

# Signaling imbalances in the EMU

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## Abstract

Markets show well known difficulties in delivering the right signals of looming imbalances, may underreact or overreact to them and cannot properly correct them. Pure monetary union add no significant system of signaling and re-adjustment and can even cause further imbalances. The more so if the asymmetries producing such imbalances have a structural nature, as in this case some markets, such as labour markets, may not work in an appropriate way. In this situation moral hazard and adverse selection are easy to arise, making correction of imbalances more difficult. The system should then be helped to deliver proper signals and to correct them. The OCA theory must be made to work and appropriate non-market institutions, mainly at the union level, should be created. In particular, a common financial regulation, fiscal, industrial and labour policies should be introduced, while devising consistent institutions at the country level.

Keywords: Currency union, EMU, institutions, signal, incentives, adverse selection,

JEL codes: E44, F16, F55

## 1. Introduction

Expectations from the EMU were high and appeared to be realized to a large extent up to 2008, but then the Union precipitated into a deep crisis. Before the EMU, existence of asymmetries and imbalances within the Union was recognized, but they were thought to be irrelevant, as the EMU institutions – in essence, the common currency and free movements of factors and goods – were able to eliminate them. Proper signals would give an incentive to private and public decision-makers in order to cope with them. The transformation of the financial crisis in private markets into a sovereign debtor crisis and its prolongation beyond the time it lasted in the United States needs an explanation. The explanation must take account of the specificities of the EMU as a(n imperfect) currency union, very different from the United States. The suspect is that the roots of this crisis were in the previous performance of the Union. Going even more back, the institutional architecture and policies of the Union should have been lacking (Acocella 2014a, b) and forecasts of their ability to cope with the different structural conditions of the participating countries and the existing asymmetries and imbalances should have been 'greatly exaggerated'.

In this paper we want to study some specific aspects of the following issues: 1. The influence of external constraints and contractionary monetary and fiscal policies on the adoption of suitable reforms in higher-inflation countries. 2. The possibility that the late manifestation of crisis can be due to signals coming out of market trends, which are noisy, for a number of reasons. 3. Whether wrong signals might have induced moral hazard and adverse selection of public and private decision-makers.

Many contributions have been published on these topics, but most of them need further discussion, especially with regard to one in relations to other.

The paper is organized as follows. The next section deals with the imbalances in the Union, both those pre-existing to its creation and those that loomed later; it compares expectations as to their permanence to realizations, ending with the private and public debt crisis in more recent years. Section 3, instead, deals with the effects of the monetary and fiscal discipline imposed by European institutions and policies. The object of section 4 are the incentives arising before and after the institution of the EMU, due to the change in the perspectives, the incoming budget constraint and the different signals. Section 5 discusses the issue of the link between signals, moral hazard and adverse selection of politicians. Section 6 presents a model of signaling imbalances in the EMU.

## 2. Imbalances in the EMU

### 2.1. Expectations from the Union

Expectations for the possible accomplishments of the European Monetary Union were high (e.g., Commission of the European Communities, 1990, 1991). Only a few critiques were raised against the project of a monetary union that was deprived of some essential pre-conditions for its proper functioning and aimed almost exclusively at achieving monetary stability while not being complemented by other institutional pillars tending to cope with imbalances and stimulate growth in an uneven environment<sup>1</sup>.

From the point of view of each participating country, loss of one instrument (monetary policy) in favor of a centralized authority might not imply a parallel loss in the ability to control the economy, as entering the monetary union would also imply a parallel drop in one target, that of the balance of payments equilibrium.<sup>2</sup> Some authors had drastically claimed that the effects of 'asymmetrical shocks would be eliminated under a monetary union with perfect capital mobility and currency substitution' (Weber, 1991: 204), even if, according to a few others (see the previous footnote), this was more problematic.

From the point of view of the Union as an integrating area, there were imbalances among the different countries. These were due to inertial, behavioral and structural factors in some countries (which stemmed, on the one hand, from diffuse inefficiencies and, on the other, the Balassa-Samuelson effect), showing themselves in their public accounts as well as in other features of their economies, such as higher-inflation rates. These imbalances had been reduced, but not eliminated, in the transition to the EMU (Allsopp, Vines, 1998) and also afterwards (Lane, 2006). Persisting this tendency, together with, possibly, the artificially high

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<sup>1</sup> An extensive and penetrating ex ante critique, based on theoretical as well as empirical considerations, is in Begg (1997), Allsopp, Vines (1998), which also show the questionable underpinnings of the EMU construction. An ex post reconstruction of the theoretical foundations of the Union and an account of the reasons for their obsolescence is in Acocella (2014b). For a reconstruction of the process leading to the Maastricht Treaty and the forces conditioning it see Dyson, Featherstone (1999).

