RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS No. 136
Economics 9 2010

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MACROECONOMIC PERSPECTIVES AND CONSEQUENCES OF INTRODUCING EURO IN POLAND

Summary: The objective of this article is to indentify costs and benefits of introducing common currency in Poland paying special attention to macroeconomic consequences. The main themes are: present level of nominal convergence, balance of costs and benefits which are significant from the Polish economy point of view as well as risks and chances involved in the adoption of euro.

The article sums up the perspectives and possible consequences of adopting single currency which might be expected and taken into consideration before joining the Exchange Rate Mechanism II.

Keywords: convergence criteria, ERM II, euro, exchange rate, monetary union.

1. Introduction

Only sixteen European Union countries have become the complete European Monetary Union members so far and only two countries have decided to use the *opt out* clause. It means that the rest of the EU has no other way but to introduce euro in the future. Poland and the other New Member States have an obligation to adopt the common currency once they fulfill the convergence criteria defined in the Maastricht Treaty[1]. By acceding the European Union, Poland actually entered the path leading to replacing Polish zloty with the single European currency.

There is no common strategy or deadline for the New Member States to fulfill the convergence criteria and introduce euro. However, it is recommended to achieve the high level of real convergence with the other economies as soon as possible. From that point of view it becomes an aim to fulfill the nominal criteria and at the same time to increase the level of economic development ensuring the stable growth. For Poland – an open economy involved in the catching up process – it is recommended to use the advantage of the highest productivity growth accompanying real convergence process to minimize the risks of the increase in real effective

[1] *The Maastricht Treaty; Treaty on European Union and the Treaties establishing The European Communities*, Protocols Maastricht 7 February 1992, http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html

exchange rate (REER) manifested in declining competitiveness and at the same time if REER appreciation takes place, to shorten the period in which competitiveness returns[2].

2. Current level of convergence

Poland was the only country which recorded positive economic growth (of 1.7%) in 2009 (Figure 1 and 2), which may have partly reflected the lower degree of openness of the economy, the strength of the financial sector, the early depreciation

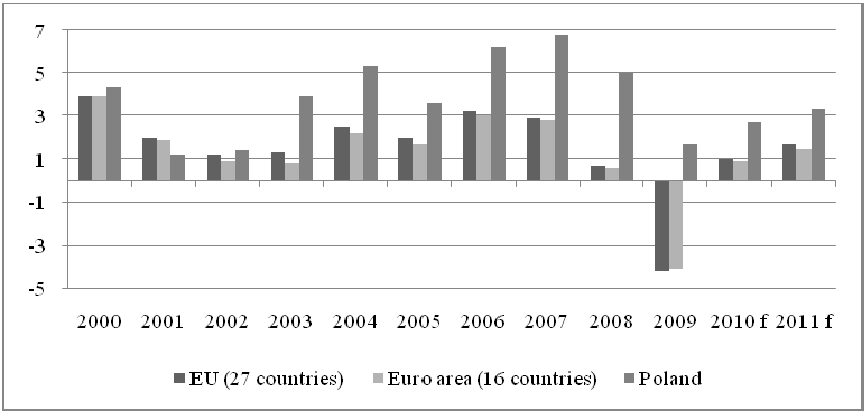

Figure 1. Growth rate of GDP volume – percentage change on previous year
Source: own study on the basis of Eurostat.

