EXCHANGE RATE SYSTEM AND INFLATION IN THE PROCESS OF INTEGRATION OF THE CENTRAL AND EASTERN EUROPEAN COUNTRIES WITH THE EUROPEAN UNION

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A b s t r a c t

Central and Eastern European countries, on the path to implementation of the common currency apply different exchange rate regimes. The study aimed at determining which of them proved the most rational from the perspective of the relations between the inflation and the currency exchange rate. The study showed that indifferent of the selected path for reaching ERM II and as a consequence the common currency the exchange rate system applied will be the factor determining the intensification or weakening of inflation processes in the Central and Eastern European countries in the integration process. It also seems that Poland does not have to be afraid of the inflation impulse as a result of tightening the exchange rate of Polish Zloty within the frameworks of the ERM II.

SYSTEM KURSOWY A INFLACJA W PROCESIE INTEGRACJI KRAJÓW EUROPY ŚRODKOWO-WSCHODNIEJ Z UNIĄ EUROPEJSKĄ

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A b s t r a k t

Kraje Europy Środkowo-Wschodniej w drodze do przyjęcia wspólnej waluty stosują różne reżimy kursowe. Celem badań było stwierdzenie, który z nich okazał się najbardziej racjonalny z punktu widzenia związków między inflacją a kursem walutowym. Badania wykazały, że niezależnie od wybranej drogi dochodzenia do ERM II i w konsekwencji do wspólnej waluty, to nie stosowany system kursowy będzie czynnikiem decydującym o nasileniu bądź osłabieniu procesów inflacyjnych w krajach Europy Środkowo-Wschodniej w procesie integracji. Wydaje się również, że Polska nie musi się obawiać impulsu inflacyjnego ze strony usztywnienia kursu złotego w ramach ERM II.

Introduction and rationale for the study

Inflation is a phenomenon that applies directly to all the market partici-pants, both the producers and the consumers. Its level is perceptible in global and regional scale. In Warmia and Mazury region over 4/5 of the enterprises investigated consider the inflation rate important or even very important factor determining investments (WARŻAŁA 2005, p. 200). Changes in the exchange rate are of no lesser importance. Its role increased with the increasing international trade and progressing economic integration within the European Union. The economic integration process will continue and its practical effects are and will be perceptible not only in the scale of the country but they will manifest increasingly at the regional and local levels. As a consequence the investigation of the relations between the inflation rate and the nominal currency exchange rate seems so important. The issue also becomes particular-ly interesting in the context of changes caused by the global financial crisis.

Joining the European Union Poland committed itself to participate in the future in the monetary union, i.e. to implement the common currency euro. The same goal if faced by the other countries which – in exception of Malta and Cyprus – are characterized by parallel implementation of two processes: the systemic transformation of the economy and the economic integration within the European Union. Individual countries implement the process of reaching the common currency in slightly different ways. The economic consequences (e.g. the inflation rate) of tightening the Zloty exchange rate within the frameworks of participation in the ERM II, that is during at least two years immediately preceding acceptance of the euro represent one of the major problems in the discussions on the subject. It should be noticed that in the countries that aspire for membership in the monetary union the relation between the inflation and the currency exchange rate is the key issue. That issue can be analyzed and assessed on the base of 10 Central and Eastern European countries.

Subject, scope and applied methodologies of studies

The relations occurring between the inflation rate and the nominal cur-rency exchange rate[1] are the subject of the study. In the studies on inflation the

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[1] The nominal currency exchange rate is the price of the foreign currency (in this paper the euro) expressed in the national currency. The real currency exchange rate is the measure of the prices for goods and services in one country expressed in prices of goods and services in another country (KRUGMAN, OBSTFELD 2007, p. 150).

HICP (Harmonized Index of Consumer Prices) was considered, which is the index of the average increase in the prices of consumer goods and services basket computed by EUROSTAT. The inflation computed according to the HICP methodology is compatible in all the European Union countries. Changes in the nominal exchange rates of national currencies were computed as percentage changes in the year average nominal exchange rates of national currencies to the euro. EUROSTAT is the source of the data.

