Slovak ER volatility was for every year slightly higher than the Czech one. That is so even despite using exports to EA(15) as the weights. Had we instead used EA(16), it would have no effect on the Slovak results but it would influence the Czech figures. That demonstrates that the Slovak membership in the Eurozone is a boon to an eventual Czech EMU entry.

[30] In this matter weighing by exports is only one of many possible methods, with this one putting the emphasis on the export orientation of both watched economies.

[31] Figures used in these two examples are also roughly equal to real-world numbers.

Chart 3.22: Exchange-rate volatilities of Czech and Slovak currencies



SOURCE: Own analysis based on data from Eurostat, Czech National Bank and National Bank of Slovakia

Table 3.4: ECB Governing Council participation scheme

		TABS-MFI	GDP	Criterion	Participation
1	Germany	7892.70	2495.8	3395.283	
2	Great Britain	8727.5	1818.9469	2970.372	
3	France	7710.60	1948.511	2908.859	80%
4	Italy	3693.90	1567.8512	1922.193	
5	Spain	3409.40	1088.502	1475.318	
6	Netherlands	2231.50	595.883	868.4858	
7	Belgium	1276.30	344.676	499.9467	
8	Ireland	1731.50	181.8163	440.0969	
9	Sweden	907.5	334.227	429.7725	
10	Austria	1071.90	281.8675	413.5396	
11	Denmark	1092.00	233.0268	376.189	
12	Poland	262.60	362.4151	345.7793	
13	Greece	464.50	239.1413	276.7011	57%
14	Luxembourg	1271.80	39.3484	244.757	
15	Portugal	482.10	171.9204	223.617	
16	Finland	396.20	184.179	219.5158	
17	Czech Republic	157.10	147.8792	149.416	
18	Romania	84.50	139.7529	130.5441	
19	Hungary	128.00	105.5356	109.2797	
20	Slovakia	65.50	64.7784	64.89867	
21	Slovenia	49.00	37.1354	39.11283	
22	Bulgaria	36.80	34.1181	34.56508	
23	Cyprus	118.10	17.2478	34.0565	
24	Lithuania	26.50	32.2028	31.25233	38%
25	Latvia	32.30	23.0372	24.581	
26	Estonia	22.10	16.0733	17.07775	
27	Malta	42.30	5.6781	11.78175	

