Lorenzo Bini Smaghi: Real and nominal convergence – policy challenges

Speech by Mr Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, at the Conference on European Economic Integration 2007, Currency and Competitiveness, Austrian National Bank, Vienna, 20 November 2007.

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1. Introduction[1]

Ladies and gentlemen,

It is a real pleasure for me to speak to you today at this conference.

As you know, the Maastricht Treaty – and in this respect the Reform Treaty has not changed anything – says very little on the real economy, aside from the fact that growth and employment are an objective of the Union. The articles contained in the monetary chapters of the Treaty all refer to nominal variables, be they monetary policy or inflation, and so does the section that describes the criteria and procedure for the adoption of the euro. This does not mean, though, that the underlying developments in the real economy are unimportant. In fact, there is a burgeoning literature on the impact that the euro has had on the convergence of the member economies. Among such a wide range of academic contributions, let me refer in particular to papers presented at a conference organised by the ECB in June 2005, which provide evidence of the changes brought about by the euro with respect to trade integration, structural reforms, financial integration, business cycle synchronisation and inflation differentials.[2] I will not dwell on those topics today, but will certainly refer to the literature in addressing the specific issue of convergence towards the euro area.

As I just mentioned, the criteria for adopting the euro refer to nominal variables – the inflation rate, the long-term interest rate and the exchange rate – and to the budget deficit and debt ratios. Is this a problem? Should the Treaty have been drafted differently? I will argue to the contrary. However, while it is wrong to suggest that the adoption of the euro solves all problems, it is equally wrong to suggest that real convergence does not pose considerable challenges in the path towards the adoption of the euro. The key policy message is that these challenges can be addressed as long as one is aware of them and explicitly takes them into consideration. Hiding the issues does not help. It might actually backfire if and when difficulties arise as people might be inclined to think that the root of all problems lies with the euro and its early adoption, rather than inappropriate policy actions in other fields. This is not just a hypothesis. It's what we observe every day, even within the euro area, with politicians claiming that Europe and the euro are to blame for their lack of success.

In my speech today, I would like to consider the case of countries which are converging in real and nominal terms towards the euro area.[3] Can both processes take place in parallel? What are the challenges? How can monetary, fiscal and structural policies best tackle them?

Let me also emphasise that the issue is relevant not only for the countries concerned but also for the whole of the European Union, in light of the existing strong economic ties. For example, the trade share of the new EU Member States, excluding Slovenia, is 18% for Germany, 9% for France and 12% for Italy. These share are comparable to that of the US

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[1] The views expressed in this note reflect only those of the author. I thank L. Stracca, M. Darracq-Paries, M. Andersson, G. Fagan, O. Tristani, K. Masuch and F. Mongelli for input and comments.

[2] See Mongelli and Vega (2006), "What effects is EMU having on the euro area and its member countries? An overview", ECB Working Paper Series No 599.

[3] Note that I will not touch upon demographics in my speech, given that the central and eastern European countries are not very different in that respect from the countries currently in the euro area.

and more important than China. Links through financial and foreign direct investment are also equally, if not more, important. Of course, the euro area is also very important for the New EU member states, representing 62% of their external trade. It is not far-fetched to say that to some extent we are "all in the same boat".

I will structure my remarks in two parts. I will first propose an analytical framework to examine the issue in a systematic way. I will then discuss some examples within the euro area. Finally, I will try to draw some policy lessons from both theory and experience.

2. Analytical framework

Let me start by laying out a framework to interpret real and nominal economic convergence.

2.1 Structural forces driving convergence, real appreciation and external deficits

Let us take two hypothetical countries, an advanced one, which I'll call for simplicity West, and one that is emerging and catching up, named East. Real economic convergence should imply a higher marginal return on capital in East compared with West, due to the fact that capital is scarcer and due to decreasing returns on capital accumulation. In a closed economy, this translates into a higher real equilibrium interest rate in East compared with West. In a world with full financial integration, we would observe large capital flows from West to East. Since people in East expect to be richer tomorrow and want to smooth consumption over time, they will borrow, the more so the higher the expected economic growth rate.

