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Adhesion of Poland into EURO ZONE

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Abstract:

Poland has been a member of the European Union since 1 May 2004 and adoption of the euro by Poland is integral part of our Treaty of Accession. From the legal point of view Poland is already the member of the Economic and Monetary Union (EMU) but because has not completed the third stage of the EMU, we still can use our own currency – polish zloty.

On January 17, 2006 Polish Finance Minister Zyta Gilowska said in an interview that Poland will not adopt the euro before 2010, adding that 2011 was an achievable deadline. In October 2006, the Polish President Lech Kaczyński said in an interview with Spain,s El Mundo that euro entry" should be a subject submitted to a referendum, which would take place at the end of his legislature, which ends in 2010 (1). Polish Prime Minister Donald Tusk said during the Economic forum in Krynica that Poland would adopt euro in 2011 a year before the European football championship organized together by Poland and Ukraine. In November 2008 Polish Government accepted so called road map to introduce euro by 2012. Firstly, Polish zloty should join the ERM 2 system which was planned in the middle of 2009. Secondly, after accomplishment convergence criteria in 2011, Poland is going to fix the permanent exchange rate between polish zloty and euro. Thirdly, introduction of Euro and withdrawal of polish zloty is previewed on 1 January 2012. The prices on polish market are going to be presented in two currencies (polish zloty and Euro) during six month. However, before Poland will join the euro zone , the Polish Constitution has to be amended to give the European Central Bank the right to print and distribute euro as a national currency. In connection with the world financial crises and suddenly devaluation of polish zloty most economist agree that government plan of euro introduction in Poland is too rushed and not realistic and adhesion of zloty into ERM 2 system should be delaying.

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1. Poland as an optimal currency area

Before adoption of euro the fundamental question arises if Poland constitutes the optimal currency area with the Euro zone partner countries according to Mundel theory of optimal currency area?

Firstly, according to the theory of optimal currency area there are obvious attractions to having single currency for countries that have high levels of mutual trade. It is said that the welfare gains from adhesion to the monetary union are likely

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to increase with the degree of openness of an economy. So with an increasing openness of polish economy towards the other partners in the union, the gains from monetary union increase. The Polish economy has increased its commercial openness at a relatively fast rate from the beginning of transformation processes: in 1990 the export of goods and services was constituted only 14,9% of polish GDP and import 16,5% but in 2007 it increased to 46,9% in export and 51,5% in import. As we compare the data of the table 1 we can conclude that Poland is now the open economy to international trade. We see that participation of international trade in GDP in Poland is far less then in Belgium, the Netherlands, Czech Republic , Hungary, and a small countries as like Slovakia, Slovenia, Estonia, Luxembourg , Malta but more then in such developed and active on the international scene economies as France, Italy, United Kingdom, Spain. Poland with participation of export plus import in GDP at 69,9 % is placed in the same group " medium open EU countries " to international trade together with Germany, Finland, Portugal, Denmark and Sweden which are intensively engaged in international division of labor. Three of them: Germany, Finland, Portugal are already member of the Euro zone from the 2002 year.

TABLE 1: Participation of international trade in GDP in billions euro in the EU members countries in 2006

EU members countries	Import	Export	GDP	% import + export in GDP
1. Austria	111,7	111,8	256,7	87%
2. Belgium	281,7	294,0	314,1	183,2%
3. Bulgaria	15,3	11,7	25,1	107%
4. Cyprus	5,5	1,0	14,5	44%
5. Czech Republic	74,2	75,8	113,1	132,6%
6. Denmark	68,6	73,7	219,5	64,8%
7. Estonia	10,3	7,5	13,1	130,8%
8. Finland	54,9	61,4	167,9	69,3%
9. France	425,5	389,9	1792,0	45,1%
10. Germany	723,7	885,6	2309,1	69,6%
11. Great Britain	483,0	354,9	1892,2	44,3%
12. Greece	50,4	16,6	195,2	34,3%
13. Hungary	61,3	59,3	89,9	134,1%
14. Italy	348,3	327,0	1475,4	45,7%
15. Ireland	57,9	89,6	175,8	83,9%
16. Lithuania	15,4	11,2	23,7	112,2%
17. Luxemburg	21,2	18,2	33,1	119%
18. Latvia	9,0	4,9	23,7	85,8%
19. Malta	3,2	2,1	5,1	103,9%
20. Netherlands	331,4	368,2	527,9	132,5%
21. Poland	**100,8**	**87,9**	**269,8**	**69,9%**

22. Portugal	53,1	34,5	155,2	56,4%
23. Romania	40,7	25,9	97,1	68,5%
24. Slovakia	36,5	33,2	43,9	107,3%
25. Slovenia	19,2	18,5	29,7	126,9%
26. Sweden	100,7	117,4	306,0	71,2%
27. Spain	252	163,6	976,2	42,5%

Source: *Poland in the EU, Główny Urząd Statystyczny, Warsaw 2007.*

Moreover, since accession to the EU Poland became the member country of the EU showing the highest dynamics of growth of export among the partners: in 2004 the export of goods from Poland grew by 27%, ahead of Czech Republic- 26%, Lithuania and Estonia and far ahead of the old member's states : Germany, Holland Austria showing 10% growth of export, in 2005 polish global export grew by 19,6 % to 71,39 billion euro and in the same time global import from third countries to Poland grew by 13% to 80,64 billion euro, in 2006 global export increased by 22,6% – equaled 87,9 billion euro and import by 23,2% to more then 100 billion euro. In 2007 Poland continued fast growth of international trade: export increased by 12.5% to 114,6 billion euro and import increased by 15,7% to 139,3 billion euro. Polish export was directed in more then 77% to the EU and more then 73% of polish import were coming from the EU member countries. From 10 greatest our export partners 8 belong to the EU (see tab. No 2) From 10 greatest polish supplier 7 belong to the EU. So we are heavily dependent on the European single market as well as export and import is concerned and taking into consideration the relatively high participation of international trade in polish GDP one can say that our development is closely interrelated with the economic progress of our EU partners.

