

# Poland and the Euro Zone Enlargement: Monetary Policy, ERM II, and Other Issues

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## Abstract

*In this paper, Poland's preparations to introduce the euro and discussions surrounding them are briefly analyzed. Its first part deals with legal and macroeconomic developments before Poland's accession to the EU in May 2004. The second part considers Poland's official position and possible future scenarios. The main conclusions are twofold. Firstly, it is argued that after finishing successfully the disinflation process, Poland's monetary integration is above all subject to fiscal and exchange rate developments. In both cases, they are a function of the economy's structural changes. Secondly, as a consequence, fulfilling the Maastricht Treaty nominal convergence criteria by Poland will imply enough degree of real convergence for its successful participation in the euro zone. (JEL E5, P2)*

## Introduction

Together with nine other countries Poland joined the European Union in May 2004. On the one hand, this event can be seen as a corollary of the success of Poland's 15-year transition from a planned economy to a market system. On the other hand, this event has clearly marked the beginning of a new period, a period in which the main long-term challenge for economic policy has become a successful euro area accession.

This paper briefly analyzes both the historical developments and possible scenarios linked to Poland's aim to join the euro zone. In the following section, Poland's pre-EU accession developments are overviewed and the current situation concerning euro adoption issues is presented. Section three discusses scenarios for euro introduction and the obstacles, vulnerabilities, and risks associated with them. The final section emphasizes that, given the nature of Polish economic developments, nominal convergence (as understood by EU institutions) implies enough degree of real convergence for successful monetary union participation.

## Pre-EU Accession Developments *vis-à-vis* Euro Zone Enlargement

In Poland, the discussion on euro adoption and important policy decisions made in this respect have taken place at least since the middle of the second half of the 1990s.<sup>1</sup> The euro adoption discussion is left for the next section as it has strongly influenced the evolution of Poland's official position. Presently, the paper will concentrate briefly on some legal questions

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\*The National Bank of Poland and Warsaw School of Economics--Poland. The opinions expressed in the paper are of the author and should not be attributed to any institution he is working for. He would like to express his gratitude to Witold Grostal and Robert Woreta for providing the graphs. Helpful comments were made by Michal Brzoza-Brzezina, Tomasz Chmielewski, and by Eduard Hochreiter. Language assistance was provided by Barton D. Raven. Any remaining errors are solely the author's responsibility.

and in more detail on macroeconomic issues. In both cases, Polish developments have had some peculiarities worth mentioning.

Like other accession countries, Poland had to harmonize its legal rules to the EU's, which in 1999 launched the single monetary policy and adopted the euro. By embracing the *acquis communautaire*, acceding countries made their legal systems consistent with the one existing under the Economic and Monetary Union (EMU), although with a derogation clause concerning euro adoption.

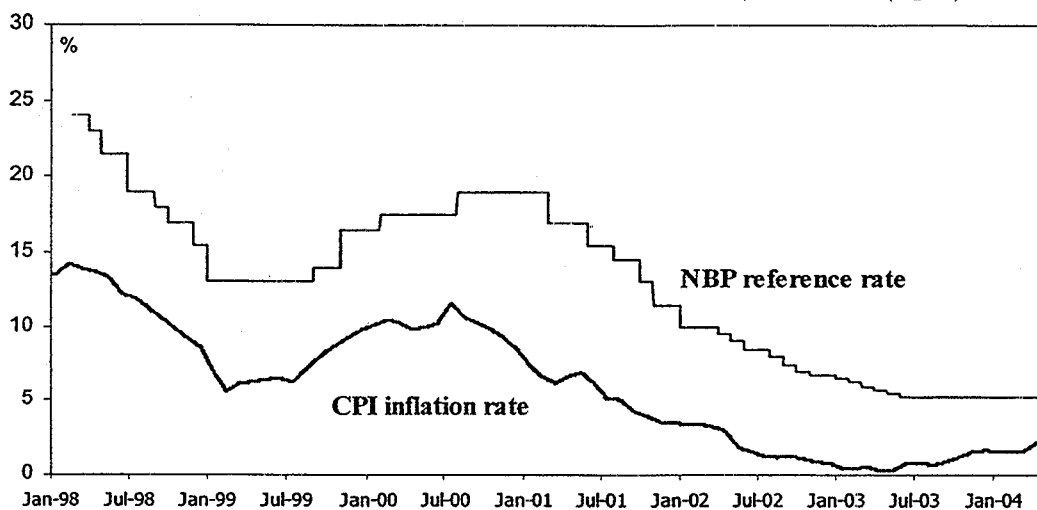
In relation to Poland's harmonization of the legal framework for macroeconomic policy, pivotal decisions were made in 1997 when the country adopted the new Constitution and the new central bank's law. In particular, the Constitution introduced two important provisions from the Maastricht Treaty. Firstly, it prohibited central bank financing of budget deficits. Secondly, this being probably the only case worldwide, it instituted the rule forbidding the public debt to exceed 60 percent of GDP.<sup>2</sup>