This phenomenon will not happen if there are financial frictions and borrowing constraints in East which prevent the real interest rate from rising or the borrowing demand from being satisfied. In that case we might even observe that the flow of capital is reversed, from East to West. This is the so-called Lucas paradox; it's what we are currently observing, for example, in some eastern Asian economies, notably in China, and what we saw in western Europe in the 1950s and 1960s. In central and eastern European countries, there does not seem to be such a paradox. There are, by and large, no borrowing constraints as countries are bound by what is called the acquis communautaire, in other words, all the laws and agreements, including the treaties that apply in the EU. Perhaps what is more important, they have implemented banking sector reforms that have led to an increase in banking competition.[4] So in the case of the European Union the theory works.

Another element of the theory which seems to be working to some extent is the Balassa-Samuelson effect, which contributes to a real exchange rate appreciation in East.[5] The real exchange rate appreciation associated with real convergence can obviously happen in two ways (or a combination of them): first, with a stable nominal exchange rate and high inflation, as in Japan in the postwar period up to the early 1970s; second, with an appreciating nominal exchange rate and stable low inflation, as in Japan in the subsequent period up to the early 1990s. I will not dwell on the choice of the exchange rate regime in my speech today, apart from noting that the second channel of real appreciation is obviously precluded after a country joins the monetary union.

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[4] See Arratibel et al. (2007) for a survey of these developments.

[5] Egert, Halpern and McDonald (2006) calculate that the Balassa-Samuelson effect could contribute to real exchange rate appreciation in some new Member States by around 1 to 2 percentage points annually, but not in all countries.

2.2 "Disequilibrium" real appreciation

While the theory suggests that real appreciation and balance of payments deficits are the natural consequences of real convergence, it does not follow that any such appreciation or deficit is justified in size. Real appreciation and external deficits may become excessive as a result of inappropriate policies and/or excessively optimistic expectations by economic agents.[6] Conceptually, this is no different from bubbles and busts in asset prices, which may be initially triggered by a real, fundamental reason (such as higher productivity growth or monetary policy shocks) but may then be inflated disproportionately by excessive self-fulfilling expectations.

In our example of East converging to West, the above risk may materialise when investor exuberance in East, supported by expectations of rapid economic and monetary integration, generates excess demand and inflationary pressures. Risk premia in East may be excessively squeezed,[7] leading to asset price misalignments (e.g. in housing) and over-indebtedness in a context of still abundant global liquidity and strong risk appetite. Irrational optimism on the side of wage earners can add to the risk. Such a scenario represents an "out-of-equilibrium" real appreciation, leading to an overshooting that is typically observed in boom-and-bust cycles. There is abundant literature on this phenomenon.

The key question is what to do to avoid such a scenario.

2.3 Adjustment in a monetary union

Let's consider first the case of a monetary union which, as I mentioned previously, puts a constraint on real exchange rate movements or, more precisely, a constraint on competitiveness within the union. Let us go back to the idea that the expected real marginal product of capital is higher in East. If the nominal exchange rate is fixed and there is sufficient capital mobility within the union, capital inflows in East must be accompanied by a combination of (i) balance of payments deficits, and (ii) higher inflation. This should gradually be reversed as the real convergence process runs its course and the excess return on investment opportunities is absorbed.

What is the adjustment mechanism? If inflation rises above the average, the country loses competitiveness and this has, over time, a dampening impact on inflation. The point can be illustrated clearly using an open economy Phillips curve where the real exchange rate appears as a determinant of inflation.[8] What effect prevails, and at what speed, depends on the relative importance of the two channels in the Phillips curve. Ceteris paribus, the more integrated and flexible a country, the likelier it will be that the forces of convergence prevail over those of divergence. Research shows that in the euro area the competitiveness channel works satisfactorily and that, abstracting from trends related to Balassa-Samuelson effects, deviations from PPP are mean-reverting. According to this research, the adjustment in the euro area is actually found to be quicker in Economic and Monetary Union than in regions of the United States.[9] However, more research is needed on this important issue; moreover, the situation is clearly different across countries, depending on the degree of integration and flexibility.

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[6] See Boz (2007) for a theoretical analysis related to emerging countries.

[7] See, for instance, Luengnaruemitchai and Schadler (2007).

[8] See Flamini (2007) for an analytical derivation, and Leith and Malley (2007) for empirical estimates for G7 countries.

[9] See Berk and Swank (2007). Note, however, that this conclusion is dependent on the assumption that the PPP trends are entirely due to the Balassa-Samuelson effect and therefore reflect equilibrium phenomena.