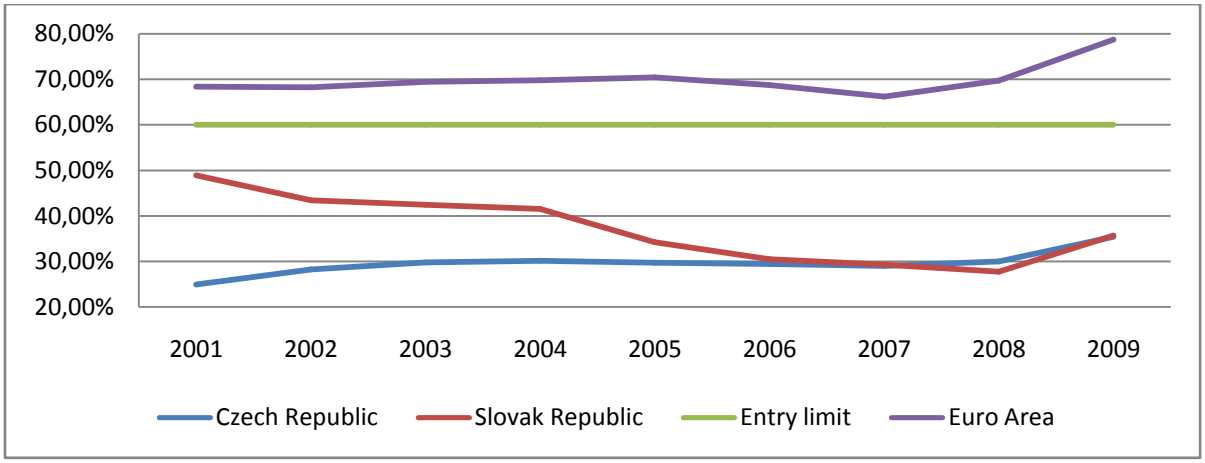
SOURCE: Eurostat and ECB

The last part of the monetary analysis concerns the participation of CR and SR on the decision-making process of the ECB Governing Council. Subchapter 2.3 defines the two-phase rotational system, according to which the governors of national central banks would take part on voting. In case where the total number of the governors does not exceed 22 it is obvious that CR and SR would fall within the same group of countries, i.e. the voices of their national central bank representatives would both have the same weight. Here we consider the case of the Eurozone consisting of all 27 EU member states. We divided all of them into the three predefined groups, according to the criteria also mentioned in subchapter 2.3, with Table 3.4 showing the resulting division. The source of GDP figures is Eurostat and the total assets of the aggregated balance sheet of the monetary financial institutions (TABS-MFI) were downloaded from the website of ECB. All figures are in billions of euro and are for year 2008. As we can see, SR would only belong to the last group whereas CR would be a member of the middle one. This of course is a very farfetched hypothetical scenario but it gives us a taste of relative CR and SR positions when it comes to involvement on decision-making of ECB.

3.2.2 Fiscal Readiness

In this part we examine the performance of CR and SR solely with respect to the remaining three Maastricht Convergence Criteria, since they provide a concise, yet comprehensive evaluation of a country's fiscal position. These are the Debt Criterion, the Deficit Criterion and the Interest Rate Criterion. They have all been defined in subchapter 2.2 and from a more general perspective also discussed in subchapter 2.4. Here, we stick to a simple graphic analysis that is in all three cases based on the data sets provided in the statistical database of Eurostat.

Chart 3.23: Debt-to-GDP ratios of CR, SR and EA vis-à-vis the EMU entry limit



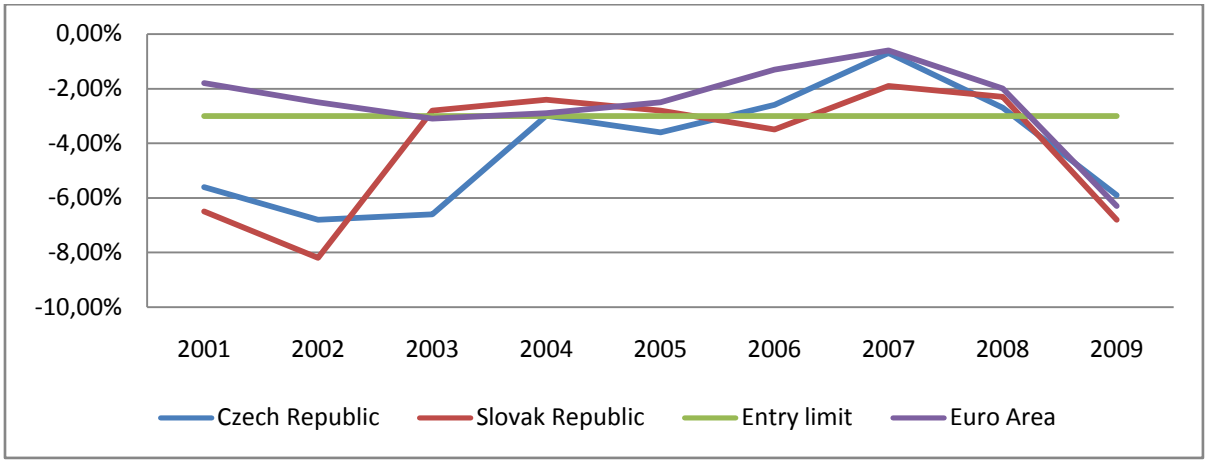
SOURCE: Eurostat

The above chart depicts debt-to-GDP ratios of CR, SR and EA, relative to the Eurozone entry limit of 60%. We can see that the Czech Republic started out with a rather low debt, contrary to Slovakia, which in year 2001 owed almost a half of its GDP. Yet, over the course of years SR has managed to push its debt-to-GDP ratio under 30%, the level at which also CR maintained its debt. Even in 2009, with debts spiking all over the world, both countries' debts remain well below the limit

of 60% of GDP. On the contrary, as we see in the chart, the aggregate EA debt stays above the 60% threshold, getting close to 80% of the Eurozone GDP.