<sup>2</sup> An implicit assumption is that the target value for inflation set by the ECB is the same as that of the country under consideration and that the former is optimal or, at least, not too low to prevent the necessary adjustment of the real wage in countries where the nominal one is rigid, which was and normally is still the case in most of the EMU countries (Krugman, 2013). Otherwise, problems would arise of the kind that materialized later.

level of domestic demand deriving from high public spending, the current account of the balance of payments would tend to be negative. However, this would not have raised any concern for two reasons. First, because any imbalances in the current account would be cleared by free movements of capital (Blanchard, Giavazzi, 2002, who conclude that, 'although benign neglect may not be optimal, it appears to be a reasonable course of action.'). Second, in the process, the common currency as well as integration of markets and limits to public deficits and debts would induce policymakers and other agents to change their conduct and introduce needed reforms, with the result of eliminating public accounts imbalances, reducing public debt, rising competitiveness, reducing risk prospects (see, e.g., Commission of the European Communities, 1990, 1991; Jahjah, 2000; Papademos, 2001 and other references in Fernandez-Villaverde et al, 2013, henceforth, FV), not only in higher-inflation countries, but also in other countries such as France, which suffered from some other kind of imbalances.

This change in the conduct of public and private agents in higher-inflation countries was at least an implicit assumption behind the institutional design of the EMU. More in detail, a beneficial impulse for re-balancing would derive from:

- the impossibility for governments to maintain unemployment any longer below its natural rate by expansionary demand policies; this would be the effect of the SGP and a conservative central bank, which would force governments to change their conduct; reduced public imbalances would contribute to lower demand and to curb excess inflation, with positive effects on current account imbalances;
- the impossibility of private decision-makers to rely on competitive exchange-rate devaluations as a kind of soft budget constraint, i.e. in order to regain the competitiveness lost due to inefficiencies, rent-seeking and wrong conduct: workers, unions and firms in higher-inflation countries could no longer earn 'monopoly' rents, would thus change their conduct in order to bring back inflation in those countries in line with that of more stable countries, with beneficial current account imbalances;
- the wider context and opportunities for comparisons and choice (especially for asset returns, once these were cleared of the currency risk component), which would induce public and private agents to adopt more cautionary policies; higher transparency and possibility to compare prices across EMU countries would also imply that even in non-tradable sectors beneficial changes in the conduct of agents could come from a higher pressure from consumers and the government or competition from foreign direct investment (Commission of the European Communities, 1990, 1991; Dyson, Featherstone, 1996).

## 2.2. Realizations

The expectations appeared to be confirmed before the crisis burst. In 2007 the average unemployment rate in the EMU-17 had dropped to 7.5 % , starting from levels higher than 9 % at the beginning of the decade, with a very low dispersion.<sup>3</sup> Poverty rates had fallen to their bottom in 2009 and families at risk of poverty or social exclusion were 21.3 % of the total.

Nevertheless, optimism was out of place. In fact, the initial favourable expectations mentioned in the previous section contained a contradiction. After entering the EMU, governments were certainly relieved of

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<sup>3</sup> The standard deviation of the unemployment rates was 2.08. Among countries with higher unemployment there were still some with excess of labor in agriculture and the services, such as Spain, Portugal and Greece. Apparently puzzling, also Germany had an unemployment rate above the average. **Howell beyond u, challenge**

the balance of payments constraint/target, but, pending structural imbalances and current account deficits, this could only happen if there were lasting capital inflows. However, reduction in domestic interest rates due to elimination of the country risk and capital inflows, even if beneficial for the governments and private agents, could have softened their budget constraint.

This contradiction materialized for the worse under the effects of the financial crisis started in 2007-2008.

Unemployment rates soared, respectively to 12.0 % in 2013 and showed a much higher dispersion, while people at risk of poverty in 2012 had increased by 2 p.p..<sup>4</sup> Imbalances in the current account and government budget as well as other structural imbalances causing them had lasted un-tackled for too long, were compensated by capital inflows into the peripheral countries for too long and finally transformed into a sovereign debt problem (Acocella, 2014a). The signals were perceived only by a limited number of people (see FV) and were evident only rather late, as a consequence of the burst of the bubble itself and, to some extent, also from the emergence of new theoretical insights (Acocella, 2014b).

More specifically, real interest rate changes and expected future rates acted on international transactions quicker than changes in goods prices. As said, the latter tended to rise more in some countries for structural reasons. With practically equalized nominal interest rates across the EMU, due to the common currency, high-inflation countries had an incentive to borrow and direct funds to speculative operations in the real estate and stock markets (De Grauwe, 2010a), while low-inflation countries had an incentive to lend abroad. Thus, capital inflows and external financing of banks made construction booms possible, led to soaring financial asset prices and easy lending to the public sector (Lane, McQuade, 2013). The effects of a deteriorating current account induced by structural imbalances were slower to act, as usual (EEAG, 2011).

The implication (again EEAG, 2011: ch. 2) was that the policymakers in high-inflation countries indulged in the illusion that everything went for the best and didn't make their home-works, i.e. they did not reduce public deficits and debts and appropriately supervise and regulate financial intermediaries; nor did they implement structural changes in order to make their economies to become more competitive.<sup>5</sup> On the other hand, also private agents could finance their consumption or investment activity more easily, in particular in speculative activities. Even when they finally realized they had arrived at the edge of the precipice, both policymakers and private agents (in particular, banks) didn't care and in some cases relied on other countries' bailout (moral hazard). This is certainly a part of the explanation. More precisely, it is true that there was an 'illusion' of the soundness of the situation. But 'illusion' is an elusive term. We will explore if there was more than that.

