ABSTRACT

of the PhD thesis by

Anna Wisniewski

Examination of the macro-economic conditions of EMU accession
on the example of the four Visegrád countries

Consultant:

Lőrincné Prof. Dr. Istvánffy Hajna
University professor

Budapest, 2008
Department of International Economics

ABSTRACT OF PHD THESIS

Anna Wisniewski

Examination of the macro-economic conditions of EMU accession on the example of the four Visegrád countries

Consultant:

Lőrincné Prof. Dr. Istvánffy Hajna
University professor

© Wisniewski Anna
# Contents

Contents........................................................................................................................................... 3  
1. Theme and objectives of the thesis ...................................................................................... 4  
2. Applied methods and sources.................................................................................................. 6  
3. Main findings of the thesis .................................................................................................... 7  
   3.1 External developments ....................................................................................................... 7  
   3.2 Monetary institutionalisation in the European Union and the lessons to be learnt .......... 9  
   3.3 Eurozone today: global role of euro and the issue of competitiveness......................... 10  
   3.4 Examining real-convergence in the Visegrád countries.................................................. 11  
   3.5 Major characteristics of the Central and Eastern European countries with regard to monetary and fiscal policy tools applied .................................................... 12  
Literature ....................................................................................................................................... 13  
Publications of the author in the field ..................................................................................... 17
1. Theme and objectives of the thesis

Establishing the Economic and Monetary Union and creation of the euro by raising monetary policy to supranational level was an especially important and from the perspective of the deepening processes of the European Union a determining step. The author of the „optimum currency area” theory, Robert Mundell in his paper\(^1\) ranks the introduction of the euro among the four major factors that determine the world economy (the other three in his study are information technological revolution, globalisation and the at that time observed expansion of the American economy). He even added that the euro can lead to the restructuring of the world economic order. The years that have passed since have justified his ideas. The major tendencies that determine the development of the world economy are the economic expansion of the Asian countries (especially India and China), globalisation and the slowdown of the American economy. The role of the euro, however, has kept its position. The continuous expansion of the international role of the European currency, the further enlargements of the euro-area and the increasing circle of countries using euro have strengthened her position. The transaction area and monetary basis of the euro-zone have already surpassed that of the US dollar.

The establishment of the Economic and Monetary Union, however, has not been motivated by the objective of restructuring the world economic order but the creation of the area of „stability and prosperity” in Europe. A progress in both nominal and real convergence among the member states has been expected.\(^2\) By eliminating exchange rate risk a convergence of interest rates has been expected, while the introduction of a common monetary policy was presumed to contribute to the diminishing of the differences between inflation rates of the member states. The reduction of transaction costs and the possibility of external shocks, together with the exchange rate stability provided for by the common monetary area was expected to produce a positive impact on economic growth. Institutionalisation of the monetary integration process has last for more than 30 years, and the final introduction of the common currency has been preceded by two attempts that ended in failure. The changes in the external conditions and the lessons learnt from the first attempts, however, have all contributed to the progress in monetary integration that finally led to the creation of the euro-zone. The programme of the euro was started with doubts and many questions. The experience of the last years, however, has justified the efforts and the confidence concerning the functioning of the common monetary policy. The international role of the euro has been strengthened. The macro-economic impact of the monetary integration on the performance of the euro-zone, on the other hand, have fulfilled convergence expectations of the less developed member states.

---

2 Delors Jelentés, 1989 illetve One Market, One Money Report (Emerson 1992)
The timing and the conditions (internal and external) of the new member states’ euro-accession are important research topics both from the aspect of the future of the euro-zone and the integration of the Central-Eastern European EU member states. The largest enlargement of the European Union in 2004 has involved ten countries (among them eight Central-Eastern European states).\(^3\) Besides social and political aspects, the admission of these states has raised important issues concerning monetary and fiscal policy. By signing the accession agreements new member states accepted the obligation of the membership in euro-zone as well. The chapter on monetary union explicitly sets membership in the euro-zone as an obligation, while the conditions to be fulfilled are the Maastricht criteria.\(^4\) Their legal status until membership is defined as „member state with derogation”. The question ahead of the new member states concerns the timing and the convergence path towards Maastricht criteria and introduction of the common currency.