The 1997 National Bank of Poland (NBP) Act introduced other important regulations from the Treaty. The Act formulated the NBP's mandate on almost the same terms as the European System of Central Banks (ESCB). Regarding central bank autonomy, it has given the NBP personal and functional (both goal and instrument) independence comparable to that enjoyed by central banks belonging to the ESCB. A few minor issues, however, remained to be harmonized in the area of financial independence. Further harmonization of the NBP Act took place at the end of 2003.

These legal changes have had an impact on Polish macroeconomic policy. It can be described through the lens of the nominal convergence criteria for euro zone participation as agreed in the Maastricht Treaty and developed further in related documents.

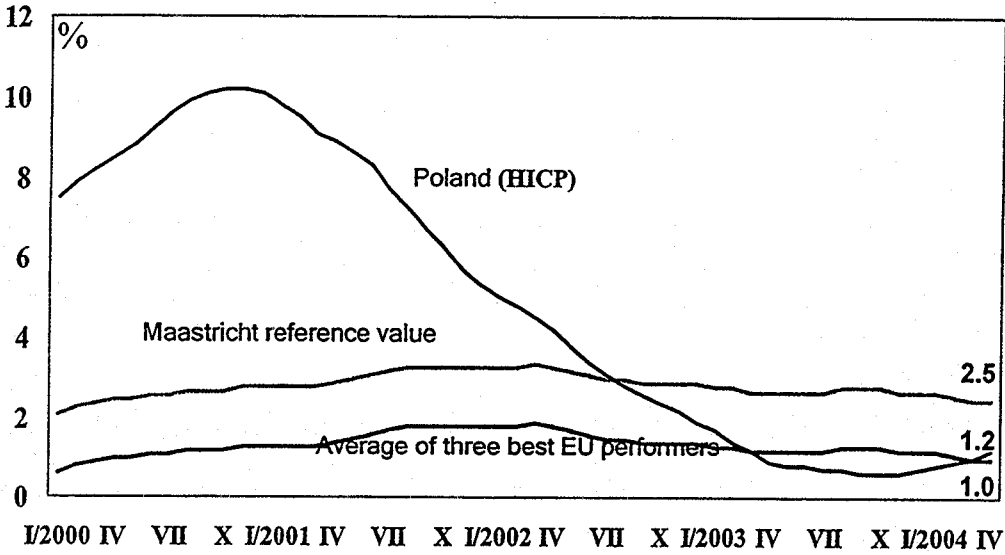
The 1997 legal framework has not only allowed for the continuation of the stabilization process which began in 1990 with the so-called Balcerowicz plan, but also helped focus authorities' efforts on EU-related goals. This was particularly visible in monetary policy performance. In September 1998, the NBP published a document [NBP, 1998] explicitly geared towards achieving euro zone compatible inflation rates. By introducing a relatively strict version of inflation targeting, this was accomplished in mid-2002, although not without some problems. See Figures 1 and 2.

FIGURE 1  
Year-on-Year CPI Inflation and NBP Reference Rate, 1998-2004 (April)



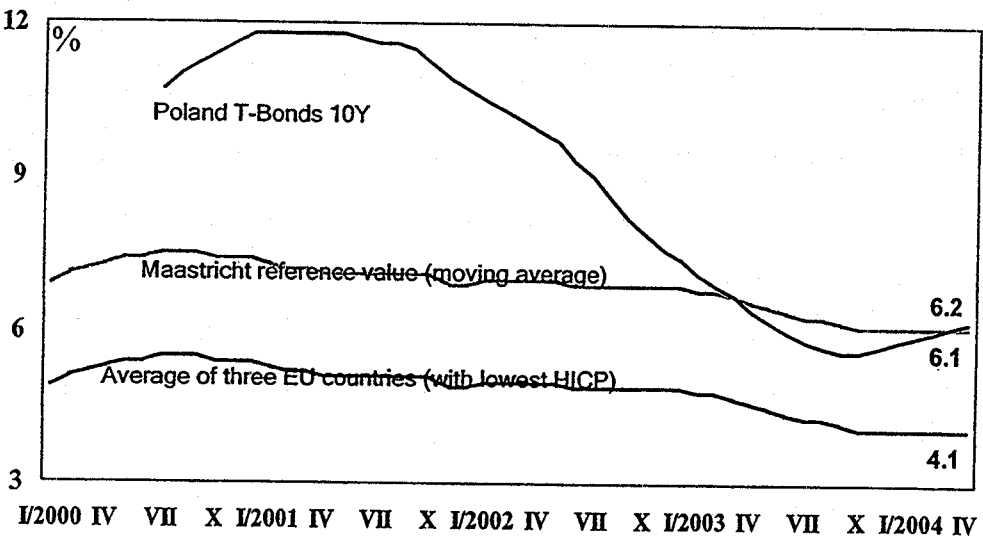
Source: Central Statistical Office and the National Bank of Poland.