The study covered the results obtained in 10 Central and Eastern European countries that have been European Union members as of 2004: the Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovakia, Slovenia, Hungary as well as Bulgaria and Romania, which joined that group in 2007. The timeframe of the study covers the years 1998-2008. This is the period during which the countries studied were already past the systemic transformation shock and were subject to the integration processes both preceding the formal accession to the EU and during the initial years following the accession.

All the countries studied committed themselves to implement the common currency euro and two among them, Slovenia and Slovakia have already done that. One of the necessary conditions for replacing the national currency with the euro is application for the minimum of two years of a fixed exchange rate system of the national currency to the euro within the so-called European Exchange Rate Mechanism ERM II. There are however different mechanisms of approaching the currency union. In the practice of the accepted exchange rate policy we observe four paths to the common currency that determine the division into control groups with uneven numbers of countries in them.

Some of the countries, in their exchange rate policy, had implemented the **fixed exchange rate regime** (Latvia as of 1994) or the currency board system (Estonia as of 1992, Lithuania as of 1994, Bulgaria as of 1997) in their exchange rate policies already some years prior to the two year period within the frameworks of the ERM II.

The second accepted solution involves application of the **floating exchange rate regime** and as a consequence the shortest possible period of staying in the ERM II. Those strategies were applied by Slovenia and Slovakia. The Slovenian tolar and Slovak koruna were quoted according to the crawling peg regimes and they stayed within the ERM II system as short as possible to (the Slovenian tolar was included in the ERM II system from the 28th of June 2004 until the 31st of December 2006 while the Slovak koruna from the 28th of November 2005 until 31st of December 2007).

Poland belongs to the group of the countries that chose the third method, that is they have not yet fixed the exchange rates of their currencies to the euro and continue applying the **floating exchange rate system** (Romania as of 1991, Czech Republic as of 1997, Poland as of 2000). The relation between

tightening the exchange rate and the inflation is a particularly important issue for that group of countries. As a consequence, the issue is the main subject of the presented studies.

Hungary requires a separate study as the exchange rate regime that the forint was subject to was incidental and not applied in other countries of the European Union. During the study period the forint exchange regime changed. As of 1995, Hungary applied the crawling peg regime with the allowed fluctuation band of ±2,25%, in 2001 the allowed fluctuations around the parity were extended to ±15%. As of the 26th of February 2008 the forint exchange rate to the euro has been liberated. This allows individual treatment of Hungary in the studies and considering that Hungary applies a **system that is intermediate between the fixed and the floating exchange rate,** although evolving towards increasing liberalization. The floating exchange rate, however, is not the target one as the Hungarian central bank declares that it aims at tightening the forint exchange rate within the ERM II, and later implementing the euro.

The main goal of the study is to determine which of the selected methods of reaching the common currency proved the most rational from the perspective of the relation between the inflation and the exchange rate.

The basic research task was achieved in the form of the answer to the two following questions:
– Is there a correlation between the exchange rate regime and the inflation?
– Was tightening of the currency exchange rate linked to an increase of inflation?

In the study the following research hypothesis was formulated: in transition economies at the same time integrating with the European Union, i.e. in the Central and Eastern European countries, tightening of the exchange rate within the frameworks of the ERM II does not cause an increase of inflation.

The exchange rate policies assumed by the studied countries in the process of reaching the monetary union determine the division into 4 comparative groups. As those groups are small the simple tabulation comparative method was applied. For the purpose of determining the average values the arithmetic average was applied. It should be remembered, nevertheless that use of the arithmetic average may bear an error if the set includes atypical observations, particularly those characterized by extremely high values.