TABLE 2: Main polish partners in trade in 2007-2008

Country	**Export in billion euro in 1-VII 2008**	**in % 2007**
1. Germany	16,74	26,1
2. Italy	4,32	6,8
3. France	4,29	6,2
4. Great Britain	3,86	5,9
5. Czech Republic	3,73	5,6
6. Russia	3,53	4,4
7. Holland	2,63	3,9
8. Ukraine	2,59	3,7
9. Sweden	2,14	3,2
10. Hungary	1,92	2,9
Import in billion euro and %		
1. Germany	18,73	24,3

2. Russia	8,08	8,3
3. China	5,83	6,6
4. Italy	5,32	7,2
5. France	4,01	5,3
6. Czech Republic	2,98	3,6
7. Holland	2,67	3,5
8. Great Britain	2,23	3,1
9. Belgium	1,91	2,6
10. Republic of Korea	1,89	2,1

Source: *GUS. Foreign trade turnover in total by countries, January-June 2008 Warszawa 2008.*

The transitional costs of establishing monetary union between Poland and euro zone will be lower if business cycles among the partners are broadly synchronized. The business cycles between two economies may be synchronized when they have the similar economic structure and similar economic policies. When we look at the structure of polish economy and the economies of countries of Euro zone it is hardly to say that Poland has the same production structure that the most developed countries of the Euro zone. The participation of agriculture in economy is much higher in Poland (18 % of labor force, more then 4% of GDP) then in Germany, France, Italy, Spain), industry employees relatively more workers and services less. In the industry production our specialization is concentrated mainly on the labor intensive goods and weak and medium technologically advanced goods. Poland has particularly strong performance in manufacturing in terms of growth of value added and productivity, while the most developed euro zone countries exhibit the most dynamic development in terms of value added and labor productivity in the services industries. Textiles, clothing, leather, basic metals , all of which rely upon old technological production method are treated as declining industries in euro zone countries, but in Poland declining industries are mainly shipbuilding, military sector, coal mining. The strong value added growth in euro zone countries is concentrated in electronic components, communication equipment, computers and office machinery, pharmaceutical, so in high technologically manufacturing sectors but in Poland the strong performance is less concentrated in high-tech industries, with high growth also in wood products and furniture, non metallic mineral products, audio visual apparatus , motor vehicles (2).

As we see in tab. no 3 in 2007 in trade with EU 15 member countries Poland showed a revealed comparative advantage in trade of raw material- intensive (15,5% of export), labor- intensive (26,4 % of export), and capital- intensive (26,2% of export) goods , accompanied by disadvantage in trade of technology- intensive goods: easy to imitate (9,6% of export) and difficult to imitate (22,2 % of export). Despite similar directions of evolution in the structure of Poland's intra – EU trade according to the intensity of factors of production in 2000- 2007, the structure of polish export with the EU partners was still different then the intra EU polish import. Poland export to the EU more then import labor intensive goods, capital intensive goods and raw material- intensive goods, but import more from the EU then export technology intensive goods, especially easy to imitate. Although the share of labor intensive goods and raw material – intensive decreased further in polish export in the whole period 2000- 2007, there had been still more important in polish export to the EU then in polish import. This decrease of exports of raw material- intensive and labor intensive goods in global polish export to the EU was in favor of capital intensive goods. In 2000 – 2007 the increased importance of capital- intensive goods had been linked specially with fast growth of export of road vehicles and their parts and components. In 2006 Poland exported automotive products to the values of Euro 14 billion (95% of all motor vehicles produced in Poland) that is 16% of total Polish export, which is composed of private motor vehicles - 38% , automotive parts and components - 28% and automotive diesel engines - 20 % (3). Technologically intensive goods played key role in Polish imports from the EU. In 2006 in Poland share of high- technology export in total export was 2,3% , but in Germany 15,35%, France 20,07%, Ireland 29,08%, Austria, 14,74%, Belgium 7,12%, Italy 7,08%, Netherlands 19,1%, Finland 17,77%, Greece 7,12%, Spain 5,7%, Portugal 7,49% (4) . Moreover patent application per one million inhabitants to EPO (European Patent Organization) reveals huge gap in innovation activity between Poland and the better developed EU countries: while Germany registered 269,3 applications, Finland - 223,2, France- 115,2, Netherlands- 165, Belgium – 124,6, Italy- 71,8, Spain 26,4%, Ireland 57,7, Poland only 2,3 (5).

TABLE 3: Structure of Poland's intra –EU trade by factor of production in 2000- 2007.

Type of products	2000		2007	
	Export	Import	Export	Import
Raw material –intensive	14,8	9,8 (+5)	15,6	11,6(+4)
Labor intensive	35,4	25,5 (+9)	26,4	20,2 (+6,2)
Capital intensive	22,0	20,5 (+1,5)	26,2	25,0 (1,2%)
Technology intensive:	27,8	44,7 (-16,9)	31,6	42,2 (-10,6)
- easy to imitate	6,6	16,4 (-9,8)	9,6	16,4 (- 6,8)
- difficult to imitate	21,2	28,3 (-7,1)	22,2	25,8 (-3,3)

Source: *J. Misala, Competitive Position in External Economic Relations, Poland Competitivenes Report 2008, Warsaw 2008, p.72*

Universally acceptable measure of similarity and dissimilarity of economic structure of countries engaged in the international division of labor is the degree of their intra-industry trade. The calculation of intra-industry share in trade between Poland and the EU shows that the intra-industry trade coefficient increased from 10% in 1988 in trade with 12 EEC members state, to almost 19% in 1995 in trade with UE 15 and to 28,3% in 2000 in trade with EU 15 to 36% in 2006 in trade with 25 EU members states. This progress point out more and more convergence of the economic structure of Poland and the EU partners countries. But the level of intra industry trade between Poland and the EU is still lower then in trade between 15 members states: at least two times less then for example in France, Germany, Belgium, half less then in trade of Italy, and on the same level that in two less diversified economies of the EU: Portugal, Greece (see table 4). Moreover, the intra- industry trade between Poland and the EU members states has mainly the form of vertical intra-industry trade: export of low-quality intermediate/ final goods and the import of high-quality intermediate and final goods (53 %) then horizontal intra-industry trade: exchange of varieties of goods with similar qualities . In the period 2000- 2006 the share of intra-industry trade in Poland's trade of goods with EU 15 increased by 7,7% : from that by 0,5% the share of horizontal trade and 7,2% the share of vertical trade. Although the continuous modernization coupled with an inflow of foreign direct investment brought some improvement in our economy, Poland has still failed to have the same modern industrial structure to develop intensive horizontal intra industry trade with the better developed the EU 15 (6).