FIGURE 2  
Poland and the Inflation Criterion, 2000-04 (April)



Source: The National Bank of Poland estimates based on the Central Statistical Office and Eurostat Data.

FIGURE 3  
Poland and the Interest Rate Criterion, 2000-04 (April)



Source: Eurostat and the National Bank of Poland.

A somewhat more complicated situation can be seen in Figure 3, which deals with the second nominal convergence criterion to be fulfilled in order to qualify for the EU monetary union. For most of the time, although with some delay, Poland's long-term interest rates (as measured by 10-year Treasury bonds) followed inflation developments, and in the course

of 2003 they became consistent with the Maastricht Treaty requirements.<sup>3</sup> However, in the second half of 2003 the rates began to rise as a result of the increasing risk premium. This occurred because of the country's worsening fiscal stance and an uncertain political situation. Consequently, at the moment of Poland's entry to the EU, long-term interest rate changes have shown diverging trends.

As suggested by the above developments a deteriorating situation can also be observed in the area of public finance, which is taken into account by two other Maastricht Treaty criteria. See Table 1.

TABLE 1  
Polish Fiscal Stance (percent of GDP) and GDP growth (percent), 2000-03

Item	2000	2001	2002	2003
1. General Government Balance	-1.8	-3.5	-3.6	-4.1
1.1 Primary Balance	+0.3	-0.5	-0.7	-1.0
2. Public Debt	36.6	36.7	41.2	45.4
3. Real GDP growth	4.0	1.0	1.4	3.7

Note: ESA 95 methodology. Government transfers and interest payments to open pension funds operating under the reformed pension system are not counted as general government expenditures. Open pension funds holdings of Treasury securities are not treated as public debt (see further remarks in Section 3). Source: Eurostat [2004b] and EC [2004b].

The deterioration of the fiscal sector has been clearly observed since 2001. It is even more pronounced if it is considered that after a temporary slowdown in economic activity, the growth re-accelerated in the course of 2002, so that in 2003 Polish GDP increased by 3.7 percent.<sup>4</sup>

Although both the government deficit and public debt have exhibited considerable worsening, the public debt-GDP ratio is still well below the 60 percent threshold eligibility requirement for euro area accession. The main concern here is linked to the fact that its increase has shown great dynamism since 2002, reflecting the quickly growing budgetary deficits.

In part, these deficits have deteriorated as a result of a GDP slowdown (cyclical component) and the increasing costs of public debt service. These were a consequence of a restrictive monetary policy in the first years of the present decade, conducted in order to put inflation back on the declining path (see Figure 1). Above all, however, they reflect a fiscal sector mismanagement ensuing from Poland's structural problems (stemming from the unfinished reform agenda, and overdeveloped and wrongly addressed social transfers) coupled with the fact that the Polish budget is rigid, i.e., it is heavily burdened with mandatory expenditures. Such a combination of underlying factors makes the Polish situation particularly difficult.<sup>5</sup> This is because politically highly sensitive decisions aiming at long-term restructuring of the legal framework governing the functioning of the fiscal sector are required, so that expenditures, mostly of a social nature, are reduced.

The fifth and last criterion to qualify for euro area enlargement refers to exchange rate stability. The latter is judged in the framework of at least a two-year participation in the Exchange Rate Mechanism II (ERM II). Since participation in this system is restricted to EU members, Poland obviously could not fulfill this requirement before EU accession. What is more important, however, is that the Polish exchange rate regime evolved towards a free float system, which is considered by the EU authorities as incompatible with the principles underlying the ERM II [ECB, 2003; EC, 2004a].

In the 1990s, Poland's exchange rate system experienced an evolution from the administratively fixed rate of the early transition period (1990-91), through crawling-peg (1991-95) and crawling band (1995-99) regimes, which finally resulted in a floating exchange rate system by the end of the decade (formally introduced April 12, 2000).<sup>6</sup> Initially, the underlying

reasons for such an evolution were linked to the need to stabilize inflation and, subsequently, the real exchange rate. In the second half of the 1990s, the exchange rate's gradual flotation was instrumental in increasing monetary policy autonomy, which was indispensable in the face of capital flows liberalization, the priority given to inflation reduction and the growing current account deficits (see Table 2).