According to some authors (e.g., FV), capital inflows propelled into higher-inflation countries caused high rates of growth, which have raised incentive problems, as they softened or cancelled the necessary reactions and favored adverse selection of politicians and other decision-makers. Thus, the high real growth, according to FV, made the signals coming out of imbalances noisy, not only for policymakers but also for ordinary citizens. In the same directions acted expectations of high real growth, which convinced people of the sustainability of debt (EEAG, 2011). This argument will be dealt with more extensively later, in section 4. In the next section we explore the effects on reforms for efficiency and equity, first, of

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<sup>4</sup> This figure undervalues the increase in poverty, as one component of the risk of poverty (the poverty rate) is calculated as a ratio of the individual household income to the median income and the latter had been lowered by the crisis. In addition, disposable income was to a large extent preserved by social transfers, whose rise negatively affected public deficit and debt, with negative long-term consequences.

<sup>5</sup> The idea that everything went for the best was also diffuse among citizens. This can be one of the reasons why they did not supervise or did not select policymakers properly, as we will see.

introducing the new common institutions devised for the EMU and, in addition, of adopting tight monetary and fiscal policies, without reference to the existence of proper signals of imbalances.

3. The effects of the EMU institutions and monetary and fiscal discipline.

3.1. The EMU as an external tie

Three issues arise both in retrospect and in prospect with reference to the EMU crisis:

1. What reforms were and are necessary in a currency union such as the EMU;
2. Were these reforms possible within the rules adopted by the Union and suggested in the literature?
3. Were the role of the EMU institutions and that of the national governments and agents enough clear?

Milone (2014) largely covers the first issue, mainly by reviewing a large literature, which often comes from public organizations such as the IMF and OECD. Milone refers specifically to reforms that appear necessary after the crisis, but these are largely the same as those needed before it. Necessary reforms differ among the various countries, but should aim at increasing both static and dynamic efficiency, reducing excessive income inequality and reforming political institutions. Monastiriotis, Zartaloudis (2010) deals only with those referred to labour markets, in particular with flexibility and argues that theoretical and empirical considerations show the existence of a variety of degrees and directions for the (de)regulation of labour markets and the agenda is open for an active exploration of the most appropriate policy options. These should have been discussed and disciplined even before the crisis, which has simply accentuated the underlying issues, having to do with the essential features of the 'European model' (rules versus discretion, the role of free markets, of fiscal policy, the relative weights of price stability and employment in the welfare function of the policymakers).

The variety of policies needed to address inefficiencies and inequality is important, because it is apparently consistent with the existence of different institutions at the various levels of the EMU governance and also impinges on the latter two issues listed at the beginning of the section, which are the focus of our analysis.

Notwithstanding the variety of institutions, both the founding fathers of the Union and the literature *before* the creation of the EMU practically delegated most of the burden for integration, alignment, reforms, etc. to the institutions at the Union's levels in a wide sense. The most important common institution is obviously the common currency, but much trust was put in markets too, in a practical vacuum of other common institutions and with specific limitations to national action in the fiscal field, through the Stability and Growth Pact (SGP). Many economists and politicians saw this institutional architecture as imposing a strong network of ties on the conduct of the agents, both public and private, in the countries with higher inefficiencies. These ties should – almost naturally – compel them to change their conduct and enact the needed reforms.

A number of theoretical considerations and catchphrases were advanced to explain the virtues of these external ties and their capability to foster the necessary changes of conduct by local public and private agents. The role of the European Monetary System (EMS), first, and the EMU, later, in imposing the necessary changes was asserted in various forms, such as the "vincolo esterno" or external empowerment (Carli, 1993: 406; Dyson, Featherstone, 1999), the "tying one's hands" or "scapegoat" mechanism (Giavazzi, Pagano, 1988; Begg, 2002), the "back against the wall" (Alesina et al, 2006) and "there is no alternative"

(Bean, 1998) theses.<sup>6</sup> As Featherstone (2001: 1) pointed out, this argument has been used differently within different institutional settings, as either a strategic lever for reform or a stimulus to shift norms and beliefs affecting policy. The former (latter) was mainly the case for higher- (lower-)inflation countries. Legitimization of reforms at the local level was thus largely devolved upon the EMU institutions, including the operations of markets.

However, as McNamera's (1998) put it, the argument and the option of the 'vincolo esterno' were mainly a fruit of a consensus among *élites* redefining the role of the state. Penetration among most sections of the population lagged or lacked at all. We can also add that the consensus was fragile in many cases, each of the various sections of the *élites* hoping to shift the burden of adjustment to others. The consensus and reliance on the virtues of markets and the common currency and the SGP, on the one side, deprived national governments' policies of much content or reduced their effective range of action and, on the other, convinced the public opinion of the possibility that everything was about to be settled, automatically, simply as an effect of participating to the Union. Public opinion did not really put much emphasis on the need for structural reforms. The nature of the adjustment needed<sup>7</sup> - with the possible exception of reducing the public debt - and the possibility of being exposed to shocks and crises were not clear. A similar effect of reducing the expectations of adjustment at the national level derived from the consideration that much of the necessary convergence of the higher-inflation countries had been obtained as an effect of complying with the Maastricht rules for admission. Admission was thus considered by many as the final act in the series of painful measures to be adopted by these countries. Further, comparisons with the state of Germany in the first years of the Union tended to confirm this orientation and induced to optimism.<sup>8</sup>

Even those who were conscious of the necessity of reforms and did not trust national governments or private agents for the will and ability to undertake them, somehow relied on Europe's action. However, as said, the EMU and other existing common institutions were not empowered with most of the required actions.