Reaching the currency union – selected elements

All the studied countries committed themselves to accede to the European Monetary Union. However, accession to the euro zone is restricted by the necessity of satisfying the institutional and nominal conditions. The nominal

convergence criteria include, among others, low inflation rate (not higher than the reference value), the necessity to maintain the currency exchange rate for two years in the European Exchange Rate Mechanism (ERM II), i.e. de facto the stabile currency exchange rate to the euro[2]. The exchange rate criterion is in fact the test of readiness to join the single currency area (ORĘZIAK 1999, p. 33). The convergence criteria are the same for all the countries, although the new EU members applied and apply a whole spectrum of possible currency exchange rate regimes:

– The Estonian kroon as of 2004 has participated in the European Exchange rate Mechanism ERM II. Earlier (until 1992) it had been quoted in the currency board system, so accession to the ERM II was a formality without a major influence on the other macro and microeconomic parameters.
– The Lithuanian lit has been in the ERM II as of 2004. Lithuania assumed the currency board system in 1994 while during the years 1992-1993 lit was quoted in the independent floating exchange rate system.
– The Latvian lat has been in the ERM II system since 2005. As of 1994, Latvia has used the conventional fixed exchange rate regime with the allowed margin of fluctuations of ±1%.
– The Bulgarian currency has been quoted in the currency board system as of 1997, first against the German mark and then against the euro while earlier the floating independent exchange rate was applied.
– Slovenia has had the euro as of the 1st of January 2007. The Slovenian tolar had been quoted in the ERM II system from the 28th of June 2004 until the 31st of December 2006, while earlier (as of 1992) the managed floating exchange rate.
– The euro has been the Slovakian currency as of the 1st of January 2009. The Slovak koruna had remained in the ERM II system from the 28th of November 2005 until the end of 2008, earlier the managed floating exchange rate of the koruna had been applied (as of 1998).
– The Czech koruna has been quoted in the floating exchange rate system as of 1997.
– Romania has applied the managed floating exchange rate system as of 1991.
– Poland has applied the independent floating exchange rate system since 2000. During the years 1995–2000 the crawling peg exchange rate system with the band of allowed deviations from the central parity had been applied.
– In 1995, Hungary assumed the crawling peg exchange rate system with the allowed band of deviations of ±2.25%, in 2001 the band was extended to ±15%, and in February 2008 the forint exchange rate was liberated.

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[2] The other convergence criteria are the stability of public finance (the budget deficit cannot exceed 3% of the GDP, the public debt not exceeding 60% of the GDP), and the level of the long-term interest rate (10 years treasury bonds) not exceeding the reference value.

The exchange rate regime influence on the inflation is described in the literature from two different perspectives. The first of them treats the fixed currency exchange rate as the anti-inflation anchor. The second of the position highlights the specificity of the systemic transformation process and points out at the appreciation of the real currency exchange rate reaching the conclusion that in the economies in transition there is a trade of between the appreciation of the nominal currency exchange rate and the inflation.

According to the first position, tightening the national currency exchange rate to the reference currency, which is stabile is treated as anti-inflation anchor (HAGEN, JIZHONG ZHOU 2002, pp. 6–7), in both countries with established market economies and in the countries in the profess of the systemic transformation of the economy. Although the higher current prices increase rate hinders maintaining the fixed currency exchange rate, the high notorious inflation encourages assuming the currency system based on the disinflation program (HAGEN, JIZHONG ZHOU 2002, pp. 14–15). This occurs in the situation when low credibility of monetary authorities is the source of inflation as that low credibility of monetary authorities contributes to creating the so-called inflation bias in the economy (WÓJCIK 2005, p. 27). According to the imperfect information theory by Lucas, when business entities and the society in a given country have high inflation expectations the costs of combating the inflation are high (MONGELLI 2002, p. 34). However, by tightening the currency exchange rate something like "borrowing" credibility from the anchor currency monetary authorities takes place. The costs of disinflation, as a consequence, are lower (CORSETTI 2008, p. 36). As the European Central Bank runs a credible inflation target policy, according to that theory, the Central and Eastern European countries that fixed their currencies in relation to the euro, will not experience the inflation higher than the countries applying the floating currency exchange rate.

