EMU Entry Strategies for the New Member States

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1. Introduction

The recent enlargement of the European Union by ten mostly Central and Eastern European (CEE) countries (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, Slovenia, as well as Cyprus and Malta) heralds the enlargement of the European Monetary Union (EMU). By the adoption of the EU Treaty the ten new member states have already become members of the EMU—although still with derogation. In contrast to Denmark and the UK who had the possibility to opt against EMU membership, the new member states are obliged to join the EMU as soon as they fulfill the Maastricht criteria for monetary, fiscal and exchange rate convergence.

In addition, while the new member states can postpone the full-fledged EMU membership by not meeting the Maastricht criteria (as presently Sweden does), all new member states seem to have to a strong intention to join the EMU as soon as possible. The recent accession of Estonia, Lithuania, and Slovenia to the Exchange Rate Mechanism II heralds a new round of EMU enlargement by 2006/07. Why do the new member states want to join the EMU as soon as possible and how can a smooth EMU accession be achieved? These are the questions analyzed in this paper.

2. The Costs and Benefits of an Early EMU Membership

The costs and benefits of an early EMU membership have been widely discussed within the theoretical framework of optimum currency areas as put forward by Mundell (1961) and McKinnon (1963). In their seminal papers the two authors relied on three main criteria to make an assessment about the pros and cons of joining a monetary union: asymmetry, flexibility and openness.

The seminal paper by Mundell (1961) on optimum currency areas focused on asymmetric shocks and flexibility of labor markets. Assuming stable prices and wages, Mundell scrutinized the macroeconomic adjustment mechanisms of demand shifts between two regions. Within this Keynesian framework, Mundell (1961) found that asymmetric shocks were most easily adjusted by monetary policy and (thereby) exchange rate changes. Wage flexibility and labor mobility could compensate for the lack of independence in monetary policy making.

The analysis presented by Mundell (1961) leads to scepticism about the desirability of forming a monetary union among the present EMU members and the accession countries. Because the EU25 will become more heterogeneous, the probability of asymmetric shocks is high (Fidrmuc and Korhonen 2001). As in addition labor market flexibility is widely perceived to be low, one size in monetary policy for the EMU25 is unlikely to fit to all.

Yet, there are other factors that have to be considered. McKinnon (1963) argued that in small open economies Mundell's (1961) assumption of stable prices and wages does not hold. As world market prices can be regarded as fixed for small countries, domestic price volatility is high if the exchange rate floats freely. To stabilize the level and the volatility of prices McKinnon (1963) recommended fixed exchange rates. As openness affects exchange rate stabilization, small open economies have considerable gains from a monetary union in terms of price stability and low transaction costs for international trade. These may well exceed the costs of lost monetary policy independence.

The empirical evidence for openness is quite clear cut. Figure 1 shows the exports to the EU15 as percent of GDP for four groups of countries: the twelve present EMU members, the three EMU "outs", the eight CEE potential EMU member states as well as Cyprus and Malta. In the year 2002 exports to the EU15 as percentage of GDP averaged 29.6% for the CEE new member states in comparison with 20.9% for the EMU members. Trade integration with the EU15 is considerably stronger for the CEE countries than for "outs" Denmark, Sweden and UK (13.3% on average). Based on McKinnon's (1961) openness criterion the Central and Eastern European countries pass the OCA-test.

[Figure 1 about here]

Nevertheless the traditional theory of optimal currency areas leaves one skeptical of the advantages of an early EMU membership. The high probability of asymmetric shocks is unlikely to be compensated by labor market flexibility and by the gains from additional trade. This explains the position of Deutsche Bundesbank (2003) who has suggested a later date for accession because of the considerable structural divergence between the present Euro Area and the new member states. A similar thinking prevails in the United Kingdom where it is widely argued that one monetary policy can not be optimal for both the UK and continental Europe.

This judgment may change however, when later works by Mundell are considered. As outlined by McKinnon (2004), Mundell (1973a) himself later questioned his original Keynesian framework in which monetary policy serves as a tool for macroeconomic stabilization, and advocated a monetary union for the then EC members (Mundell 1973b).

Indeed, in developing countries and emerging markets monetary policy is usually a source of volatility, rather than an instrument of macroeconomic stabilization in the case of exogenous (asymmetric) shocks. As public expenditure is quite commonly financed through inflation, and as exports are quite often supported by devaluations, exchange rates tend to be rather volatile. This economic instability causes losses in terms of real growth.