Bean (1998) presented a rather balanced view of economic and political considerations favouring or being an obstacle to structural reforms at a national level. His economic arguments in favour – notably the 'there is no alternative' (TINA) argument (or a variant of it), and in particular the incentive to render the local environment more attractive for business, the increase in decentralized labour bargaining - seem to prevail over those against (mainly, the incentive for reforms is lower in a monetary union from the point of view of time inconsistency; and absence of rules for debt consolidation lowers incentives). All in all, the arguments sustaining their political feasibility were less favourable to adoption of reforms. A decisive reason being of obstacle to reforms are the short-run costs that they would impose on a rather wide group of people. Their opposition could be easily overcome in a growing environment, but this is difficult to obtain at the Union level, as reforms are prevailingly an issue for a subset of countries and are not considered to be a common issue.

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<sup>6</sup> On this see also Monastiriotes, Zartaloudis (2010).

<sup>7</sup> A number of options were open. And the adoption of one of them in one country might have been consistent with a different option chosen in another country. Take the case of the labour market. Here a number of solutions exist that can all ensure wage moderation (Monastiriotes, Zartaloudis, 2010). The one adopted in Germany, through decentralized bargaining, cut of nominal wages was not very different in principle from the solution taken by Italy of a centralized bargaining with a supplementary possibility of decentralization, which had led Italy out of the deep exchange rate crisis of 1992. Success would be ensured by adoption of complementary industrial and general policies both at the country and the EMU level.

<sup>8</sup> With reference to Italy, Bassanetti et al (2013: 15) confirms that Germany has been a sort of benchmark for Italy.

In Italy the ‘vincolo esterno’ (or external empowerment) argument was rather diffuse. An independent external monetary authority could enhance separation of the Italy’s central bank from the government and its ‘whip’. Together with the passage to a common currency it could make markets and foreign competition to work and ensure efficiency: the external constraints would be capable of forcing politicians, businessmen and trade unions to a more efficient conduct in due time (Dyson and Featherstone, 1999: chapters 10, 11).

Begg (2002) presented a balanced view and in substance advocates participation of social partners to the process of reforms, to avoid disruptive results. Participation was seen as necessary, since ‘if guidelines are issued by ‘Brussels’ that call for unpopular or controversial reforms, they risk being seen as unacceptable (Chassard, 2001). A risk in this regard was that the EU could be used as a scapegoat. Indeed it might be argued that this could provide part of the motivation for Europeanisation to governments keen to push through unpopular measures such as agreeing to pension reforms at the European level in order to circumvent a lack of domestic support.’ (Begg, 2002: 14-15). Another risk was that different levels of governance had roles that should be complementary, but in practice could be subject to competitive overlapping, originating *confusion* (the ‘too many cooks’ syndrome), rather than the ideal *fusion* of the kind suggested by Wessels (1997), which is necessary for the establishment of a single policy system. In particular, heterogeneity of employment and employment policy in the EMU called for the clarification of a model towards which change should be directed as well as of the agents that would push toward it at the various levels. In this sense too see Begg (2002).

Recent reflections by Heinemann and Grigoriadis on the way to harmonize different agent’s expectations and conduct can be useful: ‘On the general level, the theoretical reasoning and the empirical jointly suggest that a theory of reform resistance is severely flawed if it is simply based on the view of reform-resistance driven by narrow self-interest. The micro-evidence, in particular, underlines the role of (procedural) fairness considerations. Voters need a minimum confidence into their democratic institutions in order to accept the uncertainties involved in far-reaching institutional change. Interestingly, trust in European institutions can to some extent be a substitute for trust in national institutions.’ (Heinemann, Grigoriadis, 2013: 38). Trust in Europe was in effect high and this could compensate for the lack of trust in national government in many EMU countries. However, Europe was not empowered with the exactly kind of policy instruments needed to reform labour markets, business structure and conduct, public administration.

We must be clear about the reasons why the EMU would represent an external tie as well as the agents that would have been constrained by the Union’s institutions. These reasons can refer to: adoption of contractionary monetary and fiscal policies, the existence of a more fierce competition in product and labour markets, limits to public deficits and debts. In the next sub-section we deal with national policymakers’ attitudes towards reforms simply as a consequence of contractionary monetary and fiscal policies. The issue of signals and incentives to both policymakers and private agents deriving from strict monetary and fiscal discipline and market constraints before and after admission to the Union is the object of sections 4 and 5.

### 3.2. Policymakers’ attitudes towards reforms with contractionary monetary and fiscal policies.

Adoption of a regime of fiscal and monetary discipline would generate mixed effects according to Coricelli, Cukierman, Dalmazzo (2006), Acemoglu, Johnson, Querubin, Robinson (2008). A regime of discipline was enforced both in the way to the common currency (at least in the higher-inflation countries, for which

fulfilling the Maastricht requirements was more problematic) and afterwards (as the ECB had to establish a reputation and the SGP was in effect).

