THE THEORETICAL ROOTS OF EMU INSTITUTIONS AND POLICIES DURING THE CRISIS

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ABSTRACT

In this paper we aim at two targets: i) to look for the theoretical roots of the EMU institutions and to check whether the current economic doctrine still supports them; ii) to discuss the appropriateness of these institutions and the policies adopted by European policymakers in order to exit the crisis, specifically with respect to the issues of fiscal policy and public debt. A general issue of inappropriateness of institutions arises both sides of the Atlantic. However, in Europe the problems raised by the specific nature of the crisis of the private debt have been augmented by those of the public debt for reasons again related to the institutional framework.
The evolution of economic thought can contribute to explain the differences between the policies that were adopted on the two sides of the Atlantic through its influence on the respective institutions. Time has passed which should have led to a radical change of most of the still current institutional architecture, but a sort of hysteresis is in place. This has a number of possible explanations, such as those underlined by Galbraith (1987). However, in order to explain it one should refer not only to normal and physiological lags, but also the opposing interests, the value judgments and visions prevailing in some European countries and the dominant role of Germany, which conveys them.

1. INTRODUCTION

As is well known, the current crisis started in the USA in 2007 but soon spread to Europe. Its (proximate) roots were in the accumulation of private debt, which took however different aspects in the two regions. In 2009 its pace began slowing down in the USA as an effect of public intervention while accelerating in Europe

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as a public debt crisis emerged here on the top of the private debt one and improper policies were adopted to face them.

In this paper we aim at two targets: i) to look for the theoretical roots of the EMU institutions and to check whether the current economic doctrine still supports them; ii) to discuss the appropriateness of these institutions and the policies adopted by European policymakers in order to exit the crisis, specifically with respect to the issues of fiscal policy and public debt. A companion paper deals with the way institutions nourished both the private and the public debt crisis in the EMU and the different reactions to the financial crisis in the USA and in the EMU (Acocella, 2013).

When trying to explain the roots of the crisis a general issue of inappropriateness of institutions arises both sides of the Atlantic. However, in Europe the problems raised by the specific nature of the crisis of the private debt have been augmented by those of the public debt for reasons again related to the institutional framework. In addition, the USA institutions have proved to be more effective in dealing at least with the short-term effects of the crisis, whereas the European ones have shown their profound shortcomings. In fact, in the USA both fiscal and monetary policy have been active in counteracting recessionary impulses, with a clear Keynesian inspiration. While having this imprint, monetary policy has also been innovative, as it has devised various types of unconventional measures that have added to the traditional ones. Differently from policies in Washington, in the EMU, only the Frankfurt pole, i.e. monetary policy, was actively expansionary, even if with some hesitation, and to some extent innovative. Fiscal policy not only has not offered any expansionary impulse, but has acted in the opposite direction, showing a deflationary bias.

This different reaction across the Atlantic is consistent with the