Due consideration should be given to the fact that the adjustment channels might be impaired in some cases. If nominal and real rigidities as well as financial frictions are limiting the scope for relative price changes, or weakening the expenditure-switching role of relative inflation differentials, the convergence process in a monetary union could be rather bumpy. This may occur, for example, if the massive inflow of capital and exceptionally low risk premia are rapidly reversed and followed by an equally large outflow as the adjustment takes place and as risks are re-appreciated .

It is important to recognise that membership of a monetary union increases the likelihood of excessively low risk premia and a pro-cyclical behaviour of real interest rates, which might temporarily slow down or even destabilise the structural adjustment process. Indeed, within a monetary union, forces exerting upward pressures on inflation tend to become self-sustained and more likely to give rise to an abrupt adjustment. Since the nominal interest rate is fixed at the union level, any shock bringing inflation above the union average will reduce the real interest rate and fuel further inflationary pressures, in a self-reinforcing mechanism.[10]

In a boom-and-bust scenario, such as the one I have described, which is a real risk in a monetary union or with a fixed exchange rate regime, policy-makers undoubtedly face the very difficult challenge of having to avoid an overheating of the economy in the face of surging capital inflows and rapid credit growth. Monetary policy would be the ideal instrument to tackle such a problem but it is simply not available. Actually, monetary policy makes things even worse for East, because it is set by West with a view to ensuring price stability in West itself. Given the convergence process and the required higher rate of growth of productivity and income in East, as compared with West, the monetary policy set by West is too expansionary for East. As an illustration, a 4% interest rate might be appropriate for an economy growing at a steady state rate of 2% and with 2% inflation – I'm giving these numbers for purely illustrative reasons – but is certainly not appropriate for an economy growing in real terms at 6% or more, as required by the catching-up process. As the inflationary pressures arise in East, the monetary policy becomes pro-cyclical, further destabilising the economy and making the adjustment more abrupt later on.

The recent financial turbulence in the United States and Europe has shown the dangers of keeping interest rates too low, compared with the economy's underlying rate of productivity and income growth, for a prolonged period of time. When I raised the issue myself, about two years ago, I noted that there was still very little literature on this issue.[11] Some progress has been made, but the issue is still not sufficiently recognised in academic and policy fora. Indeed, when one looks at the current situation in many emerging market economies, one cannot but be struck by the huge gap between these two variables which, in my view, is the sign of a major distortion in the allocation of resources that might lead to future abrupt adjustment. [12]

Fiscal policy can be activated to attenuate the inflationary pressures arising from the monetary stimulus, but the size of the fiscal restraint might have to be quite ample. Banking supervision and related prudential measures could also be implemented to limit credit expansion. Their quantitative impact is of course uncertain, especially in an environment of full capital mobility. Capital controls might be applied to contain inflows, but they are not allowed in the EU.

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[10] See Allsopp and Vines (1998).

[11] "Inflation, Expectations and Current Challenges to Monetary Policy", speech at the European Inflation-Linked Conference, Rome, 10 October 2005.

[12] In addition, low nominal interest rates may be also, if not more, important that low real interest rates in leading to asset price misalignments; see Shiller (2007).

2.4 Summing up

What can we learn from all this? Let me recap the reasoning in three main developments that can be expected from real convergence in a monetary union:

- First, real convergence may entail a higher return on capital for some time in the catching-up country and a substantial appreciation of the real exchange rate, which is to be considered, to some extent, as an equilibrium phenomenon and a natural consequence of real catching-up dynamics.
- Second, within a monetary union or with a fixed exchange rate system, the appreciation of the real exchange rate may take place through a higher inflation rate.
- Third, as a consequence of the above, the inflationary process associated with the real exchange appreciation may fuel an inflationary spiral that entails an overshooting of inflation and a boom-and-bust cycle. In this context, nominal convergence is not consistent with the continuation of real convergence and might imply large adjustment costs.

How can these last developments be avoided?

The key word is flexibility. Let me elaborate on this. First, there must be flexibility in the wage and price adjustment setting. Since the process of real convergence requires significant movements in the real exchange rate and since in a monetary union the nominal exchange rate cannot be used as an adjustment tool, it is of paramount importance that prices can move quickly in the required direction. A key aspect is thus wage formation. Movements in the real exchange rates must be rapidly reflected in movements of real wages – in the opposite direction (!) – in order to preserve the competitiveness of the economy. We do have some evidence that some new Member States score quite well in terms of labour market flexibility.[13] However, the situation is not the same across countries.