TABLE 4: Intra-industry trade (IIT) as a percentage of Poland's trade With the EU15 in comparison with the others 15 members states in 2000 m-2006

Intra-industry trade in % of global trade	Year 2000	2006
1. Poland	28,27	**36,0**
IIT horizontal	6,07	6,57
IIT vertical	22,19	29,41
2. France		83
3. UK		77
4. Belgium – Luxemburg		77
5. Germany		76
6. Spain		64
7. Ireland		62
8. Italy		57
9. Denmark		57
10. Portugal		37
11. Greece		31

Source: *Poland Competitiveness Report 2008, Warsaw 2008, p.89*

In such economic structures the business cycles between Poland and the EU member countries are not perfectly synchronized. Meanwhile the objective of the ECB is shared and the effects of the common monetary policy are the same on each state. For example, in response to an inflationary shock, the ECB would rise the interest rate and reduce aggregate demand. If the inflationary shock is common to Poland and the members of Euro-zone and the interest-sensitivity is the same and the countries have the same aversion to inflation, then it makes no difference whether the optimal response is taken by the ECB or by National Bank of Poland. But in the case of asymmetric shock it makes impossible for the ECB to find a monetary policy that fits Poland and the other members of the euro zone. In the scenario of higher inflation Poland needs also higher rate of interest and tighter money supply then euro zone. On the opposite in lower inflation, lower economic growth and higher unemployment Poland needs lower interest rates and more expensive economic policy.

The Mundell theory of optimal currency area assumes also that countries which form monetary union should have the same political preferences concerning the goal of their economic policy. Otherwise say, they should follow the same monetary and budgetary policy to fight against inflation unemployment, external equilibrium and monetary crises. It is obvious that members of the Euro zone and the European Central Bank in Frankfurt gave a high weight to reducing inflation. The question arises if Poland deflation policy has gained also the same highest importance in our economic policy. At the beginning of the transformation processes: December 1989 yearly inflation in Poland was 639,6% and subsequent Balcerowicz reform put fight against inflation at the center of his policy . Rate of inflation in Poland gradually diminish in 1990-ties obtained the 1,4% in 2006, the third lowest level among the EU member countries. As Polish Central Bank and the polish government are fully aware of the negative consequences of the high unpredictable inflation, hence monetary stability is treated as a primary goal of our policy and there are not many differences in these maters between policy of the European Central Bank and Polish Central Bank. The same is now with the goal of taking effective measure towards negative consequences of financial crises.

According to the R. Mundell theory a monetary union between countries is optimal if: a) the countries have sufficient wage flexibility; b) there is high mobility of labor between them. Country in which the degree of wage and prices rigidities is low experience lowers costs when it moves towards a monetary union. When countries and regions experience a high divergence in output and employment and if they want to avoid major adjustment problems then they need also a lot of flexibility in their labor markets after forming the monetary union. If labor markets are flexible, then there is not need for active stabilization policy to deal with asymmetric shocks. But the larger is the degree of real divergence, the greater is the need for flexibility in the labor market. The time it takes for equilibrium to be restored depends critically upon nominal wage flexibility (7). It is said that the major difference between the USA and the EU seems to be the degree of flexibility of labor market (8). Additionally it helps the adjustment problems in monetary union if the common budget is equipped in large common resources so that important economic transfer can be organized smoothly between them on the occasion of economic crisis or recession.

It seems to be difference in the flexibility of the labor market in Poland and the other European countries: wages in Poland are rising progressively and respond less or even minimally to the unemployment phenomenon on the internal market. Overall one may said that in the period of accession to the EU polish employees earned at least three times less then the workers in the old 15 member states. When adjusted to take into account differences in purchasing power in 2008 minimal wages in Poland (334 euro per month) were more then 4 times lower then in France (1321 euro), Belgium (1336), Holland (1357), Ireland (1462) and more then three times less then in UK (1148) and about two times less then in Spain (700) (9). Moreover the opening of the European labor market will force employers in Poland to pay workers more to keep them in the mother country. Last year wages in Poland in industrial sector grew by 10 % to attain average level 3,215,3 (, more than 900 euro) in May 2008. Due to the lower wages and labor migration Poland even started to face cute problems of labor shortages and 14% of polish entrepreneurs reported in the middle of 2008 that they suffering labor shortages (especially construction, furniture, lumber industry). In April 2008 the wages in Poland's corporate sector, which employed more then 9 workers rose to 12,6% on the year by year basis (9). In 2008 really average wage and salary have increased by 6% as compared to 2007 (10).Dynamic wage growth, which are not matched by labor productivity threatened to recurrence of inflation. However It is not possible, that the wages in Poland will be growing also so dynamic in upcoming years and the gaps with the EU -15 members states are not going to shrink. In 2009 unemployment in Poland surpassed 10% The workers union especially Solidarity are strong enough to demand higher and higher wages for the members who are in the firms. On the other side they block the outsiders' potential workers to get in the industry to take up job on the less expensive conditions. The less elasticity of polish labor market showed the facts that in the times of financial crises the coal miners' labor unions organized strikes in two biggest coal mining enterprises: Katowicki Holding Węglowy and Kompania Węglowa to demand the rises in wages for 12% in first case and for 14% in the other. Therefore we can say that wages in Poland are not elastics but they are subject to continuous pressure to growth (11).

Labor mobility provides an alternative to wage flexibility as a way of absorbing asymmetric shocks with workers moving from depressed regions to prosperous one. Taking into consideration the emigration after adhesion of Poland to the EU one may said that polish labor force is very mobile and got used to free access to the European single market. Up to 2008 all the EU countries except Germany, Austria, Denmark, Belgium has opened their labor market to the emigration from Poland and the other new members countries. After enlargement of the EU in 2004 Polish citizens has constituted the primary source of labor migration between the EU-10 new members and the EU- 15 countries. According to assessment of Office of the Committee for European Integration during the years after accession the number of Polish citizens working in the EU countries had been increasing steadily: from 650 000 in 2004, to more then 700 000 in 2005 and some 800 000 – 900 000 in 2006 and even 1 million in 2008. As we see in tab. 3 the member countries with significant numbers of employed legally Polish citizens included: Germany, UK, Ireland, Netherlands, Spain and Italy. After adhesion to the EU the greatest emigration flows from Poland directed to United Kingdom: British Official statistics suggest that 228 000 Poles registered to live and work in UK, other estimates suggested that real figure were between 350 000 and 500 000, some newspapers said even about 600 000 – 800 000 Poles living in the UK, but this numbers includes also temporary emigration and short time visitors.