Acemoglu *et al* present a model where reforms of the kind advocated in other contexts by the Washington Consensus (basically, restrictive fiscal and monetary policy, reforms that are supposed to be efficiency-enhancing such as market liberalization, privatization, etc.) can be detrimental. In fact, in their opinion such reforms induce politicians to adopt other instruments for furthering their redistributive action, patronage, etc., thus originating a kind of 'seesaw' effect.

In Coricelli, Cukierman, Dalmazzo (2006) and Dalmazzo (2014) a stricter *monetary policy* has positive effects on both inflation and unemployment, as it imposes a discipline on trade unions. However, according to Dalmazzo, 'commitment to price-stability may allow governments to persist in "bad" fiscal policies and tolerance for low competition', as governments can trade part of the social gains deriving from it for distortionary taxation, redistribution, patronage and the like (Dalmazzo, 2014: 4). Thus a more conservative central bank tends to raise the tax rate, thus questioning the desirability of this type of monetary authority claimed by Coricelli, Cukierman, Dalmazzo (2006).<sup>9</sup> In addition, monetary discipline reduces market deregulation. This result casts doubts on the validity of the argument in favour of resorting to an external constraint under the form of a conservative central bank in order to reform countries characterized by lax fiscal policies and scarcely competitive goods markets.<sup>10</sup> However, these implications can be accepted only after careful analysis. Not only because models such as in Dalmazzo (2014) are used admitting no trade-off between inflation and unemployment (at least in the short run). In addition, they do not consider that, notwithstanding the similarities in the two periods in so far as adoption of stricter monetary and fiscal discipline is concerned, as said, these have other features, which can justify apparently different behavior of public and private agents in the transition period and after membership had been gained. Thus, the conclusion reached by using the models under consideration do not fully take into account the incentives of policymakers and private agents before and after the admission to the EMU. In the next two sections we discuss precisely these issues.

#### 4. Incentives and signals

##### 4.1. Incentives during the transition to the EMU and after

The 'transition' to the EMU of the various countries, in particular of the peripheral countries that were not part of the EMS, implied a number of effects on incentives. Some of them pertain to adoption of a stricter regime of monetary and fiscal discipline. As said before, this has featured not only the proper transition period before admission to EMU, but also that of the following full participation to the Union. However, each of these two periods has specific features, as we explain now.

The former also implied some kind of mitigation in the effects of contractionary policies deriving from both reduced real interest rates, due to disappearance of the country currency risk, and the prospect of a future 'prize' attached to admission to the Union (for this effect see also IMF, 2004: 114). This prospect of a prize certainly affected the conduct of some agents, notably the government, big firms and trade unions (at least

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<sup>9</sup> A conservative central bank, instead, generates higher social gains the lower the degree of competition in the product markets (Dalmazzo, 2014: 11).

<sup>10</sup> Dalmazzo also studies the effects of a higher fiscal discipline on tax rates, which are positive, i.e. the former imply a lower tax rate. This should reduce distortions and rent distribution. However, the variable he uses to indicate a higher fiscal discipline represents more the preferences of the government than the discipline. Thus we do not take this effect into account in the text.

those with some degree of centralization), which were conscious of the stricter relation between their conduct and the possibility to earn the prize (on this see Acocella, Di Bartolomeo, Tirelli, 2009). More questionable is the likelihood of a similar conduct by small- and medium-size enterprises, due to their likely free-rider attitude.

By contrast, after admission to the EMU, there was no apparent prospect of a future prize tied to restructuring, eliminating inefficiencies and unsustainable budgets, as the effects of contractionary policies at the EMU level were mitigated by some kind of soft budget constraint<sup>11</sup>. Strictness of the regime in existence after admission to EMU can in fact be – and has been - questioned, as credit availability increased in peripheral countries. This is really an effect that began to loom - along with reduction in real interest rates in these countries – during the transition period. However, it could take momentum only after some time and especially after the signal of formal admission of peripheral countries to the EMU, which was commonly perceived as crossing the finishing line. Capital inflows to higher-inflation countries from abroad, mainly from Germany, raised credit availability especially to private agents and created a bubble. Absence of a (further) prize related to EMU participation coupled with a soft-budget constraint could thus have reduced incentives to enact structural reforms in higher-inflation countries. In terms of Dalmazzo's model, this would correspond to an exogenous rise in the weight put on redistribution of rents; differently, however, from his model, this rise in the weight would derive from having reached the target of being admitted to the Union.

Then, on the top of a common issue, i.e. contractionary monetary and fiscal policies at the EMU level, the two periods could imply different outcomes for both public and private agents. What certainly makes the two periods differ, in fact, is that an issue of reduced incentives for a 'correct' conduct of public and private agents was more likely to arise after the prize of the admission to the Union had been cashed and no future prize was in sight. In addition, also the influence of the changed budget constraint deriving from low interest rates and credit availability induced optimistic or 'distorted' beliefs and expectations of future prospects. We deal with the implications deriving from the changed budget constraint in the next sub-section.

#### 4.2. The budget constraint and incentives.

According to Baskaran, Hessami (2013), the EMU did not imply a harder budget constraint of the kind advocated by the supporters of the argument of the external tie induced by fixed exchange rates. Instead, in accordance with literature since Wildasin (1997), they find empirical support for the idea that the EMU itself created a soft budget constraint.<sup>12</sup> In their opinion, this would derive from the failure of the European Council to sanction France and Germany in 2003, which - in addition to Portugal - had violated the SGP. According to them, this failure reduced public and private agents' incentives for reforms in other countries.