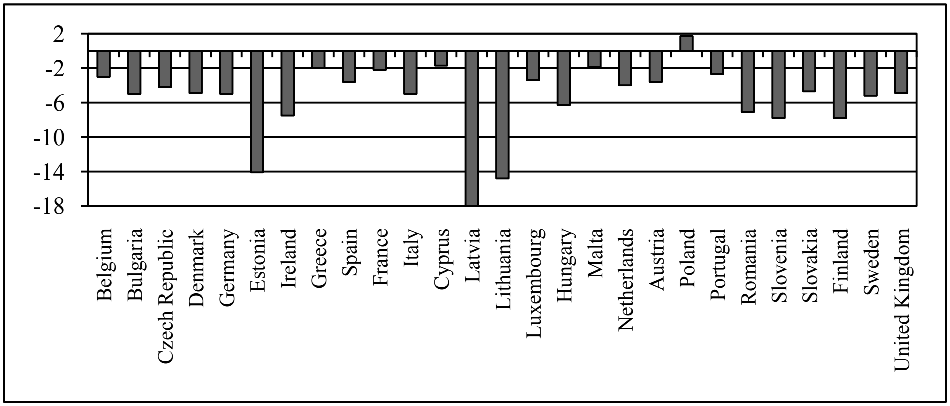

Figure 2. Growth rate of GDP volume in 2009 in EU-27 countries
Source: own study on the basis of Eurostat.

[2] Sławiński A., *Znaczenie czynników ryzyka towarzyszących wchodzeniu Polski do ERM2 i do strefy euro,* http://www.nbp.pl/publikacje/wyklady/plslawinski_euro.pdf, p. 7.

of the currency, and the absence of large macroeconomic imbalances[3]. However, the crisis thwarted Polish plan of entry into ERM II (*Exchange Rate Mechanism II*) before 2012 revealing instability of Polish economy and, as a consequence, the problems with the fulfillment of the convergence criteria.

2.1. Fiscal situation

Only in the first two years after euro was introduced, Poland seemed not to have problems with stable finances. Since 2003 the government deficit exceeded the reference level (Figure 3). In July 2004 the Council adopted a Decision stating that Poland had an excessive deficit, based on a general government deficit of 4.1% of GDP in 2003. As a consequence Poland was recommended to take action in a medium-term framework in order to bring the deficit below 3% of GDP by 2007[4]. According to the convergence reports of the European Commission and European Central Bank budget deficit in Poland in 2007 was at 2% of the GDP which is below the reference value (3%). In July 2008 the Council decided to abrogate the excessive deficit procedure (EDP)[5]. However, in May 2009 after Commission's report, Council Decision on the existence of excessive deficit, EDP was initiated again[6].

The similar situation is observed when it comes to general government debt which increased from 39.6 % of GDP in 1999 to 47.7 in 2006 (Figure 4). In 2007 it amounted to 45.2% and started to increase again. In 2009 the government debt stood at 53.6% of GDP and is forecasted to increase to around 60% of GDP in 2010[7].

It can be easily noticed that the last crisis and the support to recovery are leading to a very fast increase in debt ratio, quickly offsetting the consolidation gains achieved in recent years[8]. According to European Commission, in order to put public finances on a sustainable path, Poland should improve its structural primary balance in a durable manner by 3.2% of GDP. In principle, this adjustment could take place via an increase in revenues or cuts in expenditure. At the same time Commission indicates a risk that current policy will not be applicable for the long terms as it involves a sharp decrease of the benefit ratio of pensions in Poland until 2060, which may pose risks to the long term stability of public finances[9].

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[3] European Central Bank, *Annual Report 2009*, p. 86.

[4] European Commission, *Convergence Report 2008,* "Economy" 2009, No. 3, http://ec.europa.eu/economy_finance/publications/publication12574_en.pdf , p. 145-147.

[5] National Bank of Poland, *Report on Full Membership of the Republic of Poland in the Third Stage of the Economic and Monetary Union,* Warsaw 2009, p. 49.

[6] European Commission, Economic and Financial Affairs, http://ec.europa.eu/economy_finance/sgp/deficit/countries/poland_en.htm

[7] European Commission, *Sustainability Report 2009*, "European Economy" 2009, No. 9, http://ec.europa.eu/economy_finance/publications/publication15998_en.pdf, p. 130.

[8] Ibidem, p. 5.

[9] Ibidem, p. 130.