Movements in the real exchange rate should, and will, bring about demand shifts between tradable and non-tradable goods and more generally between different sectors of the economy. In the era of globalisation, this cannot only be described as a problem for EU countries. In fact, membership of the EU and of the monetary union can be characterised as a "regional globalisation" due to the trade-enhancing effects of the euro.[14] It is of great importance that the economy is flexible and able to reallocate physical and human capital across different production locations. The ability to shift production seamlessly from the less competitive to the more competitive sectors is a hallmark of countries dealing successfully with globalisation. It is also true for success in the monetary union.

A study of the administrative burdens in the new EU Member States on the basis of indicators published by the Fraser Institute shows that the business environment has significantly improved in those states over the past few years.[15] However, on average in 2004 it had still not reached the average level of the euro area countries and there remained significant differences between the new EU Member States. Another indicator, the OECD's country score index on barriers to trade and investments, shows an overall decline from 1998 to 2003 both in the euro area and in the four largest EU new Member States, but on average, they remain higher in the latter. This would suggest that more needs to be done to make the economies of the New Member States more flexible so that they can respond to the challenges they face in the process of real and nominal convergence.

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[13] Buettner (2007) finds that regional wage flexibility is significantly higher in new Member States (NMS) than in the euro area; in particular, wage formation within regions is more sensitive to local unemployment in the NMS. See also Blanchflower (2002) on the response of wages to unemployment in the NMS.

[14] See Rose (2000).

[15] O. Arratibel et al. (2007) ECB Occasional Paper Series No 61, in particular pp. 27-29.

3. Some interesting examples

Let us now see how the conceptual framework that I have just described works out in practice.

3.1 Some stylised facts

Let me consider the experiences of countries that are already in the euro area. This might teach us something useful about the challenges that the new Member States may face in converging towards the euro adoption. In 1995, i.e. a few years before the launch of the euro, there were a handful of countries with a real GDP per capita significantly below the euro area average: Greece, at 65%, Spain, at 79%, Portugal, at 65%, and Ireland, at 89%. If we look at the new Member States (data for 2006), we see a range of between 34% (Romania and Bulgaria) and 72% (Czech Republic) of euro area GDP per capita. For some of these countries, we are already in a situation similar to that of the countries catching up with the euro area in 1995; currently, the Czech Republic already has a higher income per capita than Portugal and is very close to Greece and Slovenia.[16] For some other countries, however, and notably for Bulgaria and Romania, the degree of the required catching-up is nowhere near to the income gap for the original euro area members. We are therefore in a new situation here.

A stylised fact in the adoption of the euro in 1999 was that the convergence of nominal interest rates was accompanied by the convergence of the real interest rate.[17] The real interest rate of previously high-inflation countries such as Greece, Spain, Italy and Ireland fell substantially as these countries were able to slash inflation and exchange rate risk premia. In Italy, for example, the real short-term interest rate fell from over 5% in the nine years before the euro to 1% in the nine years thereafter. Nevertheless, convergence has not been completed. This is related to persistent inflation differentials among the euro area countries, which has been the subject of quite some attention in the literature.[18] Higher-inflation countries, such as Spain and Ireland, have experienced systematically lower (and in the Irish case often negative) real interest rates than lower-inflation countries such as Germany, despite their higher (potential) growth.

In theory, as I said earlier, the self-sustaining nature of real interest rates in the different countries of a monetary union can fuel divergences within the union. But these forces are partly countered by the loss of competitiveness, which has a dampening effect on inflation. If you want to see the glass half empty, you could argue that this second force has not yet been strong enough to prevent persistent inflation differentials across countries. I prefer to see the glass half full by noting that inflation differentials within the euro area have remained at a relatively low level, fully comparable with divergence among US regions and well below the cross-country variation seen before the mid-1990s. This observation is also true when we look at business cycle fluctuations, which appear to be quite synchronised within the euro area. This is not to say – of course – that the differences between real interest rates across countries are of no concern.

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[16] The number for Poland, by far the largest new Member State, is 48% of the euro area average in 2006, up from 37% in 1995.

[17] See Arghyrou and Gregoriou (2007). However, they reject full real interest rate convergence for Greece, Spain and Italy as well as the UK.