TABLE 3: Polish legally employed citizens in the EU member countries in 2006-2007

1. United Kingdom	430 000
2. Germany	250 000
3. Ireland	100 000 – 120 000
4. Italy	50 000
5. Netherlands	70 000
6. Spain	65 000
7. Czech Republic	21 000
8. Austria	10 000
9. France	9 500
10. Sweden	5 000

Source: *Trzy lata członkowstwa Polski w Unii Europejskiej, Urząd Komitetu Integracji Europejskiej, Warszawa 2007, s.56-57, 4 lata członkostwa Polski w UE, Urząd Komitetu Integracji Europejskiej, Warszawa 2008, s.38-39.*

2. The Maastricht criteria

Article 109j of the Maastricht Treaty contains five criteria which any candidates, also Poland must fulfill before to go into euro zone:

1. Achieving a high degree of price stability, which according to the protocol of Maastricht says: member state eligible to the monetary union has a price performance that is sustainable and an average rate of inflation observed over a period of one year before the examination, that does not exceed by more than 1,5% points that of, at most, the three best performing EU Members States in terms of price stability (12). The assessment of price stability and inflation convergence shall be measured by means of the harmonized consumer price index (HICP).

2. Achieving a sustainable financial position: at the time of the examination the member State cannot be the subject of a Council decision that excessive deficit exists. Because inflation is typically the result of large budget deficit, budget deficit under the Maastricht should not exceed in market prices the limit 3% of the GDP. A deficit above 3% may be regarded as acceptable if it is something unusual or something transitory. According to so called German golden rules the budget deficit to this limit may be allowed as a source of economic growth and additional income especially if it correspond to public investment spending on roads, telecommunications and other infrastructures (German golden rule) (13).

3. The total outstanding government debt must not exceeding 60% in market prices of the GDP. However the 60% limit on debt may not apply where:” the ratio is sufficiently diminishing over time and approaching the reference value at

a satisfactory pace (article 104c. 2). The 60% debt limit can be seen as compatible with a deficit debt ceiling of 3% of GDP.

4. Applicant country should have joined the exchange-rate mechanism (ERM II) under the European Monetary System (EMS) for two consecutive years, which means that member state has respected without severe tensions the normal fluctuation margins (firstly 2,25%, next enlarge to 15%) . In particular, the Member State shall not have devalued its currency rate against euro on its own initiative for this period.

5. Achieving a long term interest rate of durable convergence that means over a period of one year before the examination applicant country to Euro zone has an average nominal long-term interest rate that doesn't exceed by more than 2 percentage points that of, at most, the three best performing EU member States in terms of price stability. Long term interest rate mostly reflects markets' assessment of long term inflation. The assessment of the criterion is based on the interest rates on comparable 10-year benchmark bond, using an average rate over the latest 12 months.

The theory of optimal currency area stresses the need to labor market flexibility and labor mobility as a precondition of forming successful monetary union. On the other hand the Maastricht Treaty stresses the importance of macroeconomic convergence prior to adhesion to the Euro zone. In connection with the conversion criteria the question arise what is the polish economy macroeconomic situation. If Poland qualify to respective Maastricht criteria taking into consideration the level of yearly inflation, budgetary deficit, public debt, long term interest and currency rates.

TABLE 5: Polish macroeconomic situation in the view of Maastricht criteria.

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
1. Inflation rate	10,1	5,5	1,9	0,8	3,5	2,1	1,4	2,2	4,1	2,9
2. Budget deficit							-3,7	-3,1	3,9	4,6
3. Public debt						51,1	49	44,9	45,2	47,7
4. Long term interest rates							5,6	5,84	4,25	4,00

Since the beginning of 2004, the National Bank of Poland (NBP) has pursued a continuous inflation target at the level of 2,5% with a permissible fluctuation band of -+ 1 per cent. The NBP maintains interest rates at a level consistent with the adopted inflation target. As we see from the table 5 Poland was a high inflation country at the beginning of the 21 century and after restrictive and long lasting deflationary policy was able to reduce inflation rates to 0,8% in 2003, 1,4% in 2006. In 2006 Poland was among three EU members countries indicated the lowest rates of yearly inflation. In the period 2005 -2007 Poland qualified without any problems to the inflation criteria fixed by the Treaty of Maastricht: 2,7% in 2006 and 2,9-3,0 in 2007 having inflation rates distinctly lower then calculated limit. However, in the year 2008 Poland was affected by the recurrences of inflation processes, and in March was not able to keep inflation within the Maastricht bounds and surpassed it by 0,1%. In the first half of this year, in comparison to the corresponding period of 2007 year, the growth of consumer goods and services prices amounted to 4,2%. It was previewed that at the end of 2008 inflation in Poland would reach the level of 4,8 %. But after financial crises inflation pressure in Poland was reduced and its rate decreased at the end of the year to a lower level then preview of about 4,1%. Economic crisis and an economic slowdown will bring down the inflation rate further more in the following years: according to the prognosis by Polish Monetary Council to 2,9% .

If Poland enters to the euro zone, the rates of inflation must be nearly equal with partner's countries. If this is not the case, inflation in Poland occurs to be higher then in euro zone, Poland will increasingly lose its competitiveness position. However high- inflation country might decide that it is in its interest to join a monetary union despite the fact of the asymmetric shocks to reduce inflation and interest rate. Although in the long run countries cannot really choose between inflation and unemployment, it is said that the short-run Phlilips curve is still alive. If Poland would like to reduce inflation to fast, it will most probably be faced with a temporary increase in the unemployment rate. Moreover, as we know from Balassa-Samuelson effect members countries with lower productivity face mechanically pressure to appreciate their real of exchange after joining the monetary union (14).

As we see from table 6 inflation growths in Poland in 2007 and 2008 was due mainly to the growth of prices of non- alcoholic and alcoholic beverage, tobacco (milk, cheese), vegetables, electricity, oil and gas. Prices of food and non-alcoholic beverage, as well as goods related to housing were raising the most. In manufacturing prices grew slower then in total industry, in construction and assembly prices grew by 6,5% during the first half of this year. To these all around the world effects imported from abroad we must also adds our internal reasons, namely the increase by 7,4 % the purchasing power of average monthly gross wages and salaries in the enterprise sector during the first half of this year, which gave also the pressure to growth local demand. These growths of prices were not fully decompensated by the reduction of prices of clothes, AGD apparatus, or telecommunications fees and recreation and culture. We expect continuously slower growth of inflation in the next 2009 due mainly to the slower growth of domestic and foreign demand and drop of prices of oil and gas on the world market.