The enlargement in 2004 has created a difficult situation for the European Central Bank. The accession treaty defines euro accession as a short-term obligation for new EU member countries. The communication of the ECB, on the hand, is clear from this point of view. The long-term sustainability of nominal convergence indicators is a priority for the central bank aiming at keeping up the conditions of stability in the euro area. The standpoint of the ECB of not urging the new member states for joining euro but stabilising their macro-economy is easy to understand. At the start of the monetary integration the major objective was the creation of the euro with the largest possible number of member states of the EU. Today, in a different world economic background, the objective of keeping up stability in the euro area is what influences central bank decisions. At the time of accession to EU new member states declared their intention to a rapid introduction of the euro. The experience of the past few years, however, has led to changes in country strategies concerning the timing in the light of the economic and social-political progress of individual member states.

Real and nominal convergence to the EU average has been progressing in the CEE countries since the system changes at the beginning of the 90s. The process, however, could still last for many years and raises several difficulties. Starting positions and initial level of development, as well as historical experience all determine the policy-mix applied by member states in the region. The present paper has chosen to deal with the four Visegrad countries on these basis. Comparative analysis of the development of the Czech Republic, Slovakia, Poland and Hungary can give an insight in the specific character of this group of countries both concerning the monetary and fiscal policy tools, the

---

3 Cyprus, Czech Republic, Estonia, Poland, Latvia, Lithuania, Hungary, Malta, Slovakia, Slovenia. The paper is focusing on the four „Visegrad” countries. It does not deal with countries involved in later enlargement of 2007, i.e. by Bulgaria or Romania.

4 An opt out has been provided for the accession agreement of the United Kingdom and Denmark. The case of Sweden, however, shows that even without an opt-out clause there is a way to stay out of the euro zone by derogation. Experience and macroeconomic considerations show that an opt-out would be unprobable and even unpreferred by the new CEE member states.
convergence path they have led so far and the regional specialities in comparison with the Baltic States or Slovenia.

In spite of similarities in the progress and performance of the Visegrad states in this respect, an individual decision is expected on the accession to the euro-zone. The timing depends upon individual preparedness and the credibility and fulfilment of strategies put down in convergence programmes. The present paper is aiming at a problem-oriented comparative analysis of the four countries focusing on the macro-economic conditions but in a multidisciplinary context. The objective is to examine the legal, political and economic aspects of the conditions the euro-accession of the new member states. The major interest of the author, on the other hand, is the macro-economy.

2. Applied methods and sources

The first step of the research has been the definition of the hypothesis concerning the major field of interest of the paper and the area to be put under scrutiny. Precisely setting the major objective of the research and a precise definition of the countries and the aspects to be observed had been especially important in this field. A huge number of theoretical and empirical works have been published dealing with the relation of Economic and Monetary Union and the accession countries. The papers have analysed the advantages and drawbacks of euro introduction, the risks to be expected. The theoretical literature has provided for interesting findings concerning the experience with regard to the so far operation of the common monetary policy. There are authors who focus their examination on the new member states (Darvas-Szapáry, Fidrmuc-Korhone). The formal conditions of the euro-introduction are defined in the Maastricht Treaty. The observance of the theoretical literature, however, points to the importance of real economic preparedness for an optimal participation in a currency area. The nominal and real economic aspects are both analysed in the paper based on the theoretical findings of the works in this field. The main objective of the paper was to put under scrutiny the exact conditions of the legal and institutional environment of the euro-adoption. Furthermore, the experience of less developed euro member states has been under scrutiny. The paper also examines the major characteristics of the new member states from the point of view of the monetary and fiscal policy mix applied and lessons to be learnt from the real and nominal convergence path they follow.

The analysis follows a complex method using primary and secondary sources. Primary source is every community or member state document, theoretical model (optimum currency area,
Balassa-Samuelson) and study on the field of interest. I am also listing to primary sources the statistical data applied for the illustration of major macro-economic trends in the examined countries. The statistical data used in the paper are those provided for by the European Central Bank and EUROSTAT.

Secondary sources are those historical works, articles, studies, analyses and conference materials that have been published on the subject. Besides the traditional research in the library, the internet as a major source for reaching literature has also been of use. The analysis provided for in the present paper has been a complex work, as the data search and the comparative examination had to be performed for four countries. This comparative analysis had to be integrated in the special context of monetary integration process, which made the work even more complex.