TABLE 2  
External Imbalances and Safety Indicators, 1998-2003

Year	Current Account Balance/GDP (percent)	Foreign Official Reserves (months of imports)	Foreign Direct Investments to Current Account Deficit (percent)
1998	-4.3	7.5	74.8
1999	-7.6	7.5	55.9
2000	-6.3	8.0	82.2
2001	-3.9	7.7	96.9
2002	-3.6	7.5	54.9
2003	-1.9	7.0	92.1

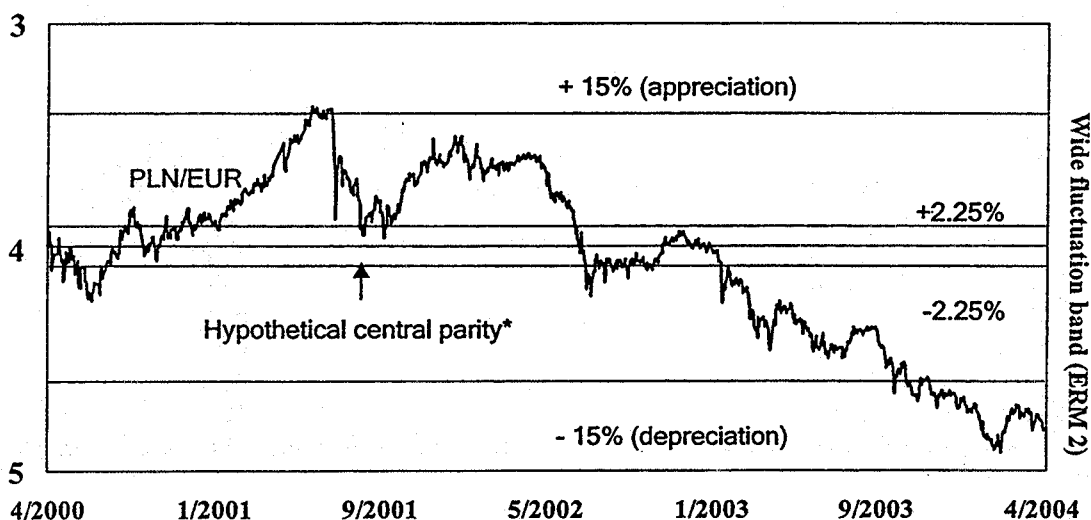
Note: Balance of Payments on a cash basis data. Source: The National Bank of Poland and Central Statistical Office.

The move to the free float had also an important EU dimension. As stated by the NBP strategy policy document of the late 1990s [NBP, 1998, p. 13]: "One of the conditions of Poland's accession to the EMU will be the inclusion of the zloty in the ERM II system for at least two years. This should be preceded by a period of freely floating exchange rate! This arrangement will help to bring the market rate closer to the equilibrium rate, prior to its renewed fixing within the ERM II." In other words, it was argued that market forces will be helpful in providing information on the correct level of the central rate to be adopted under the ERM II.<sup>7</sup>

The floating exchange rate system has been at "pure float" since mid-1999 as the NBP has no longer intervened on the foreign exchange market. Poland has become the only country among the 10 new EU member states with such a regime. The gradual evolution towards the pure float, clearly visible from the first quarter of 1998, has resulted in the development of a self-correcting exchange rate mechanism. It has proven to be an efficient shock absorber in the face of the second half of the 1990s international turbulence, while protecting Poland from potential contagion effects [Polański, 2000 and 2002]. It has also given monetary authorities broad room to maneuver during and after the 1999-2000 re-acceleration of inflation (see Figures 1 and 2). Nonetheless, as evidenced by Figure 4, the Polish zloty-euro rate has become volatile in a way not compatible with the philosophy of ERM II.<sup>8</sup>

In short, at the time of EU accession, Poland fulfilled two of the euro zone eligibility criteria, i.e., of similar inflation rates and of public debt, and bordered the interest rate criterion. This was not, however, the case with the remaining requirements. On the one hand, since 2001 fiscal deficits have been above 3 percent of GDP, showing a strong tendency to rise, reflecting among others deeply rooted structural problems. On the other hand, Poland not being an EU member state could not fulfill the exchange rate criterion. Leaving aside the formal aspect of the exchange rate stability requirement, the real problem in this respect lies in that the long-term evolution of the Polish exchange rate regime has led to the emergence of a successful system, which by no means is compatible with the exchange rate condition for euro zone accession.