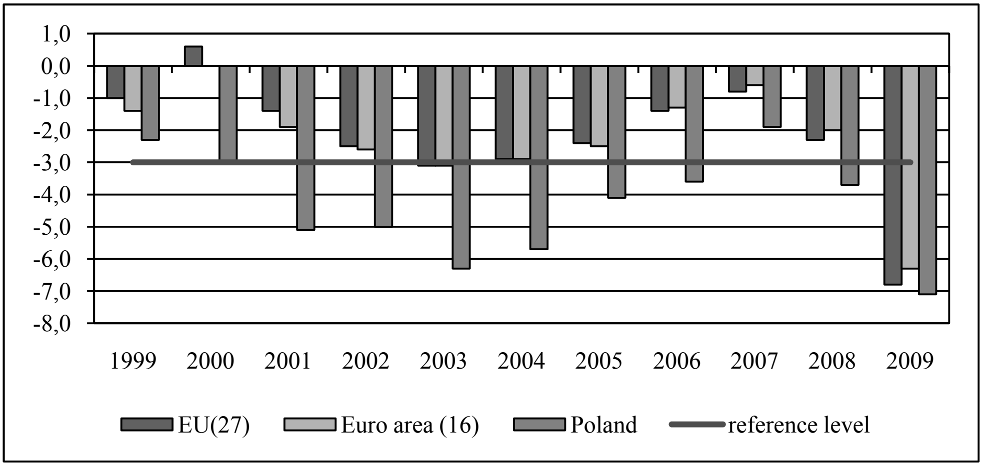

Figure 3. Government deficit/surplus as a percentage of GDP

Source: own study on the basis of Eurostat

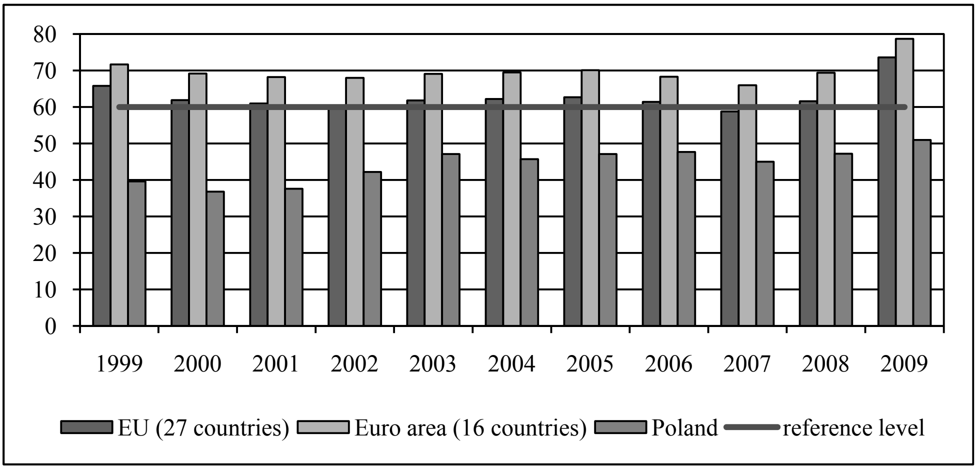

Figure 4. General government consolidated gross debt as a percentage of GDP

Source: own study on the basis of Eurostat.

2.2. Price stability

In the early 2000s a successful disinflation process was observed (Figure 5). In 2002-2003 inflation stabilized at the average level of 1.3%. After a temporal decrease in 2004, which was *inter alia* of EU accession, Polish zloty resumed its appreciation trend. However, since 2007 the inflation level has been getting higher proving to be volatile reflecting especially the sensitivity of Polish economy to external price shocks and exchange rate fluctuations as well as the variations in food prices, which have a relatively large weight (of around 30%) in the Polish HICP index[10].

