ECONSTOR
*Make Your Publications Visible.*

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Gabrisch, Hubert; Kämpfe, Martina

**Article — Published Version**

# The new EU countries and euro adoption

Intereconomics

*Suggested Citation:* Gabrisch, Hubert; Kämpfe, Martina (2013) : The new EU countries and euro adoption, Intereconomics, ISSN 1613-964X, Springer, Heidelberg, Vol. 48, Iss. 3, pp. 180-186, https://doi.org/10.1007/s10272-013-0460-0

This Version is available at:
https://hdl.handle.net/10419/113698

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

DOI: 10.1007/s10272-013-0460-0

Hubert Gabrisch and Martina Kämpfe

# The New EU Countries and Euro Adoption

**In the new member states of the EU which have not yet adopted the euro, previous adoption strategies have come under scrutiny. The spillovers and contagion from the global financial crisis revealed a new threat to the countries' real convergence goal, namely considerable vulnerability to the transmission of financial instability to the real economy. This paper demonstrates the existence of extreme risks for real convergence and argues in favour of a new adoption strategy which does not announce a target date for the currency changeover and which allows for more flexible and countercyclical monetary, fiscal and wage policies.**

In 2004 eight former transition countries from Central and Eastern Europe (CEE) acceded to the European Union, followed by an additional two countries in 2007. These ten new EU members were not allowed to make use of an opt-out clause like the United Kingdom or Denmark. Instead, the new member states are obliged to prepare their economies to adopt the common currency, the euro. Three of them, namely Slovenia (2007), the Slovak Republic (2009) and Estonia (2011), have already entered the euro area after fulfilling the formal criteria during the mandatory test stage. However, the global financial crisis and the uncertain path of EU governance reforms have led to rising scepticism in the remaining candidate countries about abandoning an independent monetary policy.

From an economic point of view, a common currency makes life easier for everyone and promises growth effects for small and very small countries from more trade – an issue extensively covered in empirical literature.[1] Our analysis does not contribute to this literature. Instead, we explore the potential losses caused by external financial shocks and their consequences for a strategy of euro adoption. We expose the so-called extreme-risk problem in economic activity, which may affect real convergence – which remains the overarching policy goal in the former transition countries. The extreme-risk problem may be defined as vulnerability to an external financial shock; such a vulnerability prevails not only in a turbulent period but is already present in tranquil times. One of the reasons for extreme risks is a monetary system ill-suited for the institutions and structures of an economy. The prevalence of an extreme-risk problem may justify a longer reform and adjustment path before adopting the euro, as well as the flexible use of monetary, fiscal and other macro policies for managing the transition.

## Attitudes

When Slovenia, Slovakia and Estonia each adopted the euro to replace their national currencies, there was broad political consensus and support among the populations of all three countries and overwhelming enthusiasm for the common currency in almost all of the remaining CEE countries. Since then, sentiments have changed. The latest survey by the European Commission from April 2012 found for the first time a majority of respondents in the region opposed to the euro.[2] A Polish survey from 2012 found that the 43 per cent minority that was opposed to the euro in 2009 had grown into a 53 per cent majority in September 2011.[3] In Latvia, which is expected to adopt the euro in January 2014, an August 2012 survey revealed support for the euro was just 35 per cent.[4]

Of course, governmental documents cannot openly discuss rejecting euro adoption, and the updated con-

1 J.A. Frankel, A.K. Rose: The Endogeneity of the Optimum Currency Area Criteria, in: The Economic Journal, Vol. 108, No. 449, 1998, pp. 1009-1025; P. De Grauwe, G. Schnabl: Exchange Rate Stability, Inflation, and Growth in (South) Eastern and Central Europe, in: Review of Development Economics, Vol. 12, No. 3, 2008, pp. 530-549; J. Fidrmuc, R. Martin: FDI, Trade and Growth in CESEE Countries, in: Focus on European Economic Integration, Q1/11, Oesterreichische National Bank, 2011, pp. 71-89.