The second of the positions highlights that strong appreciation of real currency exchange rates was one of the characteristics in transformations of Central and Eastern Europe transformations. The following phenomena are given as structural sources of that phenomenon: supply sources (the Balassa-Samuelson effect, changes in the equipment with means of production, the reverse Balassa-Samuelson effect, liberalization and adjustment of administered prices), demand effects' mechanisms and the problem of monetary authorities reputation (WÓJCIK 2005, p. 18). CEZARY WÓJCIK (2008, p. 55) states that the real currency appreciation can manifest in two ways:

1) as the appreciation of the nominal currency exchange rate while maintaining the inflation at the level close to the EU average, and/or:

2) in the form of a higher inflation when the nominal currency exchange rate is stabile.

According to numerous authors countries transforming their economies and simultaneously integrating with other countries have the choice between the fixed currency exchange rate and a significant inflation or a low inflation coupled with the nominal appreciation of the national currency (CORICELLI, JAZBEC 2003, pp. 98–99, EGERT, HALPERN, MACDONALD 2005, p. 13, HALPERN, WYPLOSZ 2001, p. 15).

In case of the nominal exchange rate maintained at a fixed level, the relative changes in prices and the real appreciation of the currency would cause appearance of a higher inflation as compared to the euro zone countries. On the other hand, allowing nominal currency exchange rate appreciation allows maintaining the inflation at the level similar to that in the euro zone (WÓJCIK 2008, p. 56). This would mean that countries transforming their economies and simultaneously integrating with the EU may choose between the nominal appreciation of the currency exchange rate and the inflation.

This issue is of extreme significance for those among the new Member States that apply the floating exchange rate. Establishing the irrevocable exchange rate of the national currencies to the euro will mean a decrease in variability of the nominal exchange rate to zero. Assuming continuation of the real appreciation trend this might mean a higher inflation as compared to the euro zone average.

An intermediate position is represented by KLYUEV (2001). Although that author also assumes a trade of between inflation and appreciation of the nominal currency exchange rate in countries in transition (KLYUEV 2001, p. 7), on the basis of the analysis of data from 13 countries in transition during the years 1990–1998 he argues that the correlation between the inflation rate and the choice of the exchange rate regime is non-linear. In case of the low initial inflation level, floating exchange rate is recommended to stabilize the inflation at a low level while in case of a high inflation the fixed currency exchange rate seems recommended to fulfill the role of the nominal anchor (KLYUEV 2001, p. 26).

The influence of changes in the currency exchange rate on the dynamics of inflation processes is known under the name of *exchange rate pass-through*. The depreciation of the currency exchange rate translates into higher prices of imported goods and, as a consequence the inflation. Studies for Poland during the years 1995–2006 were conducted by CHOLEWIŃSKI (2008) using highly advanced econometric methods. According to CHOLEWIŃSKI (2008), 1% unanticipated increase in the currency exchange rate causes an increase of the producer inflation rate m/m during the period of the initial 12 months after appearance of the impulse by ca. 0,1 pp. The reaction on the side of the consumer inflation (m/m) rate is weaker and respectively longer – the increase of that rate stabilizes after 15 months at the level of ca. 0,004 pp (CHOLEWIŃSKI

2008, p. 53). The disproportion in the scale of reaction by both inflation measures to the exchange rate impulse proves the existence of the mechanisms eliminating the *pass-through* effect between the last two links in the distribution chain. Higher costs may cause in case of producers a decrease in the margin in fear of loosing the market, which translates into stopping the increase in prices of the finished goods. In practical terms the monetary authorities also have a share in extinguishing the inflation impulse.

It should also be remembered that depreciation of the national currency is just one of the supply factors influencing the inflation. In addition to the exchange rate, the inflation is influenced by a whole range of factors both of the supply and the demand nature as well as monetary factors.