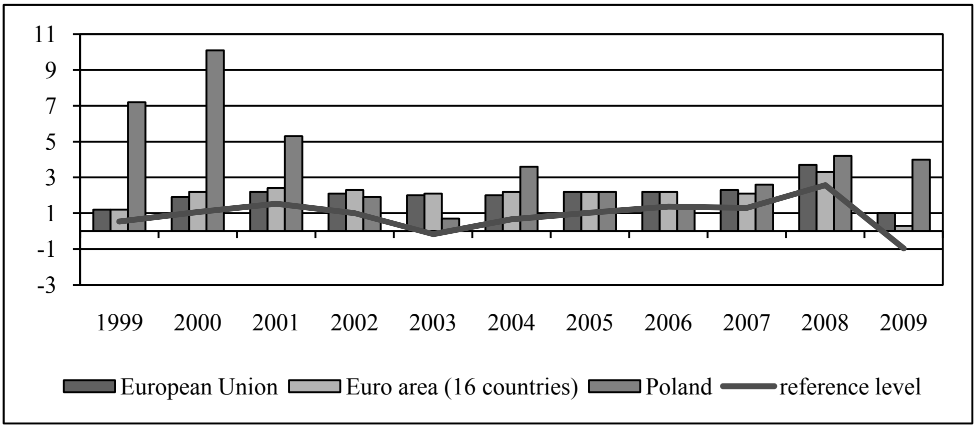

Figure 5. Annual average rate of change in Harmonized Indices of Consumer Prices (HICPs)

Source: own study on the basis of Eurostat.

2.3. Long-term interest rate

Polish long-term interest rate fluctuated in the early 2000s which was mostly because of inflation shifts, monetary stance and changes in market sentiment[11] (Figure 6). Since 2005 with the fall in inflation and monetary policy rates, long-term interest

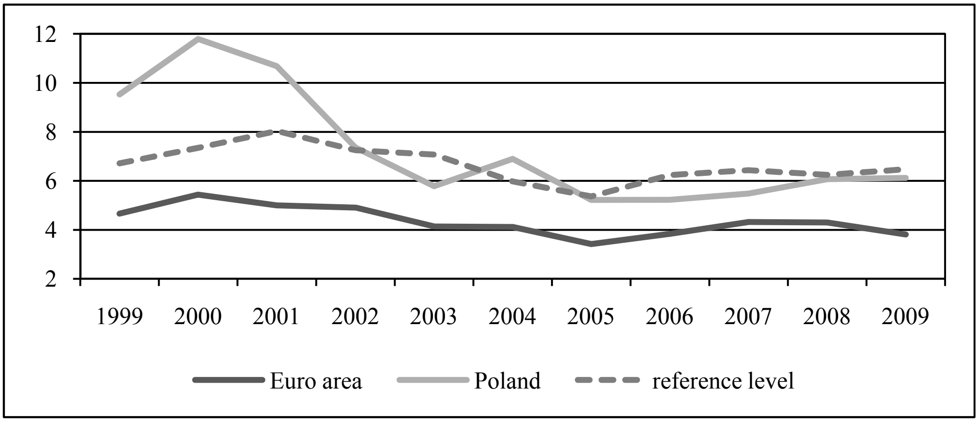

Figure 6. Long-term interest rates (10-year government bond yields), annual average (%)

Source: own study on the basis of Eurostat.

[10] European Commission, *Convergence*…, p. 141-142.
[11] Ibidem, p. 149.

rate has remained below reference level. In 2009 the average long-term interest rate in Poland amounted to 6.12% and was below the reference value of 6.47%.