FIGURE 4  
Zloty's Volatility *vis-à-vis* the Euro, 2000-04 (April)



Note: Central parity set at the PLN/EUR NBP fixing of 11 April 2000 (the last day before the official introduction of the floating exchange rate regime in Poland). Source: The National Bank of Poland.

### Euro Adoption Challenge: The ERM II and Other Issues

In Poland, public discussion on euro adoption started at the turn of 1996 and 1997 with the publication by the Ministry of Finance of a semi-official policy document entitled plainly, *Euro-2006. Poland on the Path to European Monetary Union* [Ministry of Finance, 1996]. Although this document was not adopted by the government, it started a wide and lively discussion. By claiming that Poland could join the euro zone in 2006, it put the process of adopting the euro into a relatively short time frame.

This time frame was shortened even further in subsequent proposals, which suggested that Poland should unilaterally adopt the euro [Bratkowski and Rostowski, 1999a, 1999b, and 2001]. The argument put forward relied on the contention that following the EU-agreed path to the euro zone through the ERM II system is far from optimal for two basic reasons. Firstly, because in a catching-up country with a stable exchange rate, the Balassa-Samuelson effect will result in an inflation pressure calling for a more restrictive monetary policy, which in turn will depress economic growth and attract foreign speculative capital. Secondly, it was argued that these dangers would be even more pronounced as a result of the inherent tendency of soft-peg regimes to currency crises and related phenomena. All in all, the ERM II system was pictured in the discussion as an extremely dangerous exchange rate regime, leading to currency and financial crises, finally resulting in the country's economic slowdown.<sup>9</sup>

Even though the discussion was conducted among independent economists and their conclusions have never been officially shared by the authorities, it has had an important impact on the development of the Polish position concerning euro adoption. This position has been developing since July 2002 when the "Interdepartmental Work Group of the NBP and of the Ministry of Finance for Poland's Integration with the EMU" was established. So far, the Work Group has released only two press communiqués (October 2002 and January 2004). Its

conclusions are expressed in the contents of the first Polish *Convergence Programme* submitted to the European Commission in May 2004 [Republic of Poland, 2004], and they can be summarized as follows.

1. Poland should join the euro zone, after EU accession, "as soon as possible." No binding date was given in the communiqués, however, the 2003 *Pre-Accession Economic Programme* qualified this approach with the formula "if only the macroeconomic conditions make it possible," suggesting that it should be "expected in 2008 or 2009" [Republic of Poland, 2003, pp. 9 and 10]. The projections from the *Convergence Programme*, discussed later in more detail, confirm that Poland's accession to the euro zone will only be viable, at the earliest, by the end of the decade.

The "as soon as possible" approach received support from the research conducted at the central bank. The NBP published recently a major study [NBP, 2004b], which compares the benefits and costs of euro adoption. It shows that it would be beneficial for Poland to join the monetary union at the earliest possible date because of its positive impact on foreign trade and investment activity, leading to long-term economic growth acceleration.

2. Poland should participate in the ERM II system "for the shortest possible period of time." Consequently, as stressed by the NBP [2003, 2004a] and the *Convergence Programme* [Republic of Poland, 2004, p. 8], the present pure float regime should be maintained as long as possible, i.e., until the moment of entering the ERM II system.

Thus, the Polish authorities assume that participation in ERM II should be treated as a "waiting room" for euro adoption, lasting for the required minimum period of two years, and not as a "training room," i.e., as a period devoted to increase economic policy coordination and convergence. No binding date concerning ERM II adoption has been given so far but the arguments put forward suggest that the timing of Poland's entry into the ERM II will depend on fiscal developments. This is because, on the one hand, ERM II participation should take place rather quickly as it is an element of the whole "as soon as possible" approach. On the other hand, it is stressed that in order to move to a stable exchange rate regime, certain important prerequisites must be fulfilled, in particular on the fiscal side. For this reason, one is tempted to state that as Poland wants to stay in the ERM II system "for as short a time as possible," the entry date to the mechanism will be a direct function of fiscal deficit reduction projections made in the context of the euro adoption program.

3. Concerning the choice of the width of the fluctuation band under the ERM II system the favored option is the standard one of  $\pm 15$  percent. Clearly, it provides more room to maneuver monetary policy (especially in the context of the Balassa-Samuelson effect and other factors resulting in exchange rate appreciation), and more flexibility to accommodate external shocks by the exchange rate mechanism. This approach was stressed in the October 2002 communiqué and in NBP's publications [NBP, 2003, p. 15, and NBP, 2004b, p. 9]. However, due to public suggestions made in the meantime by a European Commission representative that from the convergence point of view the relevant band should be of  $\pm 2.25$  percent, neither the January 2004 Work Group communiqué, nor the *Convergence Programme* mention preferences concerning the width of the ERM II band.