[18] See Angeloni and Ehrmann (2002) and Ortega (2003) among the academic contributions; see also ECB (2003, 2005) especially on the policy implications.

3.2 Ireland v Portugal

In the remainder of my speech, let me focus on two extremely different performances within the euro area: Ireland and Portugal. Real GDP per capita in Ireland was 89% of the euro area average in 1995, but was already above the average in 1998. Between 1998 and 2006, real income per capita increased by almost 25 percentage points, to reach 131% of the euro area average in 2006, which is the second highest after Luxembourg. (Based on these numbers, it is surprising how many people still speak of Ireland as a catching-up economy). As for Portugal, its income per capita was 65% of the euro area average in 1995, a figure which has changed little in over a decade (it was 67% in 1998 and 68% in 2006). The bottom line is that real per capita income in the two countries was not very different in the early 1990s but became twice as large in Ireland by 2006. How could that happen?

The answer to this question may well matter since Ireland and Portugal in 1995 were in a situation not unlike that of some new Member States now (though, as we have seen, for some of them the starting point is significantly lower).[19] One approach to understanding the difference can be found in growth accounting exercises. The stellar growth performance of Ireland was not just due to higher labour and capital input but also, and mainly, due to labour productivity growth, which has been close to 3% per year since the introduction of the euro and, according to available estimates, almost entirely due to growth in total factor productivity (TFP). In Portugal, growth in labour productivity has been less than 1% per year on average, reflecting subdued TFP growth.

In the decade before joining the euro area both Portugal and Ireland went through a boom, with annual average GDP growth rates at 2.8% and 6.7%, respectively (1990–1998). This strong growth masked substantive differences. While fiscal policy was pro-cyclical in Portugal, reinforcing domestic demand pressures, it was much more disciplined in Ireland. While growth in unit labour costs and HICP inflation was high in Portugal (7.6% and 6.2% on average between 1990 and 1998, respectively), cost and price pressures remained contained in Ireland (1.4% and 2.3%, respectively). Competitiveness was hurt in Portugal, resulting in a rising current account deficit (to 8.9% of GDP in 1999), while competitiveness was relatively well preserved in Ireland and the current account position broadly neutral (0.3% of GDP in 1999). Thus, the longer-term track record before joining monetary union regarding low inflationary pressures and a balanced current account was impressive in Ireland. This shows that even very rapid catching-up does not need to be associated with high inflation or large imbalances.

After the euro changeover – between 2000 and 2003 – a sharp downward adjustment occurred in Portugal as consumption and investment slowed considerably. Competitiveness problems and the need to improve the fiscal position added to the downturn. Annual real GDP growth in Portugal in the period 1999–2006 averaged 1.7%. In Ireland, real output growth continued instead at a strong pace (at 6.5% on average) in this period and the fiscal balance was in slight surplus. Following the slowdown in activity, ULC growth and inflation pressures diminished in Portugal (to 3.1% and 3.0% on average, respectively), while they gradually picked up in Ireland (3.2% and 3.5%, respectively, on average) in the period 1999–2006. Since 1999, the Portuguese economy has not succeeded in improving its competitiveness and its sizeable current account deficit remains.

In principle, one could imagine that stronger productivity growth should contribute to containing unit labour costs, making Ireland more competitive than Portugal. This is true, but not in the most obvious sense. If one computes unit labour costs in Ireland and Portugal,

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[19] In part, this might reflect the fact that the statistical data for real G DP are different from real G NP in the Irish case. Therefore, the increase in real domestic product has not necessarily entirely benefited the Irish people to the same extent. However, the quantitative importance of this discrepancy is low. We are therefore left with the task of understanding the causes of this divergence in economic performance.

numbers are approximately the same. However, export performance has been much stronger in Ireland than in Portugal, which has resulted in a trade surplus in the balance of payments (against a large deficit in Portugal). The large profit outflows in the factor income account in Ireland negatively affect the current account position. In 2006, the current account stood at -4.2% of GDP in Ireland, against -9.9% of GDP in Portugal. What has happened? Quite simply, cost competitiveness is not the only determinant of competitiveness. Shifting production to higher value-added sectors is as important as keeping unit labour costs under control, if not more. There is evidence that Ireland and Portugal have been competing in quite different products and markets in the past decade, with the latter country being subject to stronger competitive pressures from new Member States and emerging market economies.