2.4. Exchange rate

Since April 2000 Poland has been operating a floating exchange rate regime, with the central bank abstaining from currency interventions. However, exchange rate as the instrument still remains available. The zloty's exchange rate fluctuated significantly in the early 2000s (Figure 7 and 8). After the single currency was introduced, a depreciation trend was observed until Poland's accession to the European Union. Since 2005 volatility of Polish zloty diminished and the currency was appreciating till 2008. It was mostly because of strengthening the fundamentals of Polish economy and upsurge in capital inflows (stemming from both FDI and EU funds)[12]. Since September 2008 Polish zloty depreciated rapidly against euro as a consequence of the capital flow away (sale of assets denominated in high-interest rate currencies). The depreciation was also caused by changes in the economic environment, such as an increase in uncertainty on financial markets, stronger symptoms of economic slowdown in all key world economies as well as a considerable change in the conduct of monetary policy by central banks, resulting first in an increase and further in dramatic reductions in interest rates[13]. This volatility of zloty's exchange rate and recent depreciation caused not by fundamental factors, but increase in investors' risk averse appears to be especially challenging on the Polish road to ERM II.

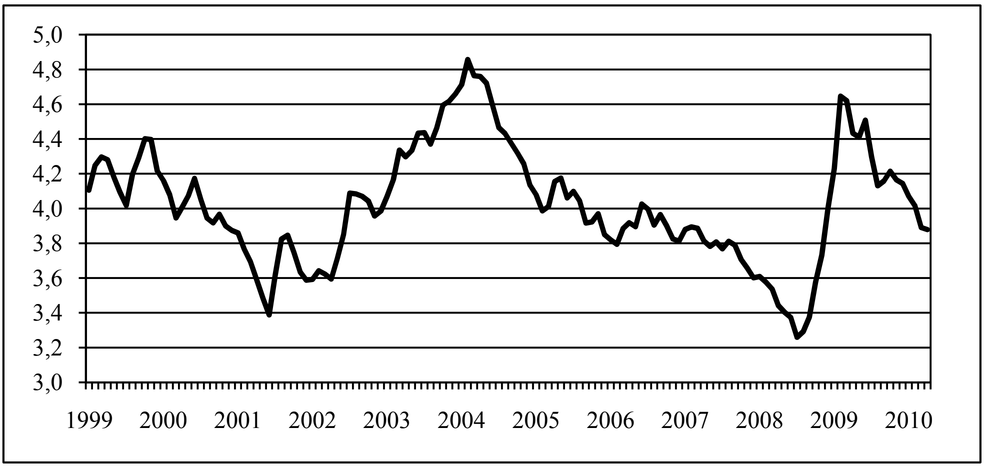

Figure 7. Nominal Exchange Rate of Polish Zloty (Euro/ECU exchange rate)

Source: own study on the basis of Eurostat.

[12] Ibidem, p. 148.

[13] National Bank of Poland, *Report…*, p. 356.

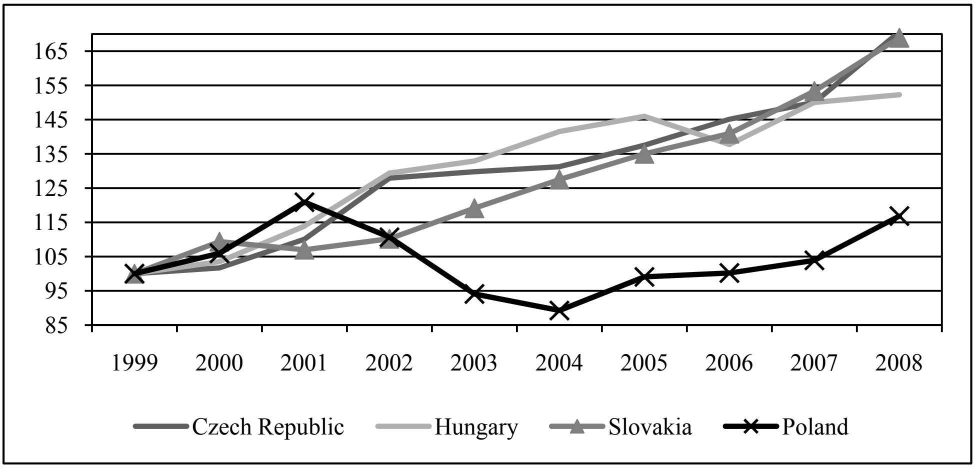

Figure 8. Real Effective Exchange Rate (1999 = 100)

Source: own study on the basis of Eurostat.