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<sup>11</sup> According to EEAG, 'abundance of cheap funds brought a period of "soft budget constraints" to capital-importing countries, to cite a concept that Janós Kornai once used to predict the fall of Communism... The soft budget constraints meant that a credit-fuelled internal boom was spreading from the construction industry to the entire economy, pushing wages, prices and incomes from the provision of non-traded goods above the level sustainable in the long-run, creating the bubble that ultimately resulted in the European debt crisis. By the same token, Germany suffered from overly tight budget constraints as resources were withdrawn, entering a period of low growth rates and near stagnation under the euro, which ended abruptly when the debt crisis suddenly changed risk perceptions.'(EEAG, 2011: 77-8). In the next sub-section we discuss the exact nature and possible determinants of a soft budget constraint.

<sup>12</sup> This runs counter Jahjah (2000) and the whole literature starting from the idea that the EMU would constitute a kind of external constraint for public and private decision-makers.

This explanation might be insufficient, as the effect would have acted only after that date.<sup>13</sup> The additional issue arising from it is why the soft budget constraint, first inaugurated by France and Germany, operated in some countries only (those with a higher inflation), not in others in the following years. Nor it would explain why the violation of the SGP induced a 'virtuous' conduct by at least Germany, but not in Portugal.

A different explanation would be that the signal of a soft budget constraint could have come from the way the EMU was conceived and worked since its first years of existence, as the bubbles generated in the peripheral countries by capital inflows gave the impression that everything was right there (FV, 2013). FV basically suggest two reasons for the existence of a soft budget constraint: i. public decision process can be assimilated to a war of attrition (Alesina, Drazen, 1991); this implies that free capital movements and capital inflows, like aid, have the effect of delaying reforms (Casella, Eichengreen, 1996) by relaxing budget constraints; ii. Independently of that, it is difficult for 'principals'<sup>14</sup> to extract good signals with bubbles and booms. Easy borrowing leads to low long run growth, as it multiplies future engagements for wrong or low-productive investment, thus wasting resources. Among a number of implications, it causes: a variant of the Dutch disease leading to misallocation of resources away from the tradable sector; a deterioration in policy and institutions, which are induced to resorting to debt and postponing reforms.<sup>15</sup>

This explanation – which would also clarify why the decision of the European Council not to sanction France and Germany in 2003 would have acted only on higher-inflation countries in the following years - emphasises the interaction between bubbles and policies. Bubbles induced public and private agents to choose 'soft' policies, i.e. they gave the politicians an incentive to raise deficits and private agents to increase their leverage. Lane, McQuade (2013) in fact finds a positive correlation between net capital inflows and domestic credit. This made it easier for the government and the private sector to borrow, thus reducing their incentive to adopt 'sound' policies. Reduced interest rates in the period before entry in the EMU didn't have similar effects, especially on politicians, as their conduct should have been 'virtuous', pending admission. In addition, capital outflows from 'core' countries had not yet materialized.

By contrast, Germany, as a country with very low inflation rates, exported capital abroad and suffered from a kind of hard budget constraint, also as an effect of the policies following unification with Eastern lander.

Looking at figures, government debt (as a percentage of GDP) lowered for some higher-inflation countries (Portugal, Greece, up to 1999-2000) and then increased; for other countries, the reduction lasted (but at a slower rate than in the period up to 2000) until 2004 (in Italy) or 2007 (Spain, Ireland).

More uniform in all higher-inflation countries was the growth performance, which was strong or very strong until 1999 or 2000, slightly lower since, up to the financial crisis begun in 2007-8<sup>16</sup>, with the

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<sup>13</sup> Also other countries might have violated the SGP fiscal rules, without incurring in formal infraction procedures. This was certainly so for Italy. In the period 2001-6 this country overshoot the upper boundary of 3% to net borrowing and disregarded the rule of the budget parity over the medium run (Bassanetti et al, 2013: 15). This only emerged in 2004-2005 as a consequence of a revision of national accounts. Improper monitoring (Eurostat was empowered to monitor national statistics only with some lag) facilitated the violation.

<sup>14</sup> Use of the term 'principal' implies that, as in FV, an issue of moral hazard arose. We are inclined to think that incentives can be affected even without moral hazard, as we will clarify in sub-section 5.1. Then we use the term in a loose meaning.

<sup>15</sup> It also leads to diffusion of low quality agents and principals and reduction in incentives of agents and tilts political-economic equilibrium against reforms. We deal with these consequences later in section 5, which deals with moral hazard and adverse selection more specifically.