TABLE 6: Changes of prices in percentage of some goods and services in Poland in the period 2006-2008

Goods	December 2006	December 2007	Jan- May 2008
1. Food, non-alcoholic and alcoholic beverages, tobacco			6,9
2. Bakery goods	6,4	11,8	3,3
3. Meat products	0	4,2	1
4. Fish	1,6	2,1	1,4
5. Milk	1,1	16,2	1,8
6. Cheese	0	18,5	-2
7. Vegetables	10,9	-2,6	12
8. Clothes	-6	-5,8	-3,2
9. Housing, water, electricity, gas and other fuels			7,5
10. Rooms ‘ rents	4,1	6,2	2,7
11. Electricity	4,2	1,6	11,5
12. Gas	15,8	4,8	10,9
13. AGD apparatus	-1,8	-1	-0,6
14. Pharmaceutics	0,8	3,1	1,4
15. Bus transport	1,3	2,4	2,8
16. Telecommunication	1,8	-2	0,3
17. Communication			-1,7
18. Recreation and culture			-2,0
19. Education			3,1
20. Restaurants and hotels			5,5
21. Miscellaneous goods and services			1,7

Source: *Rzeczpospolita, Warsaw 24 July 2008, GUS Statistics, 2008*

After credit crunch crises which started in the US October 2008 economists asses that commodities prices would plunge all around the world. In these circumstances the inflation risk will be reduced not only in the US but also in the EU and Poland as well. The statistical data in September – November 2008 confirms that the inflation growth trend has slowed. The Polish Ministry of Finance has announced that inflation is around four percent in December in 2009. With assets prices plummeting and economies shrinking not inflation pressure but reduction of production and growth of unemployment may be the biggest worry in 2009-2010.

EU hit Poland with the procedure of excessive budget deficit shortly after adhesion in May 2004 because the polish deficit exceeded the 3.0 percent rule. Three years later the European Commission called on Poland's partners to drop disciplinary action: the Commission said that Poland had brought its fiscal shortfall well below the limit and estimated it would stay in line in. It should be underlined that polish government was serious about commitment to medium-term convergence program and it is planning to drastically cut its budget deficit. . Finance Minister Jacek Rostowski said that the budget deficit will be cut to 18,2 billion zlotys (8,2 billion US dol) from 27 billion (12 billion US dol.). During the first half of 2008 year, the revenue of the state budget amounted to PLN 127 572,9 million, while expenditure was at PLN 131 029,2 million, so the recorded state budget result at small deficit of 3 456,3 million. (15). If the positive tendency would have continued and low deficit target program succeeded the overall government deficit in Poland might have even drop to 1, 9% in 2008 and 1,0% in 2009 in relation to GDP. But at the end of the 2008 year the economic slowdown had hit the state budget, and in a situation where revenues were less than foreseen, the public sector deficit grew to 3,9 in relation to the GDP. In growing public deficit it was natural to limit expenditures. Expensive health care, education, state administration systems present a main barrier on the road to lowering budget deficit. To rescue the budget balance in 2009 the polish government declared the saving program to reduce the budget spending by 19,7 billion zloty, which encompass several ministers: ministry of defense (1,95), ministry of internal affairs and administration (1,21), health (1,89), science and education (0,87), ministry of justice (0,59), ministry of Finance (0,53). However in the conditions of slower economic growth the pressure would arise to enlarge budget deficit, so it might be difficult to sustain budget much lower then limit of 3% of GDP. After the financial crisis and slowing down the economic growth tax take is falling, exposing unreformed polish public finances. With the huge weight of fixed expenditures of about 75% of the budget, the government by law can only reduce the spending from the position covering by the rest 25%. In 2009 we have the budget expenditure for about 321 billion PLN and about 80 billion is the so called flexible part of the budget. According to opinion of economists the 2009 budget was based on completely unrealistic assumptions. Although economists have long dismissed the risk of Poland falling into turmoil caused by the financial crisis, GDP growth has since been downgraded and many have now taken a more pessimistic view of the Polish economy over the next years. The Finance Ministry predictions for 2009 of 3,7 growth of GDP had been roundly criticized and revised into 1,7% GDP, growth (16). It is worth to add, that independent economists predict that 2009 could bring economic growth closed to zero. With slower economic growth, lost jobs, less export and import, increasing conservative in credits, the budget deficit would be definitely bigger than previewed. According to government prediction it may grew to the level of 4,6% in relation to the GDP (Rzeczpospolita 23 kwietnia 2009, B2).

It should be underlined that the policy of budgetary restraining is being questioned in the face of financial crises which reach also polish economy. If economic growth turns out to be clearly lower, the budgetary income will be lower than assumed budgetary plan. Dropping of production and rise of unemployment is imposing new task for public policy to additional spending. It would be difficult to keep the budget under control if we had a economic slowdown. Critics says that budget deficit should have been left on the same unchanged level as year before or even increase to offset consumption decrease and that in 2009 there will be necessity of fiscal policy revision. The shortfall is not likely a few billion zloty, but tens billion of zloty. There is pressure from the opposition to enlarge the budget deficit above 3% of the GDP to 3,6% in 2009 as a means to fight against growing unemployment. This deficit will be out of Maastricht limit in 2009, but still lower then forecast by the IMF for France – 5,5%, UK – 7,2% and the United States 12% (17) Without loosing of rules of Maastricht criteria increasing budget deficit means that Poland would have to give up its intention to join the euro zone in 20012 . In the time Poland will act in compliance with when the many EU countries normally make in a recession. If the lower spending needed to satisfy the entry criteria is not the choice. However, with growing budget deficit one can forget 2012 for euro accession, and the 2013 scenario will depend on the prospect for economic growth.

On November 2008, the Commission elaborated a comprehensive 200 billion recovery plan (1,5% of the Unions GDP) which complements the financial markets and is mostly funded at the national level (170 billion) (18). Because exceptional times call for exceptional measures, there is also a question about application Stability and Growth Pact to the euro zone member countries in the time of fighting against financial crises. Fiscal policy would likely lead not only new members countries of the EU, but also some euro zone partners to breach the 3% of the GDP Maastricht deficit threshold.

Poland meets also Maastricht public debts criteria. According to estimates by states office GUS public debt has been diminished from more then 50% in reference with GDP in 2005 to 45,2% of the GDP in 2008. Polish government tried to do the best to curb growth in public debt to make it save for financing and to limit huge financing that are currently being spent on debt servicing. But sudden depreciation of polish zloty has made of covering the interest rate from foreign debts more and more difficult. In 2008-2009 Poland was struck by the financial crisis as well as in the other economies of the EU and all around world. While there was economic slowdown, rising unemployment, dropping export, the financial system avoided completely falling down like in Iceland, Ukraine, Baltic's states or Hungary. The banking sector in Poland is still underdeveloped in comparison to the other well developed countries, what is minimizing the impact of any negative fallout from global financial turmoil. For example, the amount of assets held by the polish banking sector in relation to GDP is about 60%, whereas in Iceland, which was seriously damaged by the crisis is approximately 900% (19) . Despite the fact that Poland is trying to restrict the size of public deficit, the cost of its serving is becoming more and more increasing. Although international financial markets have continued to have confidence in euro zone countries and US, they do not have they confidence in Central – European emerging economies. If the government decided then to abandon euro in 2012 and to increase the budget deficit, on the other hand it could lead to large increase in the cost of serving public debt and further growth of budget deficit.