3. Costs and benefits from introducing single currency

Costs and benefits from introducing single currency have been defined and discussed many times since the beginnings of the *Theory of Optimum Currency Area*s. As a consequence, the decision about adopting euro is supported by the analysis of both costs and benefits as well as risks and chances. If the positive balance occurs and more benefits than costs are expected, it is reasonable to introduce the single currency.

The most common benefits from introducing euro are:

– elimination of transaction costs,
– decrease in long term interest rates,
– elimination of exchange risk,
– increase in savings and investment rate,
– intensification of international trade,
– decrease of inflation expectations,
– economic stability growth,
– price transparency and increase in market competition.

Some of the benefits mentioned above are not as much important as the others. What is more, their importance and scale of the observed phenomena vary depending on the country they occur in. Some of the benefits which were significant for the first EMU members might not be so much relevant for the new Member States. For example, first three benefits mentioned above have already occurred since Poland became a member of EU. Firstly, transaction costs, which mean cost incurred in currency exchange, are not as high as they used to be before euro was introduced. It has been estimated that at present total transaction costs account for 1% of EU countries GDP[14] which is actually not so much. Furthermore, these costs are constantly decreasing because of the introduction of electronic systems in the institutions engaged in the exchange process. Secondly, the decrease in the long term interest rates is not to be as much impressive as it seemed to be in the early 2000s. After a relevant decrease in interest rates which was observed during that period and Poland's EU accession in 2004, it has been stabilised below the reference value with no unexpected fluctuations. It might be presumed, that the further decrease is not going to be so much spectacular. Thirdly, entrepreneurs have developed many ways to minimize the foreign exchange risks including hedging, factoring, etc. What is more, settlements in euro are possible almost immediately after the EU accession which enables to eliminate exposure to exchange risk in transactions with the Eurozone[15].

The specificity of Polish economy as a catching up country implicates that the emphasis should be put on benefits like the increase in investment rate and savings rate, the increase in investment attractiveness and the increase in dynamic financial stability which means ability to maintain an acceptable level of economic balance in conditions of fast economic growth[16].

On the other hand, numerous costs of adopting euro should be taken into consideration. The most common costs and risks mentioned in literature are:

- resignation of independent monetary policy,
- risk of asymmetric shocks,
- social fears which might result in the increase of inflation expectations leading to unreasonable allocation and redistribution of income,
- costs of nominal convergence criteria fulfilment (both monetary and fiscal).

First of all, resignation of independent monetary policy means that the ECB's monetary policy might not be adjusted to the economic situation in Poland. The importance of the risk decreases when the synchronization of business cycles between the single country and the monetary union Member States is observed. However, numerous studies confirm that the level of synchronization between Poland's and EMU countries is sufficient[17]. On the other hand, regarding common monetary policy, effectiveness of adjustment mechanisms should be discussed. Especially important are fiscal adjustments which are limited by the convergence criteria and The Stability and Growth Pact. As a consequence, fiscal activities have to be compatible with an aim to provide stable finances. The impact of fiscal adjustments on society should be considered. If the adjustments involve the increase in taxes, more costs are borne by wealthier social groups, whereas adjustments made by the

[14] P. De Grauwe, *Economics of Monetary Union*, Oxford University Press, New York 2005, p. 63.

[15] *Rozporządzenie Ministra Finansów z dnia 4 września 2007 r. w sprawie ogólnych zezwoleń dewizowych* (DzU z dnia 18 września 2007 r.), http://bip.mf.gov.pl/_files_/informatory/prawo_dewizowe/15_11_ropo_zez_dewiz.pdf

[16] W. M. Orłowski, *Kto zyska na euro?,* http://www.nbp.pl/publikacje/o_euro/euro_5.pdf, p. 3.