The upshot is that if membership in the monetary union incorporates a significant degree of macroeconomic stabilization the gains from joining the monetary union will be large. Indeed in many CEE countries high inflation and depreciations could be observed during most of the 1990s, until the adoption of the EU treaty forced them to stabilize their macroeconomic fundamentals. Since the danger of macroeconomic instability is even greater for small and open economies with international capital mobility, the benefits of EMU accession in terms of macroeconomic stability seem to be significant.

Econometric estimations by De Grauwe and Schnabl (2004a) show that exchange rate stability in Central and Eastern Europe has lead to less inflation and more growth. The positive effect of stable exchange rates on growth comes from two transmission channels. First, exchange rate stability against the euro stimulates trade with the European Union. This process can be expected to continue after EMU accession as the OCA criteria are likely to be endogenous (Frankel and Rose 2002). Econometric estimations by Micco, Stein and Ordoñez (2003) find that EMU membership has increased bilateral trade between the present members considerably compared with trade with the non-EMU countries.

Second, because capital markets in the new member states remain underdeveloped—as it is the case in most emerging markets and developing countries—there are high risk premia on their interest rates, which hamper investment, consumption and growth. These can further increase in the wake of financial and currency crisis. If the CEE countries import the reputation of the European Central Bank irrevocably they achieve an interest rate level that is exceptionally low for the standards of emerging markets.

With the negotiations on entry to the EU and the macroeconomic convergence associated with them, deeper capital markets have already emerged and interest rates in all new member states have declined considerably. The entry into the monetary union would secure this advantage irrevocably. The CEE countries have the unique opportunity to complete the catch-up process of an emerging market with the interest rate of a highly developed economy.

An insurance mechanism against asymmetric shocks would emerge if the CEE countries are integrated into the Euro Area capital markets. If individual stocks and bonds of Central and Eastern European companies would be listed in Frankfurt or London and would be held by citizens of the whole Euro Area, the risk of asymmetric shocks would be shared by all Euro Area countries (Mundell 1973a).

3. ERM II Membership

Considering the considerable advantages of an early EMU membership, the new member states currently plan accession by 2006 at the earliest (Estonia) and by 2010 at the latest (Czech Republic). The path into the monetary union leads first to the Exchange Rate Mechanism II (ERM II), which regulates the exchange rate relationships between the present Euro Area and the future EMU members ("pre-ins"). There are no explicit regulations for the timing of ERM II entry, but the Maastricht criteria require a minimum waiting period of two years before examination to enter EMU.

For countries that want to enter the monetary union as soon as possible a speedy ERM II entry was necessary. Given that Estonia, Lithuania and Slovenia joined the ERM II in June 2004, the EMU entry can take place in late 2006 or early 2007—if all Maastricht criteria are met. The other new member states can choose between an early or late ERM II entry.

There are two perspectives on the timing. The European Commission stresses the disciplinary function of ERM II: since the smooth participation in the exchange rate mechanism requires a high degree of macroeconomic convergence, the consolidation of public deficits and structural reforms must be pushed ahead. The exchange rate mechanism serves as an "internship" for macroeconomic discipline. The early entrance in ERM II is even reasonable if EMU ascension is not aimed for immediately after two years.

On the other hand, the candidates stress the risks for macroeconomic stability, which originate in volatile international capital flows. Since the capital controls of the new member states had to be dismantled before entering the EU, sudden reversals of short-term international capital flows could endanger the ERM II exchange rate targets and thereby postpone EMU membership (Corker et al. 2000).

In order to minimize this risk, most countries want to keep their time in ERM II as short as possible. If the entry into the exchange rate mechanism announces the entry into the monetary union after little more than two years, as was the case with Greece, expectations will stabilize towards the ERM II parity, which is—according to the fixed rate rule—seen as the Euro conversion rate. Speculative attacks and crises are unlikely. The exchange rate mechanism is seen as a waiting room to the monetary union.

For countries that aim for a later EMU entry, it therefore can make sense to secure first the nominal and—in particular—the fiscal convergence provided for in the Maastricht criteria, and then enter the ERM II. While clear progress in nominal convergence has been achieved already, in many countries the budgets deficits remain problematic. All of the new CEE members have debt levels below the Maastricht benchmark of 60% of GDP, but the annual budget deficits have increased markedly in many countries. Poland, the Czech Republic, Slovakia and Hungary were all far above the Maastricht 3% limit in 2003.