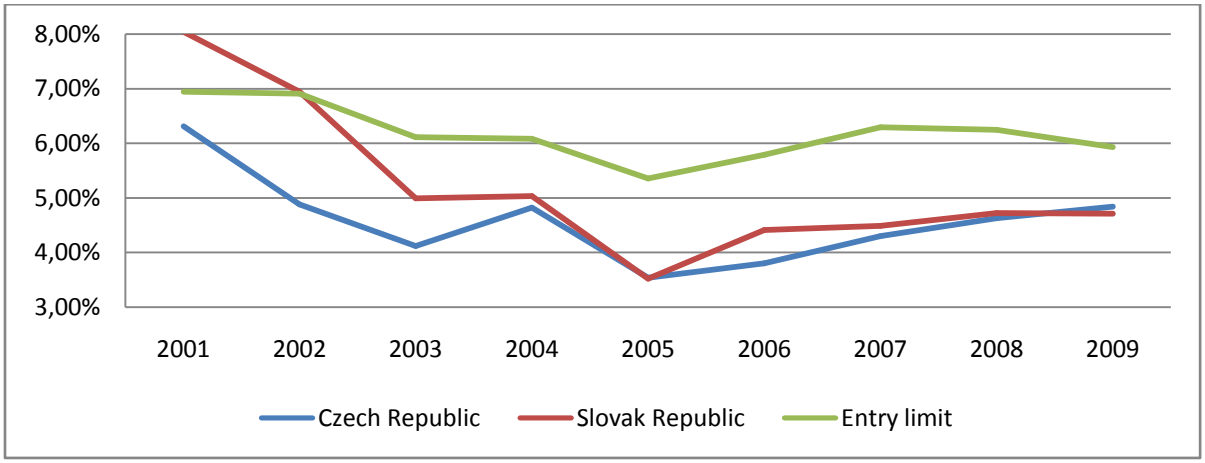
As it was already discussed in subchapter 2.4, Europe indeed faces debt levels that are getting out of hand. Chart 3.24 illustrates that the overall indebtedness is only going to get higher, with deficits in 2009 escalating all across the EU. We see politicians responding to the situation though, passing austerity measures that attempt to tackle this pressing problem of the developed world. According to the results of recent parliamentary elections in CR and SR we can also expect the change in policy, as rightist coalition governments emerge in both countries.[32] As far as long-term interest rates are concerned, CR and SR remain in a more or less unchanged position, unlike other countries, mostly from the already talked-about group PIIGS. As it is shown in Chart 3.25, Czech and Slovak interest rates stay relatively comfortably below the variable Eurozone entry limit.

Chart 3.24: Deficit-to-GDP ratios of CR, SR and EA vis-à-vis the EMU entry limit



SOURCE: Eurostat

Chart 3.25: Long-term interest rates of CR and SR vis-à-vis the EMU entry limit



SOURCE: Eurostat

[32] The newly formed Czech coalition even calls itself the 'government of budgetary responsibility'.

3.3 Summary and Rationalization

Previous two parts of this chapter have dealt with the economic positions of Czech Republic and Slovakia and have examined them from many different angles. The aim there was to provide a broad outlook of the two economies with respect to the matter of the European monetary integration. Today, Slovakia no longer stands at a crossroads, having entered the Euro Area on January 1st 2009. On the other hand, the approach of the Czech Republic is much more reserved, with the euro introduction not making the agenda of the day. Here, we summarize the findings of the previous two subchapters and compare the positions of CR and SR. We then attempt to answer the question what are the reasons behind different approaches toward the euro introduction in these two countries.

3.3.1 Summary of the Economic Outlook

We started the economic analysis of this chapter by looking at the degree of business cycle correlation between CR, SR and EA. The results revealed similarities between Czech and Slovak development trends, which generally became highly correlated with that of the Eurozone after the economic recession hit at the end of 2008. Immediately after entering the European Union Czech Republic was in an arguably better position than Slovakia. The development patterns of the two countries however became increasingly similar and as far as the business cycles are concerned, one cannot say that either CR or SR had been significantly more aligned with the development in the EA.

In terms of capital inflows into CR and SR from the countries of the Eurozone, one could observe almost identical development in the first three years of this decade. However, after joining the European Union in 2004, a gap of increasing size appeared between the influx of FDI into Czech and Slovak markets. In years 2007 and 2008 it amounted to approximately twenty percentage points, a difference hardly negligible. What is more, the nature of this trend does not seem to be temporary. Furthermore, we have proved that both CR and SR are open, export-oriented economies with striking similarities in their product structure. However, the share of total trade that the Czech Republic does with the countries of EA(15) is somewhat larger than in case of Slovakia, which is also a rather persistent trend.