Personal interviews with experts in the field as well as participation of the author at conferences have helped in the actualisation and redefinition of problems in the research area. The European Central Bank seminar in Frankfurt, as well as the participation at the ECOFIN conference in Warsaw dealing with the problematic of euro-accession of CEE countries all contributed to the finalisation of the present paper. The topic of the thesis presumes a multidisciplinary approach. The examination of legal documents and the official conditions of membership in euro-zone have been inevitable for the understanding of the conditions and factors determining the chances of new member states in their euro-aspirations. Furthermore, government materials, official strategies, legally binding and declarative materials had to be analysed as these cannot be handled independently of integration processes. The collection of information was closed end of April 2008. The sources available in foreign languages have been translated by me.

### 3. Main findings of the thesis

#### 3.1 External developments

In the period after accession to the European Union the external factors determining the macro-economic environment of euro-introduction of the Visegrad countries have changed. The main tendencies in world economy and the performance and further enlargements of the euro-zone have important implications for the countries aspiring for membership.
1) **World economic environment.** In 2002-2007 world economy was characterized by favourable conditions. The yearly growth reached an overall 5 per cent (IMF) which could be realized by an unprecendented low level of inflation (global inflation has not reached 3,7 per cent in this time period). The positive trends have been induced by the involvement of Asian countries (basically of China and India) in world economic exchanges which resulted in low imported prices. Furthermore the diminishing level of South-American indebtedness has helped to stabilize monetary processes in the world. The huge industrial supply in the world economy also contributed to low prices. This is very important as it provided for a favourable background for the ECB to fulfil its declared major objective of price stability in the euro-zone. Since introduction of the euro, the HICP index in the EMU area has been slightly above the 2 percent reference target level and it has not overpassed 3 percent in this period.

A new trend is expected to have started in world economic development, which has been characterized by lowering growth levels and an increase in prices. Slow-down has been evoked by the spreading of the American subprime mortgage crisis, on the other hand there are further tendencies that shall contribute to the restructuring process in world economy and the instability in inflation levels. In the wake of the new tendencies economic developments of the European Union are quite unpredictable. The external pressure on the level of inflation will render the efforts of the ECB more difficult in reaching its main objective. In its latest report, ECB has forecast a slowdown in the euro-zone. The range of this decrease in growth, however, is expected to be only minor. In 2008 growth in euro-zone can reach 1,8 per cent, while yearly inflation is expected remain below 3 per cent (in spite of the unfavourable 2007 figures).

These developments are especially important with regard to the euro-introduction aspirations of the CEE countries. The so far continuous process of real convergence is expected to slow down in the next years. A dynamic growth is expected to keep up in Slovakia, though growth in Hungary will be very low further on. The negative external factors in price developments can render the nominal convergence process difficult. Furthermore, the change in world economic trends will increase the stability orientation of the ECB making considerations of euro admission even more complicated and unsure.

2) **Euro enlargements.** Some major developments have taken place in the past few years concerning the participant countries both in the euro area and the ERM2 exchange rate mechanism. Soon after the May 2004 enlargement, three small countries Estonia, Lithuania and Slovenia introduced their currencies to the European exchange rate mechanism (a per-condition to eneter euro-zone defined by the Maastricht Treaty). Later, On 30 April, 2005 another three countries (Latvia, Malta and Cyprus) chose to lead their currencies to ERM2. In 2005 the separation of the Visegrad block was quite unquestionable in this sense. All the CEE countries that joined EU in 2004 became members of the
ERM system but the four Visegrad countries. The only country in this group that finally chose to step into ERM2 was Slovakia who joined in November 2005.

In the meantime and as a natural consequence of the above events the euro-zone has also been enlarged by countries that were able to fulfil the Maastricht criteria. After spending the minimum two years in ERM2, Slovenia joined euro-zone in January 2007. Later on, January 1, 2008 another two countries, Malta and Cyprus were admitted. On the other hand, due to being unable to fulfil the inflation criteria in the reference period, the admission of Lithuania in 2007 was refused. The message is clear towards the other Central-Eastern-European states. The conditions applied remain further on the Maastricht criteria, on the basis of the legal documents. Where the definition of the treaty is very strict (such is by the inflation criterion), the ECB does not intent to create precedent by avoiding to observe it duelly. The example of Cyprus, on the other hand, shows clearly that parameters not defined as hardly (by the level of debt it is enough to present sufficient convergence towards the reference level) than the observation will not be more strict.