**Hubert Gabrisch**, Halle Institute for Economic Research, Germany.

**Martina Kämpfe**, Halle Institute for Economic Research, Germany.

2 European Commission: Introduction of the euro in the more recently acceded member states, in: Flash Eurobarometer 349, http://ec.europa.eu/public_opinion/flash/fl_349_en.pdf.

3 A. Torój, E. Bednarek, J. Bęza-Bojanowska, J. Osińska, K. Waćko, D. Witkowski: EMU: the (post-)crisis perspective. Literature survey and implications for the euro-candidates, in: Polish Ministry of Finance Working Paper Series, No. 11-2012, 2012, p. 4.

4 See http://www.euractiv.com/euro-finance/latvia-prepares-2014-eurozone-ac-news-514971, 2013.

vergence programmes as well as national reform programmes in these countries follow the standards set by European Commission. Nonetheless, scepticism is evident in public speeches and deeds. There are continuous struggles between the political leaders and the more pro-euro central banks over the latter's independence in Hungary and the Czech Republic, two countries which keep pushing the euro adoption dates further away. Hungary's government is currently "fighting for sovereignty by unorthodox policies" (further illustrated by the conflict with the European Commission in a couple of areas).[5] One facet of this is contained in the new conservative constitution of 2011, in which a passage has been inserted assigning the forint as legal currency. This can only be changed through a two-thirds majority vote in the parliament. As two prominent Hungarian economists assert, the country was "formerly pro euro in words, but against in deeds; [it is] now against both in words and deeds".[6] Official policy in the Czech Republic supports stability with its own currency. In Poland, the official attitude is still supportive but pragmatic. But in these core countries, as in other candidate countries, the target dates for a currency switchover were postponed without announcing a new one ("not earlier than 2020"). Bulgaria and Romania's governments cancelled their accessions to the exchange rate mechanism (ERM) planned for 2013[7] – the pre-adoption test stage; as a result, the 2015 target date for the changeover to the euro has also been cancelled. The general attitude in the region is to wait and see what happens with the crisis in the eurozone and the implementation of a new design of economic governance. Indeed, Hungary and the Czech Republic are opposed to the ongoing governance reforms. Neither government signed the Euro Plus Pact of March 2011, and the Czech Republic did not sign the Fiscal Compact of March 2012.

There is more to the apparent changes in attitudes than just populism or nationalism, which have always existed in the region. A growing number of critical research studies from institutions like national central banks and ministries of finance in CEE countries are worth noting.[8] Prior to the crisis, cost-benefit analyses from these institutions emphasised the positive effects of adopting the euro, such as the elimination of exchange rate risk, declining interest rates and the disciplining effect of a single monetary policy on public budgets. With respect to the latter, recall the debate on unilateral euroisation ten years ago, when proponents underlined their case with hoped-for restrictions to fiscal policy.[9] These days, not all of those proponents are still in favour of the idea. A recent analysis at the National Bank of Poland using DSGE modelling concluded that the country would have performed worse in the crisis had it been a member of the eurozone in 2007.[10] Today, studies seem to recognise that without an autonomous monetary policy and a flexible exchange rate, their economies might be forced to undergo painful "internal devaluations" in cases of severe asymmetric shocks. An internal devaluation necessitates a restrictive fiscal policy and cuts in nominal wages and living standards, whereas monetary independence offers expansive monetary policy and a nominal devaluation of the exchange rate. Greece and the Baltic countries have demonstrated that internal devaluations may entail drastic cuts in economic growth and employment – and demography. At first glance, an internal devaluation would appear to be a short-term event for a small member of a currency area, and recovery would follow soon, as was recently the case in the Baltic countries. However, some local researchers with insights into the structures of these economies deny the success of internal devaluation touted by many other observers; instead, they describe it as a new boom, likely to be followed by a bust. They see the Baltic recovery since 2011 as the result of the massive infusion of EU funds (running out in 2015), enclave industries and emigration.[11] Latvia and Lithuania lost about 11 per cent of their population between 2008 and 2011 due to massive emigration of younger and qualified persons – a scenario which is also becoming apparent in some southern eurozone countries.