In the wake of ERM II entry, a parity against the Euro has to be decided upon in multilateral negotiations. For the new ERM II members Estonia, Lithuania and Slovenia the central rates were set close to the prevailing market rates. Given the comparatively wide band of ±15% around the central rate, a relatively broad palette of exchange rate arrangements is possible. The European Council has only excluded three options: a fully flexible rate without commonly agreed parity (such as currently in Poland), exchange rate pegs on currencies other than the euro (such as the currency basket in Latvia)[1], and continuous but controlled devaluations (the crawling peg, such as practiced by Slovenia before its ERM II entry).

Entry into the monetary union is possible after two years at the earliest, provided there are no severe tensions or devaluations of the parity and as long as the other criteria for inflation, long-term interest rates and public debt are fulfilled. Whether membership in the exchange rate mechanism will remain free of severe tensions will not depend solely on capital markets, but also the so-called Balassa-Samuelson effect, which is related to the economic catch-up process of the new member states (De Grauwe and Schnabl 2004b).

The Balassa-Samuelson effect originates in the high productivity growth of the traded (industrial) goods sector. The increasing productivity in industry is reflected in increasing wages for industrial workers. Wages also increase in the non-traded goods sector (services) due to labour mobility. Since productivity remains fairly constant in the non-traded goods sector the prices for services increase. The upshot is that the industrial catch-up process leads to more inflation.

Although the Balassa-Samuelson effect is a side effect of the desired real convergence process, it can be in conflict with the nominal convergence process as required by Maastricht

[1] Latvia plans to shift to a unilateral euro peg in January 2005 targeting an EMU membership by January 2008.

Treaty. The Maastricht criteria for inflation and nominal long-term interest rates were conceptualized for countries with about the same level of development, but not for the fast-growing CEE economies. If a country pegs its exchange rate tightly to the euro, and thus fulfils the exchange rate criterion, that country can count on higher inflation than in the Euro Area.[2]

There are very different estimations about the scope of the Balassa-Samuelson effect and other factors, such as increasing capital inflows before the EMU entry, which may reinforce it. Additional inflation could be in the range from 1% up to 4%. This increases the probability that—given hard pegs to the euro—inflation in the EMU accession candidate will be higher than the allowed 1.5 percentage points above that of the three best performing members. The CEE new member states face the dilemma of real versus nominal convergence.

4. The Path to the Monetary Union

How can the aspiring members achieve EMU membership despite this Maastricht bottleneck? The simplest solution would be to adapt the Maastricht criteria to the countries in a catch-up stage of economic economic development. Such changes in the convergence criteria would find broad approval in Central and Eastern Europe, but the European Central Bank and the ECOFIN council have stressed that the principle of equal treatment should be applied.

A late EMU membership, as suggested by the Deutsche Bundesbank (2003), could—due to the large income differences between the center and the eastern periphery—delay the entrance into the monetary union for decades.

Thus, in order to fulfill the Maastricht inflation and exchange rate criteria simultaneously in the year of examination, there are mainly two options. Hard pegs to the euro—which require a high degree of fiscal and wage flexibility—or nominal appreciation within the ERM II limits—which allows for a more flexible adjustment to asymmetric shocks in the periphery via exchange rates.

Hard Pegs to the Euro

Countries such as Estonia or Lithuania that have pegged their currencies tightly to the euro in the past will sustain these pegs. Provided that there is a mutual agreement about the central rate the new member states can maintain the euro-based currency boards as a unilateral

[2] Within an environment of high inflation and depreciation there seems to be no conflict between nominal and real convergence (Herrmann and Jochem 2004). Yet, the Balassa-Samuelson effect is likely to become "visible" as macroeconomic convergence with the Euro Area increases (De Grauwe and Schnabl 2004a).

commitment within ERM II. Although the band width for the Estonian krona and the Lithuanian lita has been set to ±15%, they are likely to remain (unilaterally) committed to a narrow band width close to ±0%.

Slovenia, which let the tolar depreciate gradually against the euro before its ERM II entry in June 2004 (Figure 2) is likely to allow for some more exchange rate flexibility. Nevertheless the Slovenian monetary authorities seem to target a close band around the ERM II central rate. Depreciations have abated since the ERM II entry (Figure 2).