3) Real economic convergence of the euro-zone. There are specific contradictions that can be drawn from the functioning of the euro-zone. The objective of creating an area of stability and prosperity has been only partly achieved. The promise of stability has been kept, the real economic performance, on the other hand has been lagging behind the performance of the United States. Looking at the member state performance it becomes clear that smaller, more flexible and transforming (converging) countries are doing better as far as growth concerned though by a higher inflation level. Their example confirms the initial hypothesis, that nominal and real convergence are not contradictory but processes that reinforce their impact.

3. 2 Monetary institutionalisation in the European Union and the lessons to be learnt

The present form of monetary integration is a result of a long learning process. The common monetary policy was advanced by political will and the commitment of member states, though the major motivation force behind was the market itself and the economic actors. The present form of monetary integration was rendered necessary by the development of the internal market, the monetary integration was de facto a pre-condition of the smooth functioning of the common European market.

The creation of Economic and Monetary Union shows the global contribution of the European Union. The change in the principles of the Bretton Woods exchange rate system and the wish for stability encouraged the member states to the creation of a regional currency area. The experience of the history of monetary integration points at the importance of economic policy coordination of the

5 Cyprus and Malta rae not transforming economies therefore their is example is relevant only from the point of view of understanding the Maastricht conditions. Their examples are therefore dealt with only marginally.
member states and a high level of cohesion in the currency area. The crisis tendencies in the process of monetary integration grew stronger when member state intention to coordinate their economic policies weakened.

The first experiments of the monetary integration process drew the attention to the importance and necessity of a common supranational institution, which resulted in the setting up of the common central bank that is independent of national governments and parliaments. An inevitable condition of the smooth operation of common monetary policy is the convergence between member states performance. The 1992/93 crisis shows that the nominal convergence is sufficient to reach euro-membership though a certain level of real convergence is advisable for the successful exchange rate stabilisation. The member states all have individually decided upon participation or opt-out from the euro-zone on the basis of economic and political factors. Though might be an important message towards the CEE countries, that there has not been such a country of less developed background that would have chosen to stay out. All mediterranean countries accepted the costs of adjustments.

3.3 Eurozone today: global role of euro and the issue of competitiveness

The developments in the euro-zone have been mixed so far. The harmonization of business cycles have increased but a constant process of real convergence can only be seen at the example of Ireland. The catching-up process in Greece and Spain has been slowing down parallel to the increase of the level of development. The income differences have not decreased among the member states. Real convergence is stagnating in Portugal that draws the attention to the special importance of the economic policy applied by the individual member states. The impact of EMU accession on catching-up countries is clearly positive. Convergence has been faster, interest rates lower and there has been greater stability observed as before. The experience of the less developed EU member states shows that it is not the EMU itself that leads to positive tendencies. The EMU acts as a positive external force but that cannot substitute the policy tools necessary at the national level.

Concerning the relationship between real and nominal convergence the experience shows that the fulfilment of nominal criteria have not led to a slow down in real economic growth. Depending on the policy tools at the national level, the catching-up countries have further on remained on the convergence path. The relationship between growth and inflation in these countries has also been under scrutiny. There is a consensus in the literature that financial stability creates a good basis for economic growth. The analysis by Galí–Perotti (2003) proves that the conditions of the Maastrichti treaty and the Stability and Growth Pact contributed to a more disciplined fiscal policy in many member states, at the same time it did not led to a major decrease of administrative expenses. The aim of participation in
the monetary union acted as a motivator and external force towards a more disciplined fiscal policy in most of the mediterranean countries.

Inflation levels differ permanently in the euro-zone. Monetary integration has not turned these processes. In case it is a natural consequence of productivity growth in the member state than it does not harm the economy. If it is due to market rigidities than it can cause competitiveness losses and lead to a deterioration of current account balance. Euro-membership led to a more disciplined fiscal stance in countries previously characterized by loose fiscal policy. Fiscal adjustments have proved to be sustainable in those countries where instead of tax increase the expenditure side has been restructured.

3.4 Examining real-convergence in the Visegrád countries

Real economic convergence is not an official condition of the membership in the EMU. To reach an optimum in the currency area, however, a possible high level of real convergence is desired. The Central-Eastern European countries do not constitute a homogenic group in this respect. Concerning certain criteria the development of the Visegrad countries can be separated from that of the Baltic states, though the whol CEE area is rather characterized by a huge degree of heterogeneity in this aspect.