4. With respect to the appropriate level of the ERM II central rate both communiqués and the *Convergence Programme* stress that it must take into account two factors. On the one hand, the rate should be set at "the level that would provide conditions for sustained economic growth." On the other hand, its level should "enable to avoid tensions on the currency market."<sup>10</sup>

Despite studies conducted by the Work Group on the equilibrium exchange rate, in the above quoted documents there are no quantitative suggestions concerning the level of the central rate. Both communiqués and the *Convergence Programme* emphasize, however, that

the market rate in the selected reference period must be taken into account, echoing the late-1990s idea that the free float system should provide meaningful information on the correct level of the central rate to be adopted.

It can be easily judged from these remarks that Poland, as yet, does not have a full-fledged strategy of euro adoption with a clear timetable. Rather, it can be said that the Polish authorities share general views on some important aspects, or pillars, of such a strategy.

Since exchange rate stability is only one of the several nominal convergence criteria to be considered when evaluating the readiness for euro adoption, a broader perspective to complement these ERM II centered observations is necessary. This is important, however, not only because of the formal requirements to join the euro zone. Such a broader approach is crucial for the successful participation in the ERM II system because of two more reasons. Firstly, the "waiting room" approach implicitly assumes that the essential bulk of nominal convergence must take place before joining the ERM II. Secondly, participation in the ERM II system is facilitated when the country is perceived as credible and, in the author's understanding, consistent policies aiming at fulfilling the Maastricht Treaty criteria increase the country's credibility. This also refers to the desired euro adoption target date, which should be consistent with the whole euro accession program. Clearly, such credibility will be earned only if economic policies result from a strong and sustained political commitment to join the euro zone.<sup>11</sup>

As already mentioned, the NBP authorities have stressed on several occasions that Poland should join the euro zone at the earliest date possible. In order to facilitate this, the central bank has set its target at a 2.5 percent inflation rate, with a permissible deviation band of  $\pm 1$  percentage point from the start of 2004 [NBP, 2003, p. 12]. This ongoing (continuous) target is considered to put domestic inflationary pressures in line with those of the euro area. However, if this is not to be the case, an additional short-term inflation target would be set to meet the inflation criterion [NBP, 2003, p. 18].

Given Poland's inflation performance in the last couple of years (see Figures 1 and 2), the 2.5 percent CPI target with the deviation band seems feasible, in particular, if it is taken into account that the inflation pressure resulting from the Balassa-Samuleson effect should not exceed 1-2 percentage points.<sup>12</sup> Nonetheless, several observations must be made in this context. As shown in Figure 1, the Polish central bank's interest rates have, for a long time, been at a relatively high level. This suggests to some observers that inflation in Poland can remain under control only if the real rates are considerably pronounced. It has been estimated that the natural rate of interest for Poland is twice as high as for the euro area<sup>13</sup>. If these differing rates were to continue in the future, such a situation would obviously have a negative impact on Poland's smooth implementation of the common monetary policy<sup>14</sup>.

The possibility that Poland may need higher interest rates than the ones prevailing in the euro area has two important implications for economic policy. Firstly, emphasis must be put on the soundness of the financial system. With the revival of economic growth, Poland's current account deficit will widen over time. Under the ERM II system this can be a problem, in particular if banks' portfolios show serious deficiencies. Although, as a result of the recent economic slowdown, the situation is not perfect in the area of bank credit quality (classified loans amounted to 21 percent of banks' portfolios at the end of 2003), the stability of the Polish financial system is preserved by tight prudential regulations, often stricter than in the rest of the EU, competent overseeing and banks' high capitalization (in terms of capital adequacy ratio). Secondly, the high interest rates at which inflation is stabilized in Poland have also important implications for the conduct of fiscal policy. Improving its stance would obviously allow for some relaxation of monetary policy, while the deterioration of fiscal policy

would force the central bank (seeking the 2.5 percent inflation target) to increase its rates, which in turn would raise the costs of policies aiming at euro adoption [NBP, 2004b, cp. 4].

TABLE 3  
Polish Fiscal Stance (percent of GDP) and GDP Growth (percent), 2004-07

Item	2004	2005	2006	2007
1. General Government Balance	-5.7	-4.2	-3.3	-1.5
1.1 Primary Balance	-2.8	-1.1	-0.3	1.3
2. Public Debt	49.0	51.9	52.7	52.3
3. Real GDP growth	5.0	5.0	5.6	5.6

Note: As in Table 1. Source: Republic of Poland [2004].