[Figure 2 about here]

For such hard pegs to the euro the Balassa-Samuelson effect would most likely lead to higher inflation that could exceed the Maastricht benchmark. This is even more likely as economic growth in the Euro Area is recovering and demand for CEE goods will increase. To dampen the inflationary pressure in the year of examination, the EMU accession country, whose monetary policy is committed to exchange rate stability, can keep a lid on inflation through a restrictive fiscal policy.

The cost of entrance into the monetary union would be an output loss prior and after the EMU entry. This would seem acceptable only if a fiscal consolidation would be necessary to meet the Maastricht budget criterion. Fiscal contraction to curb inflation may be supported by a "non-inflationary wage policy" and structural reforms to ensure fiscal flexibility.

All in all, a hard peg to the euro will require a high degree of macroeconomic flexibility to ensure a safe EMU entry. If failures in implementation, timing and dosage of the fiscal contraction occur, expectations regarding the EMU entrance could be destabilized.

Nominal Appreciation within the ERM II band

While the small currency board countries Estonia and Lithuania have already achieved enough macroeconomic flexibility to sustain a hard euro peg over a long time period, this may be less the case for the larger accession countries such as Poland, Hungary or the Czech Republic. For these countries nominal appreciation within the ERM II ±15% band may the better choice.

If a country fulfils the Maastricht inflation criterion by bringing inflation (close to) the EMU level, the Balassa-Samuelson effect will cause a nominal appreciation of the currency (De Grauwe and Schnabl 2004b). In comparison to fiscal contraction this has two advantages.

First, adjustment will be „automatic" and therefore not subject to discretionary policy decisions. Second, although appreciation implies a restrictive effect for exports, output losses are likely to be limited.

This gradual adjustment process is simulated in Figure 3 for different degrees of yearly nominal (and real) appreciation (1% - 5%).[3] We assume that—as in the case of Ireland before its EMU entry in 1999—the ERM II entry rate is equal to the ERM II central rate. This would provide a high degree of flexibility for nominal exchange rate movements. The exchange rate can move above and below the central rate but is likely to appreciate below the central rate due to the Balassa-Samuelson effect.

Further, we assume that the assessment of compliance with the Maastricht criteria takes place after 24 months ERM II membership (waiting room approach) and that at the same time the final EMU conversion rate after—say—six months after assessment is announced. At this time the CEE currencies have probably appreciated as shown in Figure 3. If the prevalent central rate would be announced to be the conversion rate, the respective currencies would gradually depreciate towards the conversion rate starting from —or even prior to—the day of the announcement of the EMU membership.

[Figure 3 about here]

To dampen the resulting inflationary pressure the revaluation of the central rate has to be considered. Revaluations of the central parity are explicitly allowed by the Treaty. The degree of revaluation will be subject to negotiations between the EMU and the accession country. In Figure 3 we assume that a further appreciation is projected and the Balassa-Samuelson effect is fully incorporated in the determination of the final conversion rate. Nevertheless, a mixed strategy as pursued in Ireland which allows for some depreciation prior to the EMU entry is possible.

While Figure 3 assumes a gradual adjustment to the Balassa-Samuelson effect, in practice exchange rate movements are likely to be more erratic. This may change, if the ERM II entry rate would be above the ERM II central rate thereby projecting a clear appreciation path towards the EMU entry rate (Figure 4).

[Figure 4 about here]

[3] Taking the Balassa-Samuelson effect into account Buiter and Grafe (2002: 40) estimate that the annual equilibrium (real) appreciations do not exceed 3.5% to 4.0%.

Setting the ERM II central rate above the entry rate is based on the idea that the currencies will appreciate towards the projected EMU entry rate. This approach would require exact information about the degree of expected appreciation and the duration of ERM II membership. If this commitment is credible, the EMU entry would be safe.

5. Outlook

The entrance of the new member states into the European Monetary Union remains clouded in uncertainties. The new candidates, whose membership will be decided on a case-by-case basis, face substantial challenges to achieve EMU membership. Yet the fact that the advantages such as macroeconomic stability, more trade and low interest rates seem substantial makes it very likely that a political consensus in the countries for the necessary fiscal and structural adjustments will be achieved. The ERM II accession of Estonia, Lithuania and Slovenia already heralds an early EMU enlargement.