The countries of the region are small, open economies that have been integrated their economies to the EU market at a higher degree than many of the present euro-members. Trade integration is the highest in case of the Visegrad countries, the level of integration to EU markets reaches 80 per cent. The Baltic member states have further on tight relations with Russia, which has an impact on their trade structure. The catching-up in the real economy has been a stable process in most of the countries. Here, the two-digit pace of development in the Baltic states has led to a quick real-convergence process. The Visegrad states, on the other hand, have showed a smaller but stable convergence path. In the competitiveness indicators the Visegrad countries have kept their leading position, the real economic convergence has not had a major impact on the labour market situation in these countries.

Concerning business cycle developments the “preparedness” of CEE countries again shows a mixed picture. Empiricul studies point to a high cycle synchronity in Poland and Hungary, while the cycle synchronization of the Czech Republic and Slovakia is at a smaller degree.
3.5 Major characteristics of the Central and Eastern European countries with regard to monetary and fiscal policy tools applied

The Visegrad countries harmonized their financial policies more or less simultaneously in accordance with the European legal considerations. Parallel to the changes in the institutional structure, the central bank law has also been harmonized. It legally set the principle of a) independence of the central bank, and b) the primary objective of price stability. This creates the basis for euro-area membership.

Monetary policy tools have been very similarly applied in the Visegrad four. All of them turned to inflation targeting that has provided for a stable disinflation process in the region. The experience of inflation targeting in transforming economies, however, shows that transformation and market restructuring makes definition of the target inflation more difficult. The countries observed are characterized by high level of exchange rate volatility, high level of debts in foreign exchanges, and instability of capital movements. This makes interest decisions of monetary authorities especially difficult. While the Baltic states chose the more rigid form of currency boards, Visegrad countries all applied flexible exchange rate tools. In case of macro-economic imbalances the flexible exchange rate regime provides for more policy instruments in the form of internal price level, interest rate, and exchange rate movements. The high level of openness and the financial integration into world economy, however, limits the possibilities of monetary authorities to influence developments even by flexible exchange rates. Furthermore, research showed that flexible exchange rate often acts a shock generator instead of shock absorber. The expectation of the application of the flexible regime to set a realistic market rate has not proved either. The exchange-rates in the region have all been overvalued.

The initial condition as far as the state debt level has had an impact on their present level of indebtedness. The region is characterized by low level of indebtedness (with the exemption of Hungary), the stock of debt, however, increased sufficiently in the 90s. The resources needed for modernisation and co-financing of EU funds, needs enormous amounts of external sources. The restrictive fiscal policy has not been continued after the millennium. Furthermore, the fiscal reforms and the restructuring of the expenditure side of the budget has not happened. Social and administrative expenses mean a serious burden for the budgets in the region.

Comparison of monetary and fiscal policy tools applied in the Visegrád countries proved our hypothesis of placing them together. Especially characteristic is the path chosen in comparison with the Baltic states. At present it is unclear yet which policy mix could be more efficient towards a sustainable nominal and real convergence and a fast accession to euro-zone. Exchange rate flexibility
is a major concern in the case of the Visegard group, and the commitment to budgetary reform is inevitable to successful euro accession. The Baltic states, on the other hand, are unable as yet to fulfil the inflation criteria of euro-membership. The only tool they have is a restrictive fiscal policy that has been followed but that proved to be insufficient to turn down inflation. The monetary policy followed by this group of countries does not provide for further means which can prolong their aspiration for membership.

**Literature**


Frankel, J. (2005): Real Convergence and Euro Adoption in Central and Eastern Europe: Trade and Business Cycle Correlations as Endogenous Criteria of Joining the EMU, in
S. Schadler ed., Euro Adoption in Central and Eastern Europe: Opportunities and Challenges, IMF.


Treaty of Amsterdam amending the treaty on European union, the treaties establishing the European communities and related acts, Official Journal C 340, 10 November 1997.

**Publications of the author in the field**

**Books, parts of books:**


**Referred scientific journals:**


Working papers:

Other publications:

Presentations:
„Poland and the Lisbon process”, presentation at the ISES summer university, international relations course, Kőszeg ISES, July 5, 2007.
„CEE facing the challenge of EU membership”, course for ISES international relations MA programme, Kőszeg ISES, November 19-22, 2007.