[17] National Bank of Poland, *Report* …, p. 60-69.

reduction of expenses result in costs borne by a recipient of social transfers and low skilled workers[18]. In the Commission's opinion, the positive link between public investment and growth in Poland should be exploited more, in particular while counteracting a deep growth slowdown and, at the same time, seek to fully use EU funds to finance a large part of public investment. Being in the EDP, Poland should not increase expenditure, but take the opportunity to change its composition[19].

Another important issue, defined in Article 121 (1) of the Treaty, is price stability which means that inflation rate does not exceed by more than 1.5 percentage point that of, at most, the three best-performing Member States in terms of price stability[20]. Although the fact that Poland used to have problems in fulfilling the inflation criteria in the past[21], the challenge is not to fulfil them when it is needed in short term, but being able to maintain inflation below the reference level in the long term. Polish monetary policy focuses on the direct inflation target as an inflation rate of 2.5% ± 1 percentage point which enables to sustain inflation rate at quite low level. The question is then if the inflation criteria can be fulfilled in a long term. There are two major risks which might be significant for the scale of increase in inflation rate: price rounding and Balassa-Samuelson effect. So as to the first one, it has been estimated that conversion to euro notes and coins will increase the risk of inflation because price-setters use the opportunity of rounding the euro prices upwards. The maximum impact of price rounding on the CPI index was estimated at 0.23% for Portugal, at 1.7% for the Spanish economy and at 1% for the Italian economy[22]. However, other countries which entered EMU have not observed such a significant price increase (Greece -0.9%, Slovenia - 1.5%). It can be expected that the inflation rate will slightly increase in Poland and will be mostly observed in food price increase. Whereas price rounding is about to slightly affect the inflation rate in a short term, the second risk and its economic significance in the longer run may be greater.

4. Conclusion

The most serious of the post-war period crisis has changed the economic and financial landscape dramatically since 2007 exposing the fragility of the international financial system. Under this condition Poland's participation in ERM II and the accession to the euro area must have been postponed. Current economic situation and the turmoil in financial markets have undoubtedly delayed the moment when Poland is able to fulfill Maastricht criteria and even if the criteria are to be fulfilled soon Too early

[18] W. M. Orłowski, *Kto zyska*…, p. 6.

[19] European Commission, *Public finances in EMU European economy,* "Economy" 2009, No. 5, http://ec.europa.eu/economy_finance/publications/publication15390_en.pdf, p. 244.

[20] *The Maastricht Treaty...*

[21] European Central Bank, *Convergence Report May 2008*, http://www.ecb.int/pub/pdf/conrep/cr200805en.pdf, p. 46.

[22] National Bank of Poland, *Report*…, p. 216.

accession might weaken the ability to obtain potential benefits from the participation in the short term such as intensification of trade or increase in investment rate.

In the last prognosis of Commission[23] and ECB[24], the general economic situation in Poland is going to improve in terms of economic growth. Nevertheless, regarding possible increase in deficit and government debt within next years, the Ecofin Council decided to impose the EDP on Poland and set the deadline for correction for 2012. As a result, structural reforms are urgently necessary. Polish Ministry of Finance in response to the Council recommendation to end the excessive deficit situation till 2012 prepared Convergence Program with actualization made in February 2010[25]. Despite the fact that current situation may possibly reduce ability to carry out structural reforms the assumptions made in the Program are very optimistic and extremely challenging at the same time. There is a lot to be done in the next two years and especially ahead of and after presidential and general elections.

At the moment Poland does not fulfill any of the convergence criteria. The most challenging appear to be fiscal consolidation and stability of the exchange rate, as possibilities to stabilize exchange rate depend mostly on the central bank's monetary policy[26]. Taking these two into account, a reasonable plan on ERM II entry should be prepared soon.

Literature

De Grauwe P., *Economics of Monetary Union*, Oxford University Press, New York 2005.

European Central Bank, *Annual Report 2009*.