## Shocks

There is broad consensus among economists that countries suffering from asymmetric shocks should not yet join the eurozone. Before the outbreak of the global financial crisis in 2008, there was a strong belief that those shocks would not occur so often in the European context, and the IMF and other researchers made strong cases for rapid

5 J. Neményi, G. Oblath: Revisiting the case for Euro-adoption in the CEE countries. In focus: Hungary, WIIW Seminar, 10 December 2012, mimeo.

6 Ibid.

7 Officially, Romania was the last of the countries to bow out of its changeover, targeted for 2015, when it cancelled its entry into the ERM, which was necessary in 2013 at the latest.

8 See, for example, Hungary and the euro area: challenges and prospects, in: Magyar Nemzeti Bank: Analysis of the convergence process, October 2011; or for Poland: Torój et al., op. cit.

9 See J. Rostowski, A. Bratkowski: The EU Attitude to Unilateral Euroization: Misunderstandings, Real Concerns and Sub-optimal Admission Criteria, in: Economics of Transition, Vol. 10, 2012, pp. 445-468.

10 See M. Brzoza-Brzezina, K. Makarski, G. Wesołowski: Would it have paid to be in the euro-zone?, in: NBP Working Paper, No. 128, 2012.

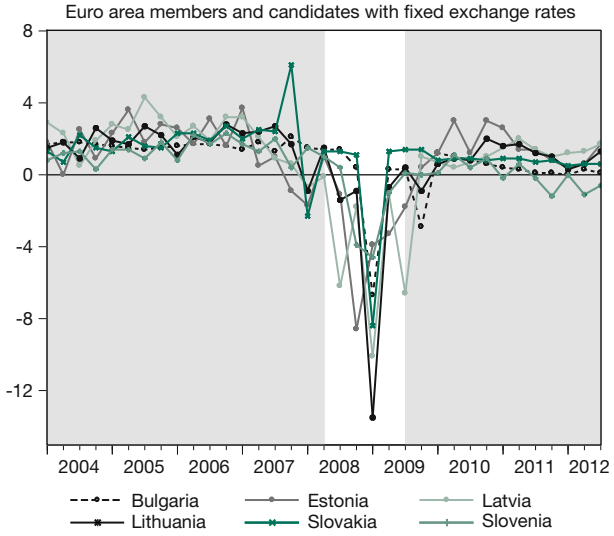
11 See R. Kattel, R. Raudla: Austerity That Never Was? The Baltic States and the Crisis, in: Levy Economics Institute of Bard College, Policy Brief 2012/5, http://www.levyinstitute.org/pubs/pn_12_05.pdf. "Enclave industries" refers to the strong integration of the export sector with Scandinavian producers.

euro adoption.[12] Asymmetric shocks were mainly considered to originate in the real economy, e.g. due to a sudden shift in demand, a price hike (for oil or other resources) or a major change in technology. Those shocks would be transmitted to the domestic economy through the trade channel. Adopting the euro was seen as a means to intensify trade relations; stronger trade relations would increase the cyclical correlation and dampen the asymmetry of shocks. However, the shocks Europe experienced in 2008-09 were not transmitted through the trade channel but rather through the financial market channel. Here, some characteristics of the financial sector in post-transition countries amplified the transmission. For example, most domestic banks were owned by international banks after privatisation, and domestic lending depended on their deposits in and credits to their local affiliates. The global crisis prompted international banks to withdraw their deposits and to downsize their credits. Domestic banks responded by imposing more quantitative restrictions and higher interest rates on their lending to the private sector.[13]