In Frankfurt and Brussels a speedy EMU enlargement seems to be taken for granted. The future voting procedure in the expanded European Central Bank has already been decided.[4] Whether monetary policy making will be easier within the enlarged monetary union is still unknown. The divergence of inflation rates will continue to grow and the economic and political weight of the periphery will increase. Low real interest rates at the periphery may increase the risk of overheating and thereby increase the need for fiscal flexibility and structural reforms. These will be new challenges of the enlarged monetary union.

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[4] The voting system in the enlarged Eurosystem is discussed by Frenkel and Fendel (2003).

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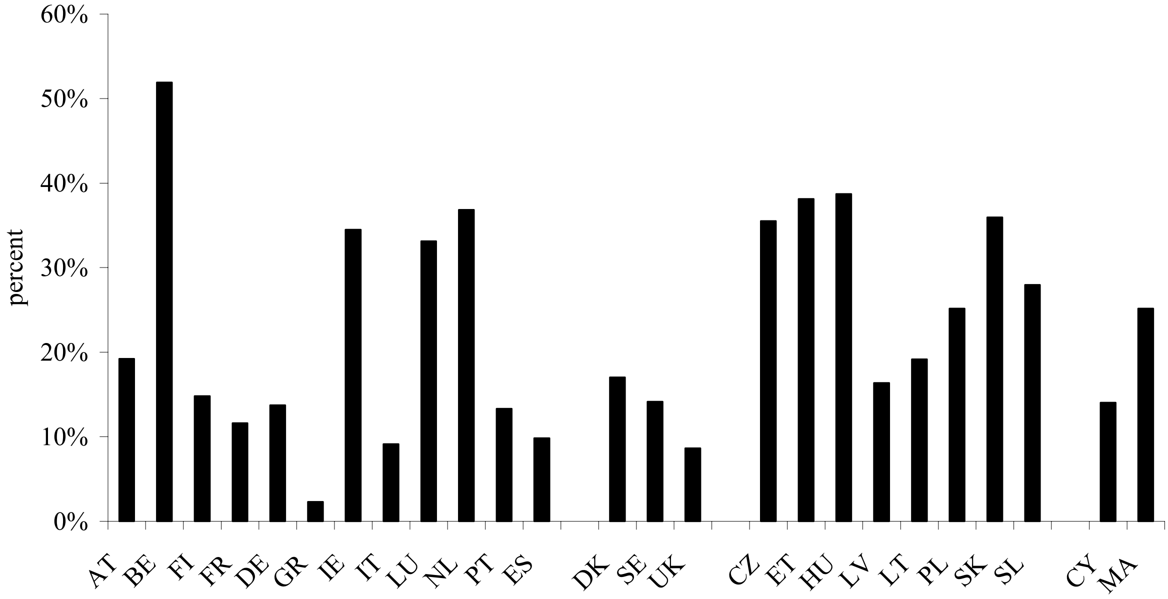
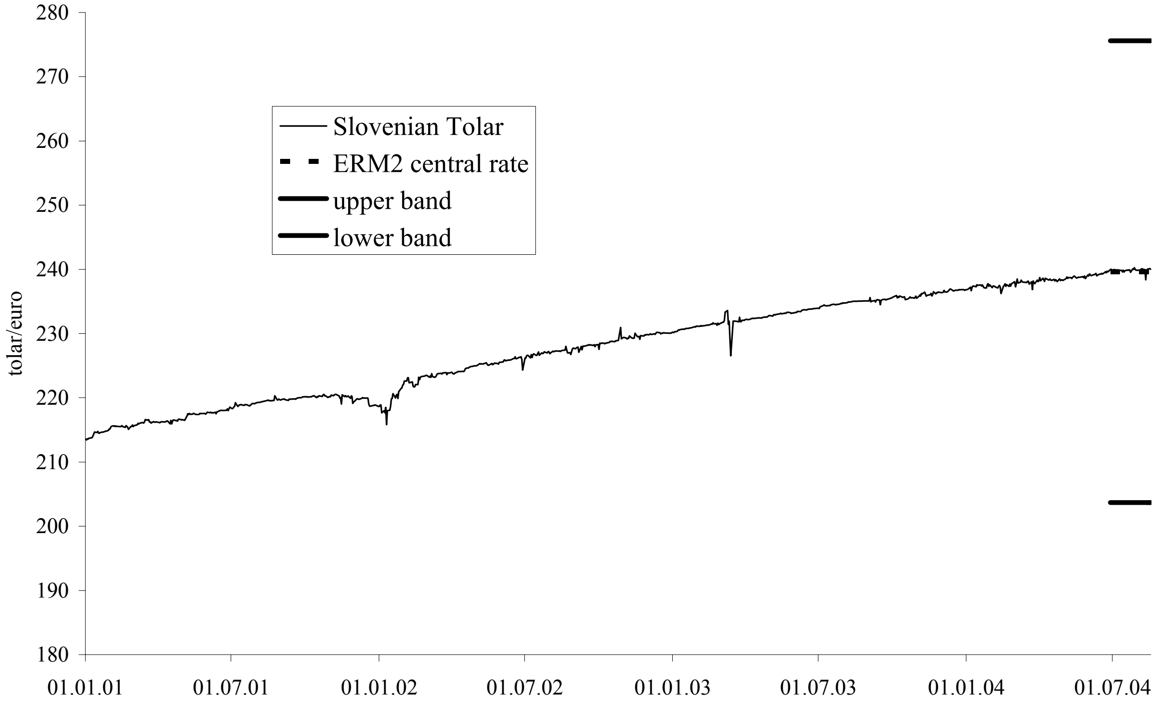
Figure 1: Exports to EU15 as Percent of GDP (2002)