European Central Bank, *Convergence Report May 2008*, http://www.ecb.int/pub/pdf/conrep/cr200805en.pdf

European Central Bank**,** *Monthly Bulletin April 2010,* http://www.ecb.europa.eu/pub/pdf/mobu/mb201004en.pdf

European Commission, *Convergence Report 2008,* "Economy" 2009, No. 3, http://ec.europa.eu/economy_finance/publications/publication12574_en.pdf

European Commission, Economic and Financial Affairs, http://ec.europa.eu/economy_finance/sgp/deficit/countries/poland_en.htm

European Commission, *European Economic Forecast – Spring 2010,* "European Economy" 2010, No. 2, http://ec.europa.eu/economy_finance/publications/european_economy/2010/pdf/ee-2010-2_en.pdf

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[23] European Commission, *European Economic Forecast – Spring 2010,* European Economy 2010, No. 2, http://ec.europa.eu/economy_finance/publications/european_economy/2010/pdf/ee-2010-2_en.pdf, p. 126-128.

[24] European Central Bank, *Monthly Bulletin April 2010,* http://www.ecb.europa.eu/pub/pdf/mobu/mb201004en.pdf, p.76.

[25] Ministerstwo Finansów, *Program Konwergencji – Aktualizacja 2009, http://mf.gov.pl/_files_/raporty_analizy_statystyki/program_konwergencji/apk_aktualizacja_2009.pdf*

[26] A. Sławiński, *Znaczenie czynników ryzyka towarzyszących wchodzeniu Polski do ERM2 i do strefy euro,* http://www.nbp.pl/publikacje/wyklady/plslawinski_euro.pdf, p. 1.

European Commission, *Public Finances in EMU European Economy, "*Economy" 2009, No. 5, http://ec.europa.eu/economy_finance/publications/publication15390_en.pdf

European Commission, *Sustainability Report 2009*, "European Economy 2009, No.9, http://ec.europa.eu/economy_finance/publications/publication15998_en.pdf

Ministerstwo Finansów, *Program Konwergencji – Aktualizacja 2009, http://mf.gov.pl/_files_/raporty_analizy_statystyki/program_konwergencji/apk_aktualizacja_2009.pdf*

National Bank of Poland, *Report on Full Membership of the Republic of Poland in the Third Stage of the Economic and Monetary Union,* Warsaw 2009.

Orłowski W.M., *Kto zyska na euro?,* http://www.nbp.pl/publikacje/o_euro/euro_5.pdf

Rozporządzenie Ministra Finansów z dnia 4 września 2007 r. w sprawie ogólnych zezwoleń dewizowych (DzU z dnia 18 września 2007 r.), http://bip.mf.gov.pl/_files_/informatory/prawo_dewizowe/15_11_ropo_zez_dewiz.pdf

Sławiński A., *Znaczenie czynników ryzyka towarzyszących wchodzeniu Polski do ERM2 i do strefy euro,* http://www.nbp.pl/publikacje/wyklady/plslawinski_euro.pdf

The Maastricht Treaty; Treaty on European Union and the Treaties establishing The European Communities, Protocols Maastricht 7 February 1992, http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html

MAKROEKONOMICZNE PERSPEKTYWY I KONSEKWENCJE WPROWADZENIA EURO W POLSCE

Streszczenie: Celem artykułu jest zdefiniowanie kosztów i korzyści z wprowadzenia wspólnej waluty w Polsce, ze szczególnym zwróceniem uwagi na konsekwencje makroekonomiczne tego przedsięwzięcia. Główne zagadnienia obejmują: obecny poziom konwergencji nominalnej, bilans kosztów i korzyści istotnych z punktu widzenia polskiej gospodarki, jak również szanse i zagrożenia jakie niesie ze sobą wprowadzenie euro.

W artykule dokonano podsumowania perspektyw i możliwych konsekwencji z wprowadzenia wspólnej waluty, jakich należy się spodziewać oraz jakie należy wziąć pod uwagę przed przystąpieniem do systemu kursowego ERM II.