On the other hand the inflation also influences the currency exchange rate. There is feedback between the inflation and the changes in the currency exchange rate, but there are also many other factors influencing both values, which means that in practical terms it is hard to expect straight functional correlations. In addition to the inflation the fluctuations of the currency exchange rate are influenced by a whole range of factors, frequently short-term, which have not only economic but also psychological and sociological bases. In the literature the following are given as the most important causes of long-term currency exchange rate deviation from the exchange rate resulting from the purchasing power parity: shift in the levels of the relative money supply, changes in the growth rates of the relative money supply, changes in the relative demand for products, changes in the relative supply of products (KRUGMAN, OBSTFELD 2007, p. 157). In case of the Central and Eastern Europe countries treated by participants in the international financial market as the emerging markets, once off or speculative factors may have a large influence on the current currency exchange rate.

In long-term, the inflation rates convergence is the major condition of monetary stability. This is justified by the purchasing power parity theory that proves that when we want to observe the necessary current balance equilibrium in medium and long term the changes in currency exchange rates should compensate the differences in the rate of prices increase between trade partners (BOROWIEC 2001, p. 47). According to the purchasing power parity theory, when the inflation rate in the new Member State is higher than the average inflation rate in the euro zone the depreciation of the nominal exchange rate of a given currency to the euro will take place, roughly proportional to the difference in the inflation rates.

The review of the literature indicates that the currency exchange rate influence on the inflation depends on a number of additional factors (CORSETTI 2008, p. 27, p. 36, KRUGMAN, OBSTFELD 2007, p. 134, MONGELLI 2002, p. 34, WÓJCIK 2005, p. 27):

– the initial inflation level,
– the credibility of monetary authorities and inflation expectations of the society,
– the advancement of the transformation processes (and as a consequence the extent of the Balassa-Samuelson effect, rate of changes in the equipment with factors of production, extent of the reverse Balassa-Samuelson effect, liberalization advancement level and adjustment of administered prices level),
– the share of imported goods in the inflation basket and the price elasticity of the demand for those goods.

Currency system and inflation

The fact of existence of different currency exchange rate systems in the Central and Eastern Europe countries was used for investigating the relations between the exchange rate regime applied and the inflation. The countries were divided into 4 groups according to the currency exchange rate regime practiced.

The first group included the countries that applied the currency board or fixed rate system during the period of 1998–2008, i.e. Bulgaria, Estonia, Latvia and Lithuania. Among the countries of that group only Bulgaria does not participate in the ERM II. Prior to the accession to the ERM II Latvia applied the system of conventional fixed rate with the allowed parity of deviations of ±1%, while Estonia and Lithuania the system of currency board, which means lack of the possibility of the current exchange rate deviation from the parity. As the ERM II system is a multilateral system of fixed but adjusted currency exchange rates with the fixed central rate and standard fluctuation belt of ±15%, formally the fact of accession to the ERM II could be treated as liberalization of the exchange rate regime. It is not so, however, because Latvia declared unilaterally that it would keep the lat within the current fluctuations band while Estonia and Lithuania secure liquidity in their currency market tightly keeping the exchange rates of their currencies without any fluctuations from the central parity. This in fact means that for those currencies accession to the ERM II did not change anything. However, if maintaining the central parity proves impossible, those countries may, with no harm to participation in the ERM II, expand the allowed fluctuation belt to ±15%.

Slovenia and Slovakia were allocated to group two. Those countries, during the initial years of the studied period applied the floating exchange rate system and then Slovenia fixed its currency in the ERM II on the 28th of June 2004 while Slovakia did the same in November 2005. Slovenia became a member of

the monetary union on the 1st of January 2007 and Slovakia two years later, on the 1st of January 2009. The strategy assumed by those countries is characterized by fast fixing their currencies exchange rates in the ERM II system, possibly short stay within the ERM II system, and as fast as possible implementation of the euro. The experiences of those countries related to fixing their currency exchange rates are a particularly important research issue.

The third comparative group consists of the countries that have not joined the ERM II yet and apply the floating exchange rate. Those are the Czech Republic, Poland and Romania. Formally Poland has applied the floating exchange rate system as of May 2000 while during the years 1995–2000 it applied, as already mentioned, the crawling exchange rate system with the allowed fluctuation band from the central rate. However, the NBP maintained the Zloty exchange rate within the allowed fluctuation band using market and non administrative instruments (BAŁTOWSKI, MISZEWSKI 2006, p. 279). Already as of 1998, gradual increased flexibility of the system had been introduced so that it allows including Poland in the group of the countries applying the floating exchange rate during the entire period studied.