In the past large differences in the interest rates between Poland and the Euro zone created large disturbances in polish capital market due to the inflow of foreign speculative capital and appreciation of polish zloty. In order to limit this eventuality polish interest rates should be nearly the same as the Euro zone rates taking into consideration the differences in the inflation rates on the day of adhesion. On 25 June 2008 Polish central bank (NBP) hiked its key reference rate by 25p to 6%. The hike comes as the Polish economy continues to grow due to domestic demand, wages were growing strongly and inflation was expecting to come up to 5%. However, the monetary tightening cycle in Poland has drawn to close after the global financial crises Polish Monetary Council has changed in November 2009 the approach to monetary policy from restrictive to neutral preparing the ground to postponing monetary tightening. So just after that Council of Monetary Policy in Poland reduced interest rates by 0,25 points to 5,75 and in December 2008 by 0.75 points to 5%, and to 4.25 in January 2009. In February 2009 it reduced the rate of interest by 0,25 to 4.00. The condition for Poland to following the EU example and reducing even more their interest rates is the stabilization on the currency markets. In the case of stopping and reversal the tendency of devaluation of zloty in the year 2009 – 2010 Poland can stick to the Maastricht criteria regarding long term interest rates without many troubles.

Meeting the exchange rate stability criterion is one of the conditions of joining the euro zone. Since April 2000 the zloty exchange rate has been a floating exchange rate that is not subject to any restrictions. Therefore before the adoption of the euro, the zloty exchange rate against the euro remains fixed for at least two years within the ERM II (Exchange Rate Mechanism II), which means that the NBP will maintain the market exchange rate against the euro within the permissible range +-15% with regard to the set central parity. However there is the risks of entering to the ERM –II where currency will be put under the exchange rate test without fiscal and external payments deficits under control. Some economists think that it would not be desirable to enter the ERM II when currency markets are so shaky. From the day of adhesion of Poland to the EU to the middle of 2008 zloty has become the currency of more and stronger: 40% stronger in relation with euro. However in November 2008 after the global crises zloty hast lost his value due to sudden devaluation by 20% from 3,2 zloty to Euro to 3,97 zloty to Euro and in December even to 4,20 by more then 30% and next up to 4,5 zloty per one euro. The situation was not calmed down following an annunciation by the National Bank of Poland that the macroeconomic fundamentals remain strong and stable. In the beginning of 2009 the rate of exchange reached the level of 4,82 zloty per one euro. February

2009 was a month of crisis for the polish currency, with zloty hitting 4.899 for one Euro. Exchange rates against US dollar was 3.82 and Swiss franc 3,26. Depreciation of polish zloty was especially dangerous in reference with Swiss franc, because some 30% of polish mortgage holders are estimated to hold them in this currency. It is common opinion, that the weakening of the zloty is not longer linked to the economic situation, but it has become a result of speculation games.

After these financial turbulences we can expect the recurrence of new equilibrium on the financial market. In 2008- 2009 the flight of short term capital, reduction of repatriated funds from migrants' workers and a continuing trade deficit was causing then deep devaluation of polish zloty. Because zloty is treated by foreign investors as one from the Central European currency, as long as other countries of the region have passing serious economic crisis there is not chances for the zloty to strengthen considerably. Economists generally believe the zloty is greatly undervalued. In the view of some of them the optimal rate of exchange between Euro and zloty should have been lower then actual rate in the range of 3 to 3,5 zloty for euro. On the other hand taking into consideration the lower competitiveness of polish economy then euro zone partners the other economists think that the optimum exchange rate of polish zloty should have been nearer 4 zloty then 3 zloty for one euro around 3,65-3.7 zloty against euro (20). Currently the exchange rates of polish zloty doesn't much the macroeconomic criteria of polish economy. A central parity should not be stipulated at a level which does not reflect fundaments of Polish economy. Most economists think that Poland should enter to the ERM 2 system with the rate of exchange about 4 zloty per one euro. This rate seems strategically profitable for the long term competitiveness of polish economy (21).

Whereas the cost of a common currency has much to do with the macroeconomic management of the economy, the benefits are mostly related with the microeconomics level (22). In the theory of economic integration is said that European Monetary Integration (EMU) is needed to safeguard the benefits from internal market. The alternative to EMU might be widely floating exchange rates with pronounced realignments that lead to competitive devaluations and new trade barriers. Then what are the main benefits and costs from monetary integration? What benefits and costs can expect polish economy with the adhesion to the euro zone? It should be underlined that benefits and costs accompanying monetary integration are pretty well detected and analyzed by theory of international integration.

1. After 10 years of functioning the area euro has become a pole of stability for Europe. Therefore adaptation of euro by Poland is recommend as soon as possible to guarantee stabilization for money and our monetary policy. Adaptation of euro is going to be related first and foremost with disappearance of speculation press ion against zloty due to the international importance of euro as a world currency. Poland expects also from participation in euro zone to become more credible country with more predictable macroeconomic policy and sound structure of economic governance. With low inflation, restricted budget deficit, solid common currency Poland may be treated as a solid partner on the international

scene. The worst scenario for Poland is to abandon the plan to join euro in foreseeable future. Resignation from euro with a economic slowdown and ballooning budget deficit may cause investors to withdraw from Poland and cause to further slide of polish zloty.

2. The eliminating the cost of exchanging zloty to euro is certainly the most visible gain from adhesion Poland to the euro zone. There are two sources of savings connecting directly with so called transaction costs: firstly, bid-ask spreads plus other commission charged by banks. Secondly, the in-house costs that arise because polish enterprises have to maintain separate foreign currency expertise. The EU Commission estimated these gains for first the Euro zone member countries at a number between 13 and 20 billion euro per year, which represented one- quarter to one-half of one per cent of the Community GDP (23).Direct gains from common currency coming from the elimination of transaction costs of exchanging polish zloty into Euro in polish banks and cantors. According to Emerson the total savings from a common currency were estimated to be about 0,4% of the GDP of the EU 12 (24). These gains may be a little bit higher for polish economic agents taking into consideration noticeable difference in the price of buying and selling the euro in polish banks and cantors. The transaction costs for all polish economy are assessed as about 3 billion zloty (about one billion dollar). The difference in rates in buying and selling euro to zloty accounts now is about 6%. Additionally it may also expect that after adopting euro transaction costs will be lower in polish trade with third countries then when using the national currency as a means of exchange.