According to the forecasts shown in Table 3 Poland's general government deficit is expected to be gradually reduced by 2005, and in 2007 it should be below the Maastricht reference value of 3 percent. These projections are, however, conditional on several economic and political assumptions, of which three are of a crucial nature.

Firstly, Poland experienced strong economic performance in the second half of the decade (see the last row in Table 3). According to the *Convergence Programme*, the output gap in Poland should become positive by late-2005 [Republic of Poland, 2004, p. 18].<sup>15</sup>

Secondly, successful implementation is needed of the *Programme for Rationalization and Reduction of Public Expenditure*, a plan to reform Poland's public finances during the 2004-07 period, which is currently being discussed in Parliament. According to a recent OECD report, this initiative, emphasizing structural changes (policies to raise employment through improvements in the functioning of the labor market) and public spending cuts, would imply an eventual permanent 1.3 percent of GDP improvement in the structural balance [OECD, 2004].

Thirdly, the projections in Table 3 assume that the payments made by the government to the open pension funds operating under the reformed pension system will not be counted as general government expenditures and, consequently, will not increase the public deficit.<sup>16</sup> This, however, is disputable under the Eurostat's (EU statistical office) recent ruling stating that so-called funded defined-contribution pension schemes should not be regarded as a social security scheme and, as a result, should not be counted as a part of the public sector [Eurostat, 2004a]. Pension schemes are to be evaluated on a case-by-case basis and any decision concerning Poland has not been taken so far. However, if government's transfers and interest payments to open pension funds were to be treated as government expenditures, general government deficits in Table 3 would increase by more than 1.5 percentage points. In addition to this, as a major part of the open pension funds' portfolios are composed of Treasury securities, the public debt would increase—according to the data for 2003—by some 3.5 percentage points [Credit Suisse First Boston, 2004, p. 10].

Of course, the non-completion of any of the three assumptions would make the fiscal projections from Table 3 irrelevant. However, in the case of the government's expenditures *vis-à-vis* the open pension funds, the situation seems particularly tricky. A decision to classify them as general government expenditures could be easily interpreted as punishing a country for a bold pension system reform, discouraging other countries, among them important EU member states, to introduce such complex reforms. In the Polish case, an unfavorable Eurostat ruling would create an important additional obstacle, leading to a further delay in euro adoption.<sup>17</sup>

At this very moment the author arrives at the crucial point, already anticipated when discussing ERM II issues, concerning the possible timing of Poland's euro area accession. Fiscal developments, particularly general government deficits,<sup>18</sup> and the interpretation given

by the EU institutions to the concept of "general government," will to a large extent determine the timing of euro adoption, the timing of convergence decision (ERM II entry date), and how smooth Poland's road to the euro will be. Paradoxically then, the timing of adoption by Poland of the EU common monetary policy has become mostly conditioned by non-monetary factors. It is the fiscal developments and the underlying structural and political (both at domestic and at the EU level) developments that have become of crucial importance for the project.

### Final remarks

This paper has concentrated on issues linked to nominal convergence criteria, i.e., on the eligibility conditions, as understood in the Maastricht Treaty and subsequent EU documents, dealing with the euro zone enlargement. There are, however, occasional policy statements, backed by a vast amount of literature, which suggest that so-called real convergence is at least an equally important question when discussing euro adoption issues. Without making an in-depth analysis of the discussion on the topic, some final remarks concerning Poland's situation in such a context can be made.

In contrast to the concept of nominal convergence, the notion of real convergence is not a clear one at a practical level. It usually refers to issues of a qualitative nature and, thus, cannot be used to make firm judgments [EC, 2004a, p. 11]. Real convergence can refer to per capita income differences, business cycle synchronization, other structural issues (like labor mobility), and basically to everything which is not captured by the concept of nominal convergence criteria. Frequently, when discussing convergence issues, differences among countries' per capita incomes are strongly emphasized,<sup>19</sup> while there is evidence (as the U.S. case clearly confirms) that such differences in themselves do not constrain the workings of a monetary union.

Poland's 15 years of rapid structural transformation have shown that at a more advanced stage of inflation reduction real factors are increasingly important for nominal convergence. In other words, nominal convergence, as evidenced by the conditions underlying the preservation of low inflation and exchange rate stability during the catching-up process or by the fiscal stance problems, is increasingly subject to structural changes, i.e., to real convergence developments. This implies, at least in the Polish case, that there are no major contradictions between nominal and real convergence. Achieving the former will imply a fair level of the latter.