The fourth comparative group covers just one country – Hungary. The path of that country to implementation of the euro has not been applied by any other country during the period covered. Hungary, during the years 1995–2001, applied the crawling peg exchange rate with the allowed fluctuation belt of ±2.25% from the parity while the central parity according to the logics of the system was subject to monthly devaluation. In 2001, the allowed fluctuation band around the parity was expanded to ±15%; actually that already was a fixed exchange rate system with the fluctuation band because during the years 2001–2008 only one devaluation of the central exchange rate was performed (on the 4th of June 2003 the central parity of the forint was devaluated by 2.27%). As of the 26th of February 2008, forint is quoted in the floating exchange rate system. The central bank of Hungary declares that it is its goal in the undetermined future to substitute the forint with the common European currency, the euro, and the only path to that goal, according to the Treaty of Maastricht is the temporary (two year) tightening of the forint within the frameworks of the ERM II system. However, during the period covered we observe in that country a gradual evolution from the intermediate system, that is the crawling peg with the allowed fluctuation band towards full liberalization of the currency.

The average inflation rates during the years 1998–2008 in the four studied groups of countries is presented in table 1. The arithmetic average is sensitive to the extreme values. As Romania was characterized, particularly at the beginning of the studied period, by a significantly higher inflation (59.1% in 1998, 45.8% in 1999, 45.7% in 2000, 34.5% in 2001), the average for the

countries applying the floating exchange rate was also high for that period. Only in as of 2005 inflation in Romania was brought successfully to the level below 10%. As a consequence that group of the countries is characterized by a higher average inflation level during the initial years of the period covered.

Table 1

Average inflation depending on the assumed exchange rate regime

Item	Year										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Fixed rate	9.3	2.3	4.5	4.3	2.9	1.4	4.1	4.9	5.6	7.6	12.3
Floating rate	26.9	18.3	19.9	14.8	8.6	5.3	6.0	4.3	3.33	3.5	6.1
First floating rate and as of 2004 and 2005 fixed rate in the ERM II	7.3	8.3	10.6	7.9	5.5	7.1	5.6	2.7	3.4	2.9	4.7
Crawling peg allowing the fluctuation band (initially 2.25%, as of 2001 15%), as of 2008 floating rate	14.2	10	10	9.1	5.2	4.7	6.8	3.5	4	7.9	6

Source: Own work based on: http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,39140985 &_dad=portal&_schema=PORTAL&screen=detailref&language=en&product=REF_TB_prices& root=REF_TB_prices/t_prc/t_prc_hicp/tsieb060

During the pre-accession period, all the countries studied, indifferent of the exchange regime applied, were on the path of decreasing the rate of prices increase. Increase in the rate of prices increase during the final years of the period studied is a general European trend; during that time the average inflation rate in the euro zone countries and in the entire European Union also increased. The average inflation in 2008 in the entire EU increased to 3.7% as compared to 2.3% in 2007 (http://epp.eurostat.ec.europa.eu/tgm/table.do?tab =table&language=en&pcode=tsieb060&tableSelection=1&footnotes=yes&la beling=labels&plugin=1).