3. The theory of integration asserts that the true gains from introduction of a common currency are much larger then the apparent savings in transaction costs. The continuing existence of national currencies can lead to indirect costs if it allows firms to engage in price discrimination on the home market. Using zloty as a national currency it is difficult for consumers to compare prices on polish market with the euro zone and it is also difficult for foreign consumers and enterprises from euro zone to compare prices in zloty with their prices. National currency allows firms to obtain some local monopoly power. They can charge higher prices in the local market then abroad. At present it is estimated that prices in Poland are the 53 % of the average level in the Euro zone. Some prices on the agricultural products, services are much lower then in the EU, but the technologically advanced products have lower prices in the euro zone then in Poland. Because prices discrimination is only possible because national markets are still segmented, then euro will reduce the scope for price discrimination between Poland and euro zone member countries. Consumers and polish firms will be able to compare prices across European single market in the same currency. Adhesion of Poland to the Euro zone will provide - as is accepted – better price clearance between polish and euro zone market where even small difference can be detected. This can bring about the movement towards equalization of prices with some prices growing and some prices dropping on the Polish market to adjust them to the Euro zone level.

4. Introducing euro in polish economy will eliminate the exchange rate risk connected with polish zloty. Therefore it will lead to a more efficient working of

price mechanism. Economic agents base their business decision on the information that the price system provide for them. Because exchange rate uncertainty may introduce uncertainty about the future prices of goods and services, the quality of this decision in the system of national currency might be less then in the system of common currency. The system of common currency price system would become a better guide to make the right decisions regarding investment and consumption as far as international transactions are concerned. Savings are likely to be greater for polish small and medium – sized enterprises (SME) than for large Multinational Corporation, which hold diversified currency portfolios and support treasury department to manage exchange risk. Elimination of risk in currency rates can reduce the amount of risky projects. The exchange rate changes are dangerous instruments in the hands of politicians. In the Euro zone the exchange rate realignments that periodically disturbed the European economies have become a thing of the past. Market mechanism becomes of course more reliable as a mechanism to allocate national resources. All these efficiency gains for polish economy are difficult to quantify. The experiences of some countries illustrates that when devaluations are used to often, they will lead to more inflation without gains in terms of output and employment. They can lead to macroeconomic instability as economic agents continuously tend to expect future devaluations.

5. It is argued that an additional dynamic effect arises after adhesion of Poland to euro zone because EMU reduces the risk premium attached to foreign investments. Risk –Adverse investors exporting capital abroad require a higher premium to compensate them for the increased riskiness of currency rates fluctuation. A reduction in this risk premium and more stable polish macroeconomic policy would stimulate foreign investments and Poland expect additional inflow of foreign investment by about 50% in comparison with so called “anti monde scenario”. These new investments may come not only from the Euro zone members, which are the main investors in our economy, but also from non – European wanting to invest in Europe and plan their factories in Poland as country belonging to the euro- zone. It is worth notice, that in 2008 intra- euro zone foreign direct investments (FDI) stand at one third of GDP’ members countries as compared to one fifth before establishing monetary union. European Commission suggested that up to two thirds of this increase importance of FDI in the member states economies can be attributed directly to the creation of the single currency (24).

6. It is obvious that adhesion of Poland to euro zone should lead to a fall in the real interest rate. Reduction of polish interest rate after adhesion to euro zone should raise investment in Poland, as well as consumption and increase output over time as the capital stock increases. In the neoclassical growth model the reduction of the interest rate in Poland due to acceptation of lower interest rate fixes by the European Central Bank would increase the rate of growth of our GDP. For example the interest rate managed by Polish Central Bank in November 2008 was 6% but then of the European Central Bank was 3.0%, a half lower. In the beginning of 2009 the interest rate in Poland was at 5% and in euro zone at 2,5%, also a half lower. Higher interest rates and rapidly changing rates of polish zloty struck against

competitiveness of Polish export. If Poland wants to remain competitive within the EU, it must lower its key interest rates to levels closer to its European neighbors. Therefore as a result of our adhesion to the EMU and lower interest rate polish economy may invest more and accumulate more capital. This would raise productivity, output per worker and export and may put polish economy on a permanently higher growth path.

7. Adhesion of Poland to the Euro zone could lead to an increase in trade with the Euro zone member countries. Elimination of the transaction costs of zloty to euro and uncertainty connected with the zloty exchange rate and polish monetary policy could stimulate additional trade and other exchange transaction on the European single market. There would be fewer problems from uncertain and variable exchange rate which cause important difficulties for exporting polish companies. The exchange rate stability which encourages greater trade should result in higher growth and employment. The question then is: how large would be the increase in cross- border transactions stimulated by the Euro. The analysis said that the effects would be similar to the abolition of non tariffs barriers under the single market program. Intra- area trade flows in the euro zone accounted for one third of the area's GDP, up from one quarter in 1998. According to European Commission the elimination of exchange rate volatility can explain up to half of this increase (25). Adaptation by Poland the euro money could also increase the volume our mutual trade with the euro zone partners by at least about 50%.

8. Adaptation of euro is also recommended to avoid negative consequences of tendency of zloty fluctuation and changing its rate of exchange. Rapidly changing of rate of exchange is striking against export, competitiveness of many industries and services and inciting inflow of speculative capital. From late June until July this year the euro fell against zloty by over 14 grosh and the dollar fell by 12 grosh. Zloty had not strengthened on this scale since October 2007. From the time of polish adhesion to the EU zloty had appreciated by about 40 % in relation to Euro. Thousands of polish firms went under when zloty had become overvalued. Some branches of Polish industry, like shipbuilding, furniture were on the verge of bankruptcy due to losses of profit in export market Appreciation of polish zloty had reduced also the value of aids from structural funds and forced our regions to modify their development plans. But in October 2008 zloty suddenly lost 20 % of its value and in December value of zloty deceased further by 10%. In 2009 the reducing of repatriated funds from migrants workers and a continuing trade deficit weakens zloty further to euro to about 4,5 zloty per one Euro. Such sudden devaluation struck also foreign contracts of polish firms which were wrongly calculated and insured. If on the one hand appreciation of zloty benefited consumers, importers, cooling down inflation, on the other hand depreciation of polish zloty acted for export but against import and boosted inflation. It seems that from the long term perspective the euro will give polish economy more stable fundament for growth and competitiveness and reduce negative consequences of circulation of speculative capital.