At the time of Euro introduction in Slovakia Czech GDP per capita, measured by purchasing power standard, was closer to the Euro Area average than the Slovak one. In 2008 the difference was about 7.5 percentage points, in the years before it was even bigger, for example, in 2004 approximately 16.5 percentage points. Difference in unemployment rates is massive too. While in 2008 CR outperformed EA, recording only around 60% of its unemployment, Slovakia, even despite huge progress in this area, still faced the unemployment rate at the level of about 130% of the Eurozone average, with the difference having been larger in the past. If we use 2004 as the reference year, the corresponding figures are 92% and 202%. When looking at regional disparities within the observed subjects the findings tell a roughly similar story. Individual regions within Slovakia are much more dissimilar than the regions of Czech Republic, whose overall level of regional differences is comparable to that of the Eurozone.

As far as the monetary convergence goes, the position of Czech Republic seems to be more solid than the position of Slovakia. CR enjoyed lower average inflation than SR and the historical

interest rates set by the Czech National Bank were also much more in line with the ECB rates than the rates set by the National Bank of Slovakia. Furthermore, our analysis has shown that both countries are more or less on the same ground in terms of actual exchange-rate volatility. Yet, we have discovered that the eventual gains of Czech Republic realized in case of joining EMU would have been slightly bigger than the gains realizable by Slovakia. Regarding participation on the ECB decision-making process we have established that if anything, the position of CR is safer than the position of SR.

On account of compliance with the fiscal convergence criteria both countries were and remain to be in a fairly favorable position. In the years preceding Slovak accession to the Euro Area both countries have kept their relative budget deficits close to the 3% level. Historically, Czech Republic has maintained lower relative debt, while Slovakia had to push its indebtedness figures down. Thanks to that it has also managed to decrease the interest rates that it paid on its long-term debt, complying with the Interest Rate Criterion as soon as in 2003. Neither of the two countries had any problem with this criterion ever since.

3.3.2 Rationalization of Different Approaches

Results yielded by the above summarized economic analysis indicate that while both CR and SR perform in many areas essentially alike, in others Czech Republic irrefutably dominates Slovakia. Why is it then the case that the more fragile of the two economies switched to Euro sooner than the other one? To answer this question, one has to consider influences of historical and political nature rather than the strictly economic ones. In the following argumentation we shall draw largely from a private interview conducted on August 24th 2009 with Doc. Ing. Oldřich Dědek, CSc., who is the National Coordinator for euro introduction in the Czech Republic and also lectures at the Institute of Economic Studies of the Faculty of Social Sciences at the Charles University in Prague.

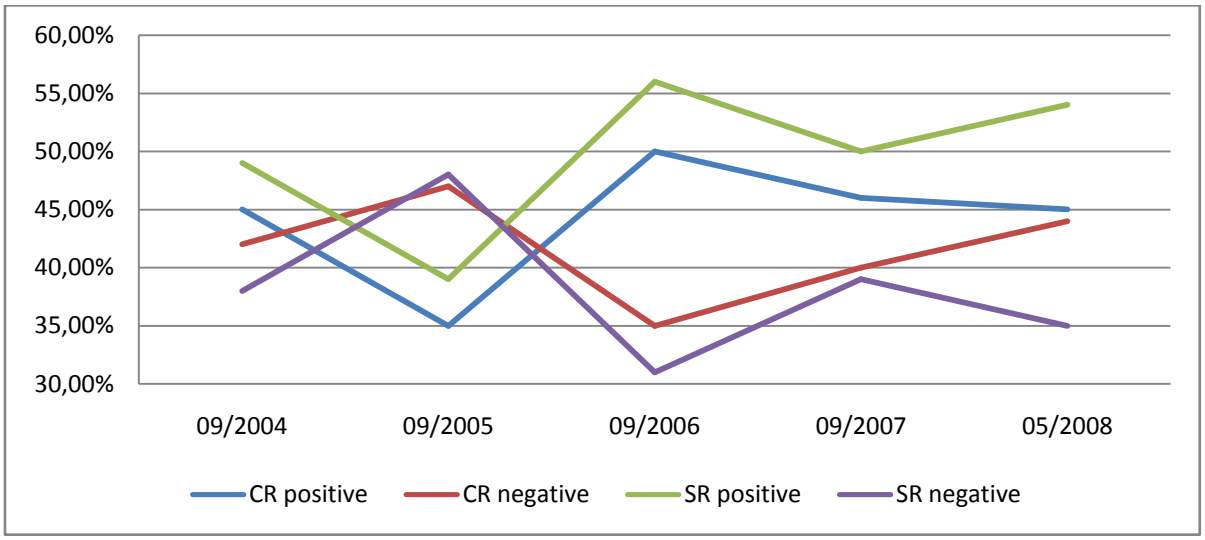
On January 1st 1993, not long after the fall of the Iron Curtain, Czechoslovakia dissolved and split into two separate sovereign states, Czech Republic and Slovak Republic. While the former did not seem to have any difficulties integrating with the European Union, North Atlantic Treaty Organization, Organization for Economic Cooperation and Development, and other international institutions, the path of Slovakia was not so unequivocal. In 1994 Vladimír Mečiar became the prime minister of the Slovak Republic for the second time in the second era of independence and his reign put the integration efforts of Slovakia into serious jeopardy. Due to reasons that need not be debated here SR was excluded from accession talks with the European Union, which ultimately spurred a wide civil opposition that led to Mikuláš Dzurinda being elected the new prime minister in 1998.