It is impossible to establish that the choice of one of the alternative exchange rate systems determined a systematically higher or lower inflation; the trends are highly similar as visible in figure 1. On that base it can be concluded that indifferent of the chosen path of reaching the ERM II and as a consequence the common currency, it is not the applied exchange rate system that will determine increasing or decreasing the inflation processes in the Central and Eastern European countries in the process of integration with the European Union.
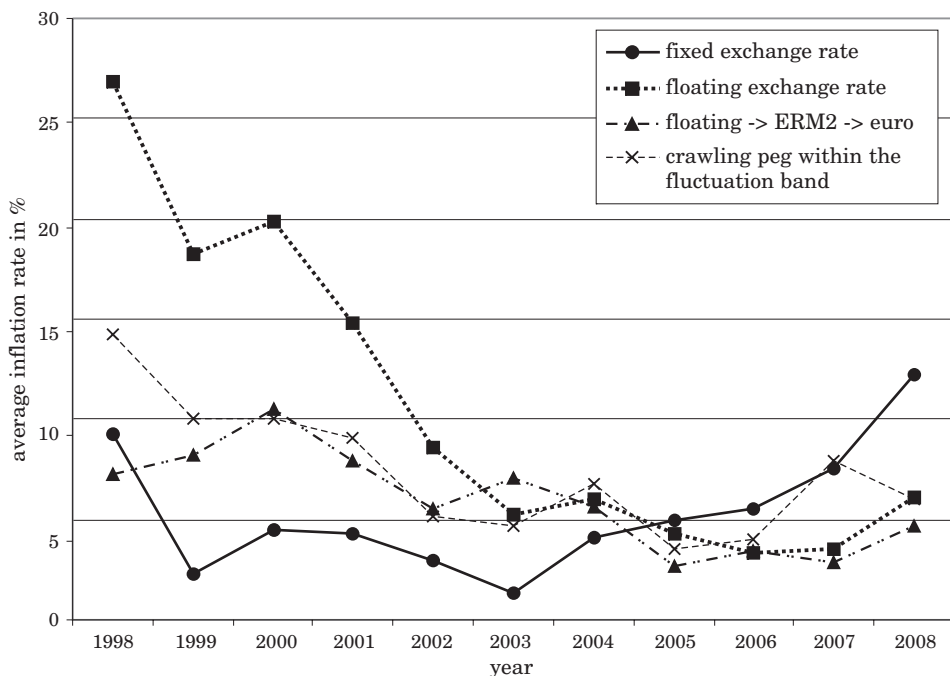
Fig. 1. Average inflation depending on the assumed exchange rate regime
Source: Own work based on: http://epp.eurostat.ec.europa.eu/portal/page?T30–pageid=
1996,39140985&_dad=portal&-schema=PORTAL&screen=detailref&language=en&product=
REF_TB_prices&root=REF_TB_prices/t_prc/t_prc_hicp/tsieb060

During the pre-accession period, the countries applying the fixed currency exchange rate were characterized by the lower average inflation rate than the countries applying the floating currency exchange rate. This is consistent with the theory saying that the fixed currency exchange rate or a more orthodox system of the currency board favors lower inflation functioning as anti-inflation anchor. However, already as of 2003 the inflation in Lithuania, Latvia, Estonia and Bulgaria increased faster and faster. The inflation in those countries should be seen as the phenomenon accompanying the high economic growth rate (BUKOWSKI 2008, p. 120), so it should rather not be linked to Estonian kroon, Lithuanian lit and Latvian lat joining the ERM II, because those currencies already earlier had been subject to the regime of fixed exchange rate to the euro. On the other hand Slovenia and Slovakia, after tightening the exchange rate recorded a decrease of the inflation. This is the experience important from the perspective of Poland because for those two countries accession to the ERM II involved tightening the currency exchange rate as will be the case in Poland.

Conclusion

During the pre-accession period countries with the fixed exchange rate were characterized by lower average inflation than the countries applying the floating currency exchange rate. However, already in 2003, the inflation in Lithuania, Latvia, Estonia and Bulgaria increased faster and faster and was higher than the average inflation in the countries applying the floating exchange rates. This fact, however, should not be linked to accession to the ERM II because in those countries that accession did not mean a change in the exchange rate regime. In case of Slovenia and Slovakia, however, that changed the floating currency exchange rate to the fixed exchange rate system within the frameworks of the ERM II and then replaced the national currency with the euro, no significant increase of inflation was recorded. This is an experience highly important from the perspective of Poland because accession of the Polish Zloty to the ERM II will also mean resignation from the floating currency exchange rate and replacing it with the fixed euro exchange rate.