<sup>16</sup> However, one must consider that in the early 2000s growth rates lowered in the whole EMU. This was the consequence not only of the contractionary effects of the common monetary policies and fiscal rules, but also of the

exception of the service sector and constructions. By contrast, growth was rather high in Germany until 2001, which reflected also on a current account deficit until 2002-2003, but drastically dropped afterwards. Thus, with the only exception of Greece, there was no boom in higher-inflation countries after their inception into the EMU, as claimed by FV and EEAG (2011). However, the soaring asset prices certainly relaxed credit and budget constraints in high inflation countries, even if this was not to such an extent as to propel a boom, at least in comparison with the pre-EMU period, with the exception of Greece (Eurostat, no date). Some constraints deriving from the new institutions, such as a monetary policy that was contractionary at least until mid-2001, might have braked a possible boom. More than total GDP growth, growth in specific sectors, such as construction and the financial sector, is important, as an indicator of growing asset prices and wealth. This was of the utmost importance for growth of consumption<sup>17</sup> and is likely to have generated some misperception or a false assessment of fundamentals. This was 'corrected' only when the crisis erupted in Greece in the second half of 2009.<sup>18</sup>

All in all, however, bubbles certainly existed that could have supported an otherwise very low growth in the whole economy, as an effect of a rather contractionary monetary policy and limits to budget deficits introduced by the SGP. This would suggest an explanation of the evolution of policies and the performance of higher-inflation countries based on the absence of proper signal for the need of a change. We deal with this in the next sub-section.

#### 4.3. Why wrong signals can arise?

After accession, the important signals of the balance of payments and the exchange rate were lost. Relaxation of the external constraint due to free capital movements implied not only a rather high growth rate in that course of action, but also the loss of proper signals, at least for the government, of the reduction in the country's competitiveness, which in due time could have a negative influence on growth and the very possibility of continuing to extract rents. The balance of payments, the current account as well as some indicators of competitiveness could still be calculated, but the idea that any current account deficit could be balanced by capital inflows, with no negative impact on the (nominal) exchange rate, together with the moderately high rate of growth, were reassuring for policymakers. For private agents, the contemporaneous fall or reduction in aggregate demand abroad and at least partial substitution of the domestic to the foreign market (made possible to some extent by the looming bubble) also meant that signals of a loss of competitiveness were noisy. Finally, reliance on temporary jobs as well as on relocation abroad of some industrial production lines implied that many firms could cope with reduced demand abroad, the impossibility to resort to nominal currency devaluation, inefficiencies and rents, without suffering a substantive loss in their competitiveness, at least in the short- or medium-run.

More generally, the ability of private and public agents to perceive the right market signals can be debated. From this point of view we spot two kinds of issues: a. Can markets send the right signals to policymakers and agents and, in the affirmative, under what conditions? Symmetrically, what are the difficulties of signal extraction in market economies? b. Do markets send correct signals in a monetary union and, more specifically, in the case of EMU?

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slowing down of the growth rate in the USA, after the burst of the financial bubble created by the crisis of 'new economy' and the 2001 terroristic attack.

<sup>17</sup> Even with reference to Italy, where the bubble was not so large as in other PIIGS countries, Bassanetti et al (2013) assess a contribution to growth of higher asset values equal to 0.4 p.p., out of a total average growth equal to 1.6% in the 1998-2007 decade. (An additional contribution of 0.2 came from relaxation of fiscal policy due to reduction in the primary surplus.)

<sup>18</sup> Giordano et al (2013) find evidence of a 'wake-up-call contagion'.

a. Why difficulties of signal extraction in a market economy?

There are a number of reasons supporting existence of difficulties in signal extraction from market trends. Some refer to markets and political institutions in general. First, signals coming out of market trends can be noisy, depending on existence of multiple equilibria. In addition, even if there were a unique equilibrium, mention should be made of short-sightedness of people and policymakers and the role of political institutions, populism and national specificities. Short-sightedness is particularly acute in financial markets and certainly acted in the EMU (De Grauwe, Yi, 2013). Moreover, the procedure followed by public and private agents for extracting the right signals is imperfect, as they do not know the right model.<sup>19</sup> In the end there might be a few people able to apply correct methods of signal extraction. Most private agents perceive signals and adapt their expectations mainly on the basis of the specific market where they operate. Their ability to perceive imbalances looming elsewhere and ultimately having a reflection on the market where they operate is often scanty. Even when this is not so and some agents look at the generality of markets, they may ignore signals from other related markets, being specifically interested in the evolution of their own market, as either this is more pressing or interrelations as between markets are difficult to assess.

This has induced some authors to suggest alternative ways to cope with excessive capital inflows and current account imbalances. The former can be regulated by proper direct control or taxes. In the case of a current account imbalance due to competitiveness, wages should be lowered or raised according to the nature of the imbalance, also by means of income policies. Imbalances in the current account not due to competitiveness should be faced by boosting or contracting aggregate demand. There are however two opposing considerations especially addressed to use of direct policy instruments: one is theoretical; the other is practical. The former says that, in the words of EEAG, 'we find such proposals naive and dangerous, because, by attempting to mimic through controls the outcome of market discipline, they are bound to confuse symptoms with causes and direct the attention to policy tools that are entirely inappropriate as remedies against long-term structural deficiencies of market economies' (EEAG, 2011: 82). The latter has to do with the Union's institutional architecture, which rules out capital controls and emphasizes market self-adjustment, practically banning other forms of common policy intervention.