Mr. Dědek sees this part of political development in Slovakia as one of the major reasons why about a decade later pro-western and pro-European sentiment in the society enabled the adoption of Euro as soon as 2009. Due to experiencing the fear of international isolation, Slovak population does not generally subject individual aspects of European integration to close scrutiny. On the contrary, the Czech public, which Mr. Dědek describes as sometimes even overconfident, lacks the kind of experience described above and is thus much more critical when it comes to international affairs. Therefore, when the decision on what kind of approach to take toward euro adoption knocked on the door, Slovak electorate, unlike the Czech one, saw it rather as a chance to prove its worthiness to the world.

In the view of Doc. Dědek, successful politicians cannot go against the public opinion. That is why in Slovakia there was never any serious mainstream opposition to euro. Slovak leaders, regardless of political spectrum, be it Mikuláš Dzurinda, a two-time prime minister from 1998 to 2006, or Róbert Fico, the head of Slovak government in years 2006 – 2010, always presented European integration, including the introduction of euro, as something very positive. In Czech Republic however, there is one particular political figure that adds to the overall conservatism of the general population, namely the former prime minister and the current head of state, Václav Klaus. According to Mr. Dědek, President Klaus, being a very influential persona on the Czech public scene and also a hard-line eurosceptic, shapes the thinking of many Czechs. As a result, even the Civil Democratic Party (ODS), which to a large extent represents the interests of business circles, did never push for a quick euro adoption. Doc. Dědek argues that ODS rather chose maintaining internal party unity over pursuit of a dividing agenda, even though this was widely supported by the Czech enterprises that kept incurring costs associated with fluctuations of the Czech koruna exchange rate. Consequently, Czech politicians rather chose to excuse their reserved position by popular arguments such as appreciation of the Czech currency, which they used as a kind of a convenient 'smokescreen', Mr. Dědek adds.