It was not established that the choice of any of the alternative exchange rate systems determined a systematically higher or lower inflation. In that base it can be concluded that indifferent of the selected path of reaching the ERM II and as a consequence the common currency it will not be the exchange rate system that will be the factor determining intensification or weakening of inflation processes in the Central and Eastern European countries in the integration process. The assessment – positive or negative – of the floating currency exchange rate chosen by Poland finds no justification from that perspective. The assessment of the choice of that method should be conducted on the base of other characteristics and not the inflation consequences.

The important conclusion for Poland is that we should rather not be afraid of the inflation impulse resulting from tightening the currency exchange rate. The fixed exchange rate to the euro protects us against the inflation impulse resulting from depreciation of the currency. This, however, does not exclude appearance of inflation impulses originating from other sources.

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References

BAŁTOWSKI M., MISZEWSKI M. 2006. *Transformacja gospodarcza w Polsce*. Wydawnictwo Naukowe PWN, Warszawa.

BOROWIEC J. 2001. *Unia ekonomiczna i monetarna; Historia, podstawy teoretyczne, polityka*. Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu.

BUKOWSKI S. 2008. *W drodze do euro: stabilizacja kursów walutowych – doświadczenia krajów Unii Europejskiej*. In: *Polska w strefie euro, szanse i zagrożenia*. Ed. J. Ostaszewski. Szkoła Główna Handlowa w Warszawie – Oficyna Wydawnicza, Warszawa, s. 103–126.

CHOLEWIŃSKI R. 2008. *Wpływ zmian kursu walutowego na dynamikę procesów inflacyjnych.* Studia i Materiały 226, NBP Warszawa.

CORICELLI F., JAZBEC B. 2004. *Real exchange rate dynamics in transition economies.* Structural Change and Economic Dynamics, 15.

CORSETTI G. 2008. *A modern reconsideration of the theory of Optimal Currency Areas.* European Commission, Economic Papers, 308, Brussels.

EGERT B., HALPERN L., MACDONALD R. 2005. *Equilibrium Exchange Rates in Transition Economies: Taking Stock of the Issues.* Oesterreichische Nationalbank Working Papers, 106.

HAGEN J., JIZHONG ZHOU. 2002. *The choice of exchange regimes: an empirical analysis for transition economies.* Zentrum fur Europaische Integrationsforschung. Working Paper, B03, Bonn.

HALPERN L., WYPLOSZ CH. 2001. *Economic Transformation and Real Exchange Rates in the 2000s. The Balassa-Samuelson Connection.* UNECI, Economic Survey of Europe, 1 X.

KLYUEV V. 2001. *A Model of Exchange Rate Regime Choice in the Transitional Economies of Central and Eastern Europe.* IMF Working Paper, WP/01/140.

KRUGMAN P., OBSTFELD M. 2007. *Ekonomia międzynarodowa: teoria i polityka, : teoria i polityka,* Wydawnictwo Naukowe PWN, Warszawa.

MONGELLI F.P. 2002. *New Views on the Optimum Currency Area Theory: What Is EMU Telling Us?* Working Paper, 138, ECB.

ORĘZIAK L. 1999. *Euro nowy pieniądz.* Wydawnictwo Naukowe PWN, Warszawa.

ORĘZIAK L. 2004. *Finanse Unii Europejskiej.* Wydawnictwo Naukowe PWN, Warszawa.

WARŻAŁA R. 2005. *Wpływ bezpośrednich inwestycji zagranicznych na rozwój regionalny (na przykładzie województwa warmińsko-mazurskiego).* Katedra Makroekonomii UWM Olsztyn (praca doktorska).

WÓJCIK C. 2005. *Źródła zmian cen relatywnych i dynamiki realnego kursu walutowego – przegląd badań teoretycznych.* Banki i Kredyt, 9.

WÓJCIK C. 2008. *Integracja ze strefą euro, teoretyczne i praktyczne aspekty konwergencji.* Wydawnictwo Naukowe PWN, Warszawa.