Source: IMF: Direction of Trade Statistics.

Figure 2: Exchange Rate Tolar/Euro since January 2001 (Daily Data)



Source: Datastream.

Figure 3: Simulation of EMU Entry – Entry Rate = Central Rate

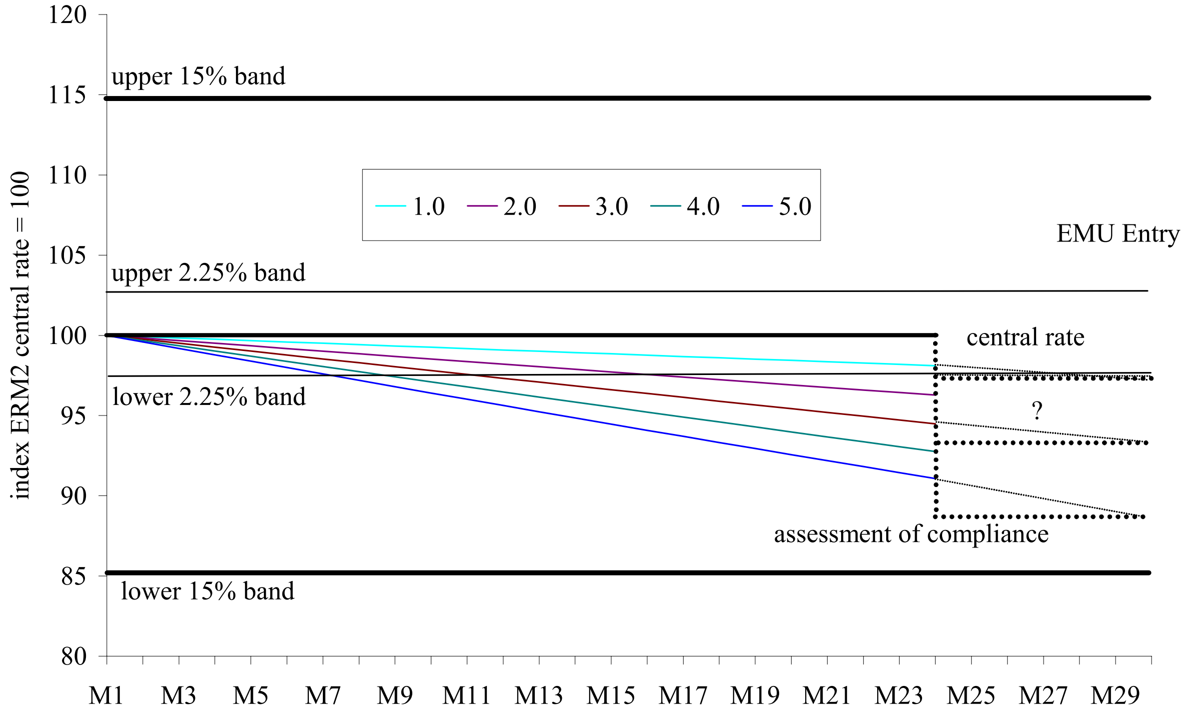


Figure 4: Simulation of EMU - Entry Rate > Central Rate