9. There may be some structural consequences for polish capital market, which will become more liquid, deeper in many segments and more divers in terms of the range of instruments. For polish companies issuing debt and equity, Euro implies lower capital costs. Bonds emission on the European market can increase with the introduction of the joint currency. Hardouvelis estimated a reduction of 2% in the cost of capital due to the process of European integration (26). Thalassinos (31-34) has predicted a change in the stock's market, in the financial and capital markets and in international portfolio diversification. Equity market have integrated fast after introducing euro with the share of equity held in other euro- area countries rising from 20% to 40% (27). For all polish capital sector the increased competition might bring about its modernization and greater pressure to perform, greater expansion for foreign market, all this will help to bring lower interest rates.

10. Savings through lower official international reserves. As long as zloty subsist, polish national central bank have to keep large foreign exchange reserve (50 billion US dol.) to be seen to be able to defend exchange rate. Because in euro zone the European Central Bank, overseeing a common currency, and keeps the common reserves of the member states at lower (only 50 billion euro from the reserves of the 12 member states by 200 billion euro) such large polish reserve cease to be useful. It is expected that only 5% of Polish currency reserve will be moved to ECB after adhesion of Poland to the Euro zone. Some of this reserve could be used then for another goal for example to retire polish public debt (domestics or international). However, we are not expecting large economic gains from this savings because the polish central bank reserves are having opportunity costs as they are actually invested in the interest – bearing assets.

On the other hand we expect some default coming from our adhesion to euro zone which are related with:

1. Adhesion of Poland to the euro zone is connected with the fact that our Central Bank will loose its real power. It means that it will not be able any more to change the price of polish zloty or to determine the quantity of the national money in circulation. In the euro zone it will be impossible for Poland to carry our independent monetary policy on the national level. For each member country adhesion to euro zone means transferring to the European Central Bank in Frankfurt the previous national bank competencies regarding the emission of currency and fixing the rate of interest. Poland in the euro zone structure will not be able to change individually the rate of exchange to act against negative balance of payments tendencies or against unexpected growth of import or drop in export. Poland will not be able to modify individually the rate of interest against the inflation growth or to boost economic activity. If Poland would be hit by an economic shock that doesn't affect the euro zone partners, it has to fight it with one hand tied behind its back mainly by the fiscal policy means.

2. Fears of growth of prices are the principle reason of lack of enthusiasm in Poland regarding accepting euro as a national currency. Although the statistics data said that in the 15 member states of euro zone there was moderate growth of inflation after accepting common currency, we observe divergence of opinion

between economic analysis and the perception of polish society. Polish citizens' fear that after adhesion to euro zone the prices for the primary goods will growth substantially that strikes the standard of living of people with the lowest income. Accession of Poland into the euro zone will reduce the scope for price discrimination between Poland and the euro zone markets. On average the prices in Poland are at 53% of average level of prices in the EU 15 member states. Such prices discrimination is only possible because polish and EU member countries markets are still segmented. It is worth to add that Polish National Bank in his report foresee moderate growth of prices in Poland after accession to the Euro zone : by 0,53 % in the less pessimistic scenario to 2,56% growth of prices in the most pessimistic scenario (28). Although in the short run this will come about the growth of prices and rates of inflation in Poland, then in the long run it may bring about the growth of competition and pressure to reduce the inflation and level of prices. This would be benefits for consumers in Poland, especially in the cases of the sectors composed of imported goods and services in which prices of the local producers are relatively high.

3. After adhesion to the euro zone, as I said before, Poland may profit from the reduction of the interest rates to the level of the ECB. However, in the long run the interest rates on the bonds market in Poland might be higher then in the EU partner countries. Before the credit crunch Germany ten years bounds yielded nearly the same profits as in the other euro zone partners, for example only 0,2% less then Italy. After the crises the spread has widened in the case of Ireland, Spain, Greece and Portugal, which faced serious difficulties to finance their debts. The sharp rise in bonds spreads for Greece, Italy, Ireland, Portugal showed that capital market became less forgiving of higher debt and rising budget deficit (29). The same situation would meet Poland after adhesion into euro zone, however it is not excluded that borrowing cost would be higher when Poland stand by outside the euro zone then in the situation when it decided to join in.

4. Market mechanism in Poland and in other post communist countries are relatively young and functioning correctly no longer then 15- 20 years. According to the institutional economics institutions play fundamental role in each economy for market regulation, stabilization, movement of productions factors, etc. Because of the "infancy of the market institutions the risk of the destabilization of the market seems to be more important in Poland then in better developed euro zone countries. Necessity of the keeping "une marge de manoevre "is particularly essential in the case of controlling inflation, economic growth and unemployment and in carrying out the policy of destructuralization. Polish politics are afraid that after adoption of euro the country would be deprived a monetary instrument more adequate for regulation polish economy then more mature economics of euro zone.

Poland is likely to adopt the euro in 2012 or a few years later, despite the fact that still has a number of hurdles to get over. The country already meets most of the EU's Maastricht criteria, with budget deficit of less then 3% of GDP and public debt running at under 60 of GDP. But there is still the issue of currency stability after sudden devaluation of zloty in October 2008 and being a member of the ERM 2 system for at least two years. The zloty collapse had come primary because the currency had been targeted by speculators. In view of zloty exchange rates fluctuation it became clear that euro was a great idea and we have missed the best moment to do so. Government has now two strategies to choice: if it tries to limit budget deficit under the Maastricht criteria to make severe cuts, this policy may occurs to be politically hard to sustain. On the other hand if government decides to enlarge budget deficit, we would have higher public debt, zloty would drop in value, and all these may delay the euro project by several years.

Overall, we can conclude that elimination of monetary frontier between Poland and the euro zone will bring about more advantages that disadvantages for polish economy. While the benefits from Poland participation in the Euro zone will be moderate, cumulative and reasonable uncontroversial, the costs seems to be much more uncertain, possibly widely exaggerated and diminishing with the passage of time. In sum the standard analysis shows that adhesion of Poland to euro zone is comparable to the elimination of non tariffs barriers under the single market framework and will give additional moderate impulse to economic growth by 0,4-0,5 % of polish GDP each year during 20 years period. This additional growth would come mainly from: intensification of trade with the EU members countries, increase of competition on polish market, elimination of risk of rate exchange of polish zloty and transaction costs, increase of attractiveness of polish market for international direct investment, new possibilities for polish economic agents to finances their activities on European single market.

In the short run Poland may expect the economic profit from participation in the Euro zone. The economic costs may occur in the long run which are related with the fact that economic structure of polish economy is not perfectly similar to the EU so called core countries and with low flexibility of wages. From five criteria of optimum currency area Poland have accomplished only three, hence in the face of asymmetric shock it would face the problems of structural unemployment. The importance of costs bearing from functioning of common currency in Poland would be related with the further structural changes in the economy, growth of productivity and reforms of the labor market.

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