A flexible exchange rate system offers a couple of advantages to cushion the effects of a financial crisis on the real economy: usually, domestic borrowers and foreign creditors hedge their exchange rate risk, and risk-sharing cushions the effect of changes on real activity. An outflow of finance leads to a sharp devaluation of the exchange rate, which compensates for a decline in the money supply and higher real interest rates. However, hedging is unusual in a fixed exchange rate system – and a currency union or a currency board is a very strong fixed exchange rate system – and moral hazard leads to overly risky borrowing and lending. Compared to a flexible exchange rate system, monetary and financial indicators are lower and less volatile, but the withdrawal of finance leads to higher real interest rates, credit restrictions and a decline in lending. Therefore, output volatility is higher in a fixed exchange rate system than in a flexible one.

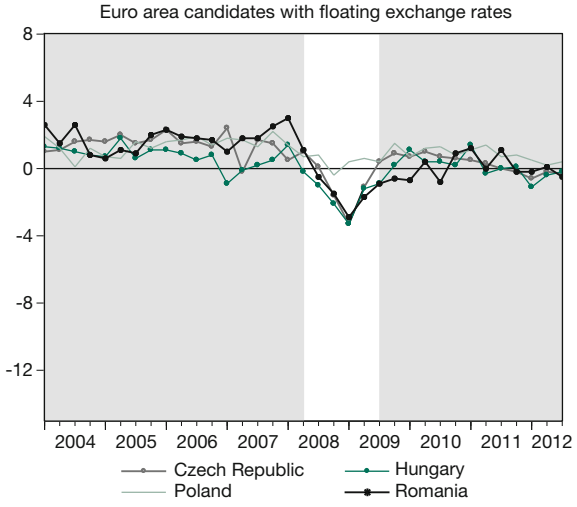
Figure 1 illustrates the discrepancy in quarterly GDP changes between the new member states with flexible and fixed exchange rates. The period of the most powerful contagion from the global financial crisis is between the first quarter of 2008 and the third quarter of 2009 (indicated by the white bands). Countries with a flexible exchange rate responded with devaluation, higher inflation and stable real interest rates, supported by expansionary monetary policy.[14] Countries with a fixed exchange rate, and thus without an autonomous monetary policy, had

Figure 1
**Quarter-on-quarter GDP growth**
seasonally and working day adjusted, in %




| Country | ERM entry | Euro adoption | Other/earlier |
|---|---|---|---|
| Bulgaria | ---- | --- | CB: 7/1997 |
| Estonia | 6/2004 | 1/2011 | CB: 6/1992 |
| Latvia | 6/2004 | --- | FP: 2/1994 |
| Lithuania | 6/2004 | --- | CB: 4/1994 |
| Slovenia | 6/2004 | 1/2011 | MF: 10/1991 |
| Slovakia | 11/2005 | 1/2011 | MF: 10/1998 |

CB = currency board; FP = fixed peg; MF = managed float.




Source: Eurostat.

12 J. Frankel: Real Convergence and Euro Adoption in Central and Eastern Europe: Trade and Business Cycle Correlations as Endogenous Criteria for Joining the EMU, in: S. Schadler (ed.): Euro Adoption in Central and Eastern Europe: Opportunities and Challenges, Washington DC, IMF, 2005, pp. 9-22.

13 For an overview, see H. Gabrisch: Finanzielle Instabilität und Krise in den Post-Transformationsländern, in: Wirtschaftspolitische Blätter, Vol. 56, No. 3, 2009, pp. 183-197.

14 See M. Kämpfe: Polnische Wirtschaft trotzt der Krise, in: Wirtschaft im Wandel, Vol. 15, No. 12, 2009, pp. 498-505, Institut für Wirtschaftsforschung Halle.

to respond with output, employment and labour force adjustments – a so-called internal devaluation. In the group of countries without their own monetary policy, the picture is one of a typical boom-bust cycle, in which the vulnerability of a small open economy depends on the dynamics of external markets. In a tranquil market environment, everything looks safe, but in times of a turbulent market, the growth process proves to be unsustainable.