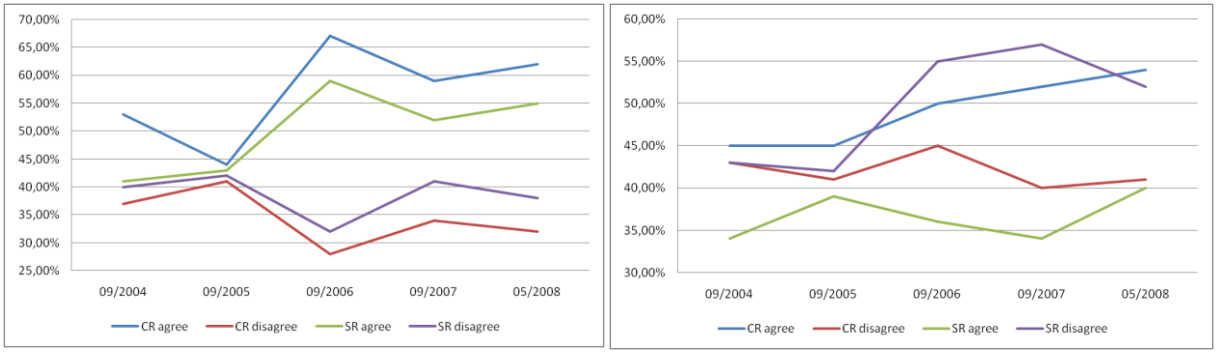
The following charts illustrate the differences in popular sentiment in Czech Republic and Slovakia. They are based on the survey data from the Flash Eurobarometer #237 reported in July 2008. Chart 3.26 shows the responses of Czech and Slovak respondents to the question: "Do you think the introduction of the euro would have positive or negative consequences for [your] country?" According to the answers given to this question, people in CR think less of Euro than people in SR and this trend seems to be long lasting. Chart 3.27 contains twofold information. The left-hand-side figure represents the positions of the people toward the statement: "Using the euro will make people feel more European." The right-hand-side figure shows their responses toward statement: "Adopting the euro will mean that [your] country will lose a great deal of its identity." A possible interpretation of these results may be that the Czechs are relatively more afraid of euro because for them its international-currency status symbolizes a credible threat for their national identity.

Chart 3.26: Effects of euro on CR and SR – survey



SOURCE: Flash Eurobarometer #237 – http://ec.europa.eu/public_opinion/flash/fl_237_en.pdf

Chart 3.27: Euro as a globalization threat – survey



SOURCE: Flash Eurobarometer #237 – http://ec.europa.eu/public_opinion/flash/fl_237_en.pdf

The recent world recession presented a radical change for the process of monetary integration in Europe. Currently, even if the political climate in CR were much more favorable to euro, its introduction would be impossible because of non-compliance with the Maastricht Convergence Criteria. The newly emerging Czech government does indeed plan austerity measures, as it announces an era of fiscal responsibility. However, this is not motivated by efforts to adopt euro. On the contrary, according to an article published at the website of the Slovak newspaper SME on June 16th 2010, the Czech coalition parties have agreed that a fixed date of Euro adoption will be set only after the countries of the Eurozone start adhering to the Maastricht rules themselves (SME internet article). In summer 2009 Mr. Dědek prognosed that even though Slovakia lost the ability to devalue its currency, it would not be hit by the recession harder than the Czech Republic. According to our economic analysis, so far this seems to be the case. Ultimately however, only time will tell which country coped with the crisis more successfully and how big a role euro played in the recovery.

Conclusion

In the first chapter of this thesis we have identified costs and benefits of a monetary union from a general and purely theoretical perspective. Second chapter focused on detailed description of particular characteristics and properties of the European Monetary Union that play a key role in the decision-making process of monetary integration. In the third and final chapter we have constructed an analysis that compared economies of Czech Republic and Slovakia against each other, based on the framework established by the previous two chapters.

In the sense of economic positions of the two countries, the results of the analysis were not surprising. The two economies share similarities in many areas but some key indicators point out to a clear dominance of the Czech economy over the Slovak one. This implies that the rather enthusiastic approach of Slovak Republic to euro adoption was not based primarily on economic performance. Instead, we present arguments which support the notion that the attitudes of both countries in this matter are driven largely by historical and political motifs rather than purely economic ones. The major reasons behind the differing positions of the two countries are the following:

Slovak Republic: Threat of isolation from Western Europe that was present in the last decade of the 20th century fueled positive sentiment toward European structures among the general population.

Czech Republic: Skepticism of the populace in this matter is caused by the fact that Czech Republic never faced any serious problem concerning the integration process so far. Therefore there was no incentive presented that would cause a dramatic shift in the popular sentiment.

Political decisions about the speed and the fashion, in which Czech Republic and Slovakia pursue the matter at hand is in both countries very much in line with the opinion of the general public. These implications can be transferred also to other countries, especially in the Baltic region, where Estonia is scheduled to become the seventeenth Eurozone member in 2011.

From the economic point of view, it will be very interesting to see which approach, Czech or Slovak, was better. With the effects of the economic crisis still present and with the current fiscal troubles in Europe it is now too early to tell. In a few years however, significant observations are likely to be made that might enrich the theory of monetary integration.

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