To a large extent, the divergence can be traced back to the key structural features of the two economies. The first is a different degree of flexibility. Indicators of product and market regulation, compiled by the OECD, signal significantly more rigidity in Portugal than in Ireland; the same is true for other measures of market friendliness such as the World Bank's Doing Business index.[20] Another crucial difference is in the availability of physical and human capital, as evidenced by the discrepancy in educational attainment of the labour force, R&D expenditure, penetration of information technology, etc. Ireland has also benefited, in part, from the removal of the exchange rate risk after the adoption of the euro, which has favoured large FDI inflows (though countries like Portugal should have benefited from this as well). Labour market and wage and price flexibility have contributed to preventing inflation from rising excessively and becoming entrenched and ultimately unsustainable for the country's competitiveness.

Another interesting and telling difference between Ireland and Portugal has been in the field of fiscal policy. Public debt, public expenditure and budget deficits have all been significantly lower in Ireland than in the rest of the euro area, noticeably so when compared with Portugal. This shows that the discretionary use of fiscal policy is hardly a recipe for stimulating growth, especially when the "fiscal house" is not in order.

At the same time, one should not be complacent about developments in Ireland. Several years of very low and even negative real interest rates, coupled with buoyant growth, may have led some sectors of the economy, and the housing market in particular, to levels which are unsustainable over the medium term. We still do not know of policies that have been reliably deployed to prevent the risk of misallocation of capital in an environment of very low real interest rates. Only time will tell. Moreover, the success of Ireland, a small country with little more than four million inhabitants, may not be easily replicated elsewhere, especially in larger countries. Nonetheless, it shows that equally flexible and dynamic economies in the east could do just as well if they were to join the euro area.

To sum up, the differences between Ireland and Portugal are not so much in the behaviour of the real exchange rate and in standard measures of cost competitiveness. The Irish example shows that it is possible to prosper in the monetary union while having a higher potential growth rate than the rest of the union. This does not need to be "paid" in terms of divergent or explosive inflationary outcomes and / or in unsustainable competitiveness for the country. The Portuguese example, in contrast, provides a stark warning that entering the monetary union per se does not guarantee a satisfactory growth performance. In order to obtain the full benefits of monetary union, the appropriate economic structures and national policies have to be in place.

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[20] Ireland is ranked 8th and Portugal 37th in the World Bank's ease of doing business index, which ranks economies from 1 to 178. The index is calculated as the ranking on the simple average of country percentile rankings on each of ten topics covered in Doing Business 2008. See http://www.doingbusiness.org/economyrankings/.

4. Conclusion

Ladies and Gentlemen, let me conclude. Economic and monetary union should never be considered as a final destination, but only as a departure point. Joining the euro area is not, in itself, a recipe for economic success. Countries need to be well equipped in order to thrive in it. The recipes for success are known: flexibility in the wage and price formation process, flexibility in the production structure, human and physical capital, dynamism. These features are not very different from those that are needed anyway in an era of globalisation, but participation in EMU makes them even more compelling. Real convergence is therefore not, per se, an impediment to joining the monetary union. Nonetheless, there is no doubt that real convergence creates some challenges of its own that need to be properly addressed by policy-makers before joining a monetary union. Not doing so will lead to both economic and political problems.

The recent experience of Slovenia, which adopted the euro on 1 January this year, is a confirmation of what I just said. The economy is growing fast and inflationary pressures are mounting, with the latest numbers exceeding 5%. Monetary policy evidently cannot cure this problem. On the other hand, fiscal policy in Slovenia is too lax, out of line with what would be required for macroeconomic stabilisation. Deregulation of the product and labour markets has not yet been completed. Wages are growing faster than productivity, in particular in the public sector. The risks of a boom-and-bust cycle are looming.

In the face of this worrying scenario, what is the reaction of the policy authorities? Very predictable: they blame the euro for the price increases.[21] "Déjà vu all over again": Whenever things go wrong in a country, the policy-makers blame Europe.

It's obviously not the right response, and it won't help the Slovenian people understand where the problems lie. Whether Slovenia will turn out to be more like Ireland than Portugal in the next few years depends entirely on Slovenia. And this will be true for any new member of the euro area.

Thank you for your attention.

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[21] See the statement by Slovenia's Prime Minister Jansa on 16 November 2007: "I was warned by other countries' leaders that we would see price increases after euro adoption".

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