## The extreme-risk problem

More insights into the dynamics of output responses to a change in external financial conditions are provided by the descriptive statistics for rates of output change (see Table 1). Firstly, we look at the standard deviation as a measure for volatility. The volatility of real rates of change is lower in the four countries with floating exchange rates and control over their monetary policies than in the six countries with handcuffed monetary policies. As expected, these differences illustrate that a flexible exchange rate cushions the effects of external shocks on output. Secondly, Jarque-Bera coefficients reveal the significance of a non-normal distribution (extreme skewness and kurtosis) of rates of change over time. Coefficients are consistently significant in the six countries without autonomous monetary policies. A negative skewness depicts only negative extreme rates of change. Thirdly, from our point of view, leptokurtosis is the most important property of the data, for it helps to identify a possible extreme-risk problem of growth and real convergence. The term "extreme risk" represents a leptokurtic data distribution with fat tails or tail risks. Extreme risks are usually analysed in financial economics, when the key monetary and financial indicators show high volatility; inflexible policy regimes distort the exchange rate, inflation and interest rate risk.[15] In these regimes, extreme risks can be identified without distortion only in the real economy. Therefore, we transfer this approach to the real economy for comparing the properties of data under the two monetary systems.

A combination of extreme leptokurtosis (with values above 5) with a strong negative skewness (with values below -0.5) reveals extreme risks for negative growth rates. The real economy can achieve high output growth when the market is tranquil followed by extreme output losses in times of turbulent markets. Data for countries with inflexible or absent monetary policies show a much higher leptokurtosis, partly in combination with a high negative skewness, than data for countries with floating exchange rates. This extreme risk is lurking in the tranquil period but does not become prevalent until the market enters a turbulent period. We found similar results – some even more pronounced – when we removed the crisis period from the data and analysed the tranquil pre- and post-crisis periods only (not shown). We conclude that post-transition countries show a high potential for suffering from an asymmetric shock due to their still weak institutions and economic structures. It is the monetary regime itself that elevates this risk potential.

Table 1
**Descriptive statistics for output growth**
2004Q1 – 2012Q3

| | Std. Dev. | Jarque-Bera | Skewness | Kurtosis |
|---|---|---|---|---|
| Euro area members, currency board, fixed peg | | | | |
| Bulgaria | 1.596 | 289.6*** | -3.334 | 15.413 |
| Estonia | 2.456 | 54.8*** | -1.933 | 7.757 |
| Latvia | 2.931 | 62.4*** | -2.198 | 7.846 |
| Lithuania | 2.727 | 684.6*** | -4.266 | 22.916 |
| Slovak Rep. | 2.044 | 277.4*** | -2.701 | 15.690 |
| Slovenia | 1.479 | 37.2*** | -1.763 | 6.615 |
| Euro area candidates with floating exchange rates[a] | | | | |
| Czech Rep. | 1.165 | 16.6*** | -1.257 | 5.238 |
| Hungary | 1.067 | 12.3*** | -1.179 | 4.687 |
| Poland | 0.593 | 0.6 | -0.206 | 2.515 |
| Romania | 1.384 | 1.4 | -0.471 | 2.720 |

*** significant at 1%. [a] Including managed float.

Source: Own calculations based on Eurostat.

## Convergence

Prior to the outbreak of the crisis, the macroeconomic discussion in the candidate countries centred on the fulfilment of the formal convergence criteria and the estimated costs and benefits related to membership in the eurozone.[16] The announcement of a target date confirmed the belief that a rule-based monetary policy could achieve the fulfilment of the inflation and interest criteria. With respect to fiscal policy, the reduction of public expenditure would ensure compliance with the upper threshold for the public budget deficit. Finally, a high real growth rate based on strong foreign direct investment would support monetary and fiscal measures in a gradual departure from public budgets with high deficit and debt ratios.

15 For an overview of the literature, see L.T. Orlowski: Proliferation of Tail Risks and Policy Responses in the EU Financial Markets, in: European Commission; European Economy, Economic Papers, No. 416, June 2010. See also H. Gabrisch, L.T. Orlowski: The Extreme Risk Problem for Monetary Policies of the Euro Candidates, in: Comparative Economic Studies, Vol. 53, pp. 511-534, 2011. Both studies apply ARCH/GARCH modeling for the detection of extreme risks.

16 See the analysis by the major economic adviser to Poland's president: J. Osiatyński: Warunki gotowości Polski do wejścia do strefy euro, in: Ekonomista, No. 5, 2011, pp. 659-676.

Table 2
**Fulfilment of Maastricht criteria according to March 2012 Convergence Report**

| | Price stability | Deficit/GDP[b] | Public debt/ GDP[b] | Long-term interest rate | Exchange rate stability – ERM II | Central bank independence | Target date for euro adoption |
|---|---|---|---|---|---|---|---|
| Reference value | 3.1%[a] | 3.0% | 60.0% | 5.8%[c] | | | |
| Bulgaria | 2.7% | 1.9% | 19.8% | 5.3% | no[d] | no | no |
| Czech Republic | 2.7% | 2.9% | 44.0% | 3.5% | no | no | no |
| Hungary | 4.3% | 2.5% | 78.4% | 8.0% | no | no | no |
| Latvia | 4.1% | 2.1% | 44.5% | 5.8% | yes | no | 2014 |
| Lithuania | 4.2% | 3.2% | 40.2% | 5.2% | yes | no | no |
| Poland | 4.0% | 3.0% | 53.7% | 5.8% | no | no | no |
| Romania | 4.6% | 2.8% | 34.2% | 7.3% | no[d] | no | 2015 |
| Sweden | 1.3% | -0.3% | 35.6% | 2.2% | no | no | no |

[a] 12-month average (March 2011 to March 2012) for Sweden, Slovenia and Ireland. [b] Commission estimate for 2012. [c] 12-month average (March 2011 to March 2012) for Sweden and Slovenia. [d] 2013 target date cancelled.

Sources: EU Commission: EU Convergence Report 2012, European Economy 3/2012; and EU Commission: Who can join and when?, http://ec.europa.eu/economy_finance/euro/adoption/who_can_join/index_en.htm, July 2012.

Doubts as to the appropriateness of the formal convergence criteria had arisen even before the global financial crisis broke out. It has been pointed out that these criteria are not codified in any economic theory from which they can be logically derived.[17] The thresholds are of a static nature.[18] It is not relevant to have the inflation or interest rate criteria fulfilled in a certain year of examination; their stability after euro adoption is important. Experience with the first new eurozone member from the region, Slovenia, confirmed these doubts. Negative real interest rates and higher inflation followed the euro changeover. As a consequence, the second CEE country to adopt the euro, Slovakia, had to accept an unfavourable conversion rate due to the ECB's fear of higher inflation in that country. However, in Estonia, the third CEE country to join the eurozone, inflation again soared above the convergence criteria in the first year of its eurozone membership, while interest rates started to decline. This recalls the unhealthy picture of declining real interest rates in Spain and Portugal after the introduction of the euro in those countries.

Prior to the crisis, the European Commission had added further indicators for the assessment of convergence, among them the development of the real economy and the shape of the financial sector. Apparently, there were widespread fears of an appreciation of the real exchange rate after euro adoption.[19] For example, high productivity-led growth rates in the tradable goods sector may cause an upward price adjustment in the non-tradable goods sector and higher inflation. Therefore, wage cost developments were adopted as an additional indicator for evaluating price stability in the Commission's convergence reports.

The spillovers and contagion from the global financial crisis challenged the traditional design of convergence policies in a more fundamental way. They revealed the vulnerability of private debt positions to external asymmetric shocks. Even eurozone members with relatively low public debt levels and public budget surpluses like Spain, Portugal, Ireland, Slovenia and Slovakia ran into severe financial instability. The Commission's convergence report from 2012 shows most of the countries had managed to return to compliance with the Maastricht criteria (Table 2), but it became more or less clear that inflation, interest rates and fiscal indicators may again exceed the thresholds due to market turbulence. Table 2 also includes Sweden, another non-eurozone country, which performed quite well in the financial crisis with its independent monetary and fiscal policy.

The crisis also revealed that financial globalisation has rendered the current account the passive variable in the balance of payments while the capital account is now the active one. This conclusion challenges the view that high

17 Ibid., p. 662.

18 See H. Gabrisch, L.T. Orlowski: Interest Rate Convergence in the Euro Candidate Countries: Volatility Dynamics of Sovereign Bond Yields, in: Emerging Markets Finance & Trade, Vol. 46, No. 6, 2010, pp. 71-87.

19 See M. Kämpfe: Perspektiven für die Euroeinführung in den mittel- und osteuropäischen Kandidatenländern, in: Wirtschaft im Wandel, Vol. 18, No. 6, 2012, pp. 180-186, Institut für Wirtschaftsforschung Halle.

current account deficits in eurozone members or candidate countries are simply the result of domestic factors like a lack of fiscal discipline or weak labour market and wage bargaining systems. The inflow of capital, in tandem with the absence of a flexible monetary policy, may lead to a real appreciation and the build-up of unsustainable private debt positions. These are the true reasons behind the current reassessment of the costs and benefits of fast euro adoption and the adjustment of adoption strategies.

## Reform policies

When real convergence is the guiding goal for post-transition countries in their euro adoption strategy, the announcement of a target date for the currency changeover would be a subordinated issue, likewise a hurried implementation of nominal convergence programmes. According to the convergence programmes of the countries, updated in 2012, euro adoption has not been abandoned, but fulfilling the convergence criteria is not related to a target date. Nevertheless, the convergence programmes read as if the countries plan to adopt the euro in 2015, since they envisage the fulfilment of the Maastricht criteria around that year. All governments promise a reduction of public net borrowing to less than one per cent of GDP (with the exception of Hungary, which is aiming for less than 1.5 per cent) by 2015, even though some economies are in a recession and others stagnate at low growth levels. (Meanwhile, the Baltic economies are once again showing signs of a boom). With the exception of the Czech Republic, the convergence programmes seem to comply with the directives of the Fiscal Compact, i.e. each country's cyclically adjusted balance is planned to be less than one per cent. The annual deficit reductions account for 0.5 percentage points. Strict observance of the Fiscal Compact will certainly diminish the options for the countries to promote growth through structural deficits, for example through higher public investment in infrastructure. Convergence programmes lack a clear orientation towards the real convergence goal. Rather, they need to be more consistent with the national reform programmes, as requested in the EU's 2020 strategy. Those programmes ought to have the goal of making the economies more robust in their resistance to external real and financial shocks.

Certainly, national reform programmes need to be tailored to the individual country. Nevertheless, reforms should follow some general directions: *financial sector* reforms should strengthen trust in the banking system in all countries and reduce the dependency of domestic lending on foreign sources, which is currently extremely high in many countries (e.g. Bulgaria, the Baltic countries and Hungary). Also, reforms should attempt to generate a higher share of domestic bank participation in lending. Finally, reforms ought to strengthen long-term financing of the company sector on the secondary bond market against credit and stock financing, which proved to be highly vulnerable to external shocks.

We also suggest reforms of *labour market governance*. Unit labour costs ought to remain relatively constant in comparison with those of a country's major trading partners. Basically, this requires nominal wages to rise with national productivity increases plus the ECB target inflation rate. However, this requires reforms of the national wage bargaining system as well as larger coordination at the EU level. National reforms of this sort make sense only if they are followed by each member of the EU – which was obviously not the case in the pre-crisis period. Eurozone candidate countries ought to establish or strengthen trilateral councils (government, trade unions and employers' associations) on the demand side.[20] Those councils were introduced in the early 1990s, but later became ineffective;[21] unfortunately, national reform programmes do not intend to revitalise them. On the supply side, reforms should strengthen the research and innovation systems and lower the import content of exports. It would also be helpful if decision makers in the countries understood that the creation of highly productive job opportunities and the fair remuneration of productivity increases is one of the most favourable ways to stabilise employment, incomes and demography.

In this article, we emphasised the extreme-risk problem of macroeconomic policies that aim at premature euro adoption. Former transition countries need more time to reform their economies and reduce their vulnerability to external shocks. Sound macroeconomic policies are needed as a protective shield in the reform implementation stage. Policies aiming at mitigating extreme risks ought to be countercyclical and sufficiently flexible, allowing for appropriate responses during tranquil market periods as well as in times of financial distress.

The primary aim of monetary policy should be to mitigate market risks, in particular the extreme risks embedded in the key monetary policy target and instrument variables.[22] In order to fulfil this aim, monetary policies ought to be rather unorthodox and more complex than the prevailing ones based on simple instrument rules. With a non-normal distribution of data and extreme risks in the key monetary indicators, forecasting becomes increasingly inaccurate, and monetary policy should be discretionary rather than rule-

20 For a more detailed discussion in the Polish context, see J. Osiatyński, op. cit., pp. 666-668.

21 G. Standing: Labour Market Governance in Eastern Europe, in: Journal of Industrial Relations, Vol. 3, No. 2, 1997, pp. 133-159.

22 This section refers to H. Gabrisch, L.T. Orlowski, The Extreme Risk Problem and Monetary Policies of the Euro-Candidates, in: Comparative Economic Studies, Vol. 53, 2011, pp. 511-534.

based. Monetary authorities should adequately address extreme risks through a broad range of macroprudential policies and emergency measures, such as sterilised interventions, emergency liquidity injections, currency swap lines and special lending facilities for banks. Such an approach might entail a prolongation of the nominal convergence path.

Fiscal policy has to obey the stipulations of the Fiscal Compact and its provisions for cuts in the structural deficit. This reduces the leeway for countercyclical policy to strengthen automatic stabilisers. We calculated the cyclical elasticity of public budgets as the ratio of the change of the cyclical component to the rate of real GDP and found for 2008-09 an extremely low level of elasticity in all post-transition countries except Poland and the Czech Republic, in comparison to the core eurozone countries. The calculations indicated that flat tax rate systems in the Baltic countries, Bulgaria and Romania reduced elasticity. In Hungary, the introduction of a flat tax in the new constitution in 2011 will also likely lead to a substantial drop in elasticity.[23] Moreover, past reforms of the social security systems lowered the sensitivity of public expenditures to rising unemployment. Even in Greece, with its chaotic tax collection system, the elasticity of the budget balance with respect to GDP is higher than in most eurozone candidates. Therefore, fiscal reforms ought to strengthen the countercyclical components of the public budget through an appropriate progressivity of tax rates and reforms of the social security systems.

## Conclusions

There is no pressure to attain ERM membership in 2015 and to adopt the euro two years later. Legally, the eurozone candidate countries are equipped with a derogation rule like Sweden, which has yet to adopt the euro.[24] Candidate countries can make extensive use of the derogation and hold on to their monetary policies as a cushion against external shocks. Neither the EU Commission nor the European Council have ever exerted pressure on a euro candidate country to join, and it is not very probable that this will happen in the future – not least due to rising doubts in Brussels and the capitals of some current eurozone members regarding the wisdom of further eurozone enlargement. We conclude that the candidate countries possess enough time to establish the economic conditions under which the loss of monetary and fiscal sovereignty will be less painful.

23 Incorporated into the constitution in November 2011 and can only be changed by a two-thirds majority vote.

24 The reason for this is to avoid a constitutional conflict, since the population voted against the euro.