Both these considerations can be debated. As to the former, it is true that causes rather than pure symptoms should be removed. However, this requires time, as the causes are difficult to tackle, the more so when this must be done at the country level, in the absence of suitable common labour and industrial policies. Arguments against the position expressed by the EEAG also derive from the critique of the theoretical foundations of EMU institutions and the need to reform them (see Acocella, 2014b).

b. Apart from these considerations, do markets in a monetary union send the right signals to policymakers and agents? And can they operate in such a way as to overcome them? The answer to both questions could be conditionally in the affirmative. As for current account imbalances, correctness and effectiveness of signals depend not only on the size of imbalances and imperfections in the product markets, but also on the degree of wage flexibility and labour mobility, as labour markets are often characterized by more rigidities and tend to react to the signals with a longer delay. As to capital markets, they can send signals, if policymakers correctly interpret them. However, they are plagued by issues such as beauty contests and, as

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<sup>19</sup> The theory often offers a variety of contrasting arguments, as, e.g., if one compares the position of those supporting the external tie to those, such as Blanchard, Giavazzi (2002), tending to neglect existence of a foreign constraint in the EMU.

seen, can overreact and create bubbles. Issues can then be complicated by the different speed of adjustment as between the different markets.

Is a monetary union conceivable without free capital mobility? Possibly not, but in this case common policies - financial regulation, in particular of banks, industrial and labour policy, appropriate monetary and fiscal policies – should be added to avoid imbalances in different areas. The very way of operating of a monetary union with structural differences among the different countries and free capital movements would expose (and has exposed) it to a risk of break up, in the absence of other common policies, low labour mobility, no fiscal union, no lender of last resort for governments (Krugman 2013).

## 5. Incentives, moral hazard and adverse selection of policymakers

### 5.1. Signals and moral hazard

Absence of a proper system of incentives does not imply moral hazard, as this requires existence of asymmetric information and a conduct by agents that is detrimental to the principal. Moral hazard arises because the agent does not take the full consequences and responsibilities of its actions, thus acting less carefully than it otherwise would, leaving the principal to bear some negative consequence of the actions. Absence of incentives or disincentives simply implies that some wrong signal let him think that the environment where he acts has lasting negative or positive features, which induces the agent to think that his current conduct is profitable.

Let us refer to the different markets where moral hazard might have played a role. The main markets are those for goods, labour and financial assets. There is no immediate way of devising some kind of asymmetric information relevant for our issues in the first two markets. However, the change in institutions can act on the incentives usually existing in those markets. Take the case<sup>20</sup> of the Hartz reforms in Germany: the situation of hard budget constraint existing there for the reasons already indicated, induced the government to enact a series of reforms related to the labour market that had a positive impact on the workers' incentive to accept a job and possibly also to change the terms of wage bargaining. An even more manifest kind of moral hazard could have interested financial operators and the government, but, most likely, after insurgence of the crisis, when some kind of guarantees were expected in certain contingencies.

### 5.2. Bubbles, entry of politicians as a pre-selection process and adverse selection.

Bubbles can act not only on incentives of agents in general, but also on adverse selection of politicians and other agents.

Taking issues of partisanship aside, when we introduce asymmetric information, separating bad from good politicians is very difficult, as the program of future policy declared by each candidate before the election is always incomplete and may not correspond to his real intentions and future choices. This is especially important after admission to the EMU. In fact, after 1999 the process of restructuring the economy of 'peripheral' countries had still to be completed, but the prospects of continuing relatively high growth rates and benefits from participation to the EMU was so diffuse. Then people were more inclined to opt for candidates – even the less able and/or having a special interest in taking office - promising some relaxation of the restrictive policy experienced until then (Le Borgne, Lockwood, 2012) and some promises of soft

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<sup>20</sup> This is only an example. Institutions - and also effective reforms of them - are very specific to each country: in other countries reforms similar to those enacted in Germany could not have been effective, especially if reproduction of German institutions were only partial.

budget constraint to the 'core' constituency were appealing while appearing credible, which can positively influence the probability of a poll success or political survival of a ruling government (Robinson, Torvik 2009).

Let us suppose, as an example, that all the assumptions for the validity of the median voter model hold. Each constituent will vote according to his preferences, under the constraint of his current and prospective budget. Let us assume also that current incomes have all been reduced by contractionary policies. Two parties offer different prospects for their policies: one, A, promises to continue its present contractionary policy; the other, B, promises to reduce taxes just as a way to prevail in the entry stage of the political process. The latter will be chosen, as the alternative prospect is no longer tied to the promise of a benefit like that of entering the EMU, an event thought to be fruitful of future gains. Whether this theoretical conclusion corresponds to stylized facts in 'peripheral' countries is a matter of inquiry, since not only the median voter model has a number of limitations, but also different specific circumstances can operate in each country that make non-populist politicians to prevail.

## 6. Conclusions

Markets show well known difficulties in delivering the right signals of looming imbalances, may underreact or overreact to them and cannot properly correct them. Pure monetary unions, i.e. unions with no other common institutions than the common currency and markets, add no significant system of signaling and instrument for re-adjustment at least in the short or medium run and can even cause further imbalances, as free mobility of capital can create bubbles which mask them. The more so if the asymmetries producing such imbalances have a structural nature, as, in this case, some markets, such as labour markets, may not work in an appropriate way. In particular, the high capital mobility is not matched by a high international labour mobility and an essential condition for a currency union to work is thus not fulfilled. In this situation moral hazard and adverse selection are easy to arise, making correction of imbalances more difficult.

The system should then be helped to deliver proper signals and to correct them. The OCA theory must be made to work and appropriate non-market institutions, mainly at the union level, should be created. In particular, a common financial regulation, fiscal, industrial and labour policies should be introduced, while devising consistent institutions at the country level.

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