Poland may at best fulfill all five nominal convergence criteria only at the very end of the decade. This is another sign that its situation in meeting them is highly conditional on real economy developments. Summing up, the paper finishes with a by no means original conclusion that political willingness resulting in close cooperation between Polish authorities and the EU institutions will be of crucial importance for the successful completion of the euro adoption project within a reasonable time frame.

### Footnotes

<sup>1</sup>Actually, the latter can be traced back to 1992. See Polański [2004] for details.

<sup>2</sup>It must be added that the Polish definition of public debt is more restrictive than the one accepted in the EU methodology (ESA 95). According to the Polish Constitution, public debt includes, "granting guarantees and financial sureties by the State" ["The Constitution...," Art. 216]. Moreover, the Polish Public Finances Act of 1998 has introduced three "prudential thresholds" (at 50, 55, and 60 percent of GDP), which should trigger policy measures, both at the central and local government levels, aiming at rebalancing their budgets.

<sup>3</sup>Obviously, when reference is made to inflation and interest rate criteria, the concept of "Maastricht Treaty requirements" (or "Maastricht reference values") refers to the EU prior to May 2004 enlargement (i.e., to EU-15).

<sup>4</sup>Particularly strong growth was observed in the final quarter of 2003 (4.7 percent). In the first quarter of 2004, it accelerated even further, reaching 6.9 percent (in both cases, year-on-year data).

<sup>5</sup>In fact, if only GDP ratios are looked at, several accession countries had an even more complicated fiscal situation in 2003. For instance, according to the sources quoted in Table 1, the Czech Republic had a government deficit of 12.9 percent, while Hungary had 5.9 percent.

<sup>6</sup>For more details, see Polański [1998a and 2004].

<sup>7</sup>See also Polański [1998b].

<sup>8</sup>Figure 4 combines exchange rate developments with the ERM II framework, assuming the central parity rate at the level observed on the foreign exchange market just before the official flotation of the zloty. It shows two fluctuation bands: the standard one ( $\pm 15$  percent) and the one which seems more relevant for the convergence process ( $\pm 2.25$  percent). Clearly, developments in the graph do not take into account foreign exchange market interventions, whereas the intervention mechanism is an essential part of the ERM II system.

<sup>9</sup>A detailed account of the discussion, including its international dimension, can be found in Backé and Wójcik [2002].

<sup>10</sup>Both quotes come from the October 2002 communiqué.

<sup>11</sup>On the role of credibility during ERM and ERM II participation, in the context of the Austrian and Greek experiences with the euro area accession, see Hochreiter and Tavlas [2004].

<sup>12</sup>A detailed research on the Balassa-Samuelson effect concerning Poland can be found in Chmielewski [2003]. International comparisons are presented by Kovács [2002] and Mihaljek and Klau [2003].

<sup>13</sup>On estimates for Poland, see Brzoza-Brzezina [2003 and 2004] and OECD [2002 and 2004]; on estimates for the euro area, see Crespo-Cuaresma et al., [2003] and ECB [2004].

<sup>14</sup>For instance, its adoption could lead to a "Portuguese scenario," i.e., a situation of very high balance of payments' current account deficits. See Brzoza-Brzezina [2004].

<sup>15</sup>Such developments, however, may incline analysts and decision makers to argue that Poland's fiscal sector balances should be closer to zero (or even enjoy positive values) at the time of euro zone accession. Opinions of this type might be easily formulated on the grounds that fiscal developments should be analyzed over the business cycle.

<sup>16</sup>In 1999, Poland deeply reformed its pension arrangements, moving away from the previous public sector pay-as-you-go pension scheme to a modern three-pillar system relying heavily on funded scheme principles. One of the elements of the reform is the operation of so-called open pension funds. Although they are privately managed, participation in these financial institutions is obligatory for most of the citizens, and the funds are highly regulated and strictly overseen by the government.

<sup>17</sup>On the other hand, it should be mentioned that in 2009 the situation will gradually get back to normal as the open pension funds will start paying out the first pensions. Consequently, the amount of pensions paid out by the State Social Insurance Institution (ZUS) will start declining.

<sup>18</sup>Public debt-to-GDP ratio developments are not overemphasized because of two reasons. Firstly, given the past and present performance of some EU countries, it seems that EU institutions pay less attention to the debt criterion. Secondly, in light of the data in Table 3, Poland's public debt development seems to be under control, although as recently stressed by the OECD report, there is a risk of breaching the 60 percent threshold in a few years [OECD, 2004]. Applying Polish methodology (see footnote 2), at the end of 2003, the public debt-to-GDP ratio was 51.6 percent, breaking the first of three "prudential thresholds."

<sup>19</sup>For example, in this context it is often stressed that Polish GDP per capita amounts to slightly above 40 percent of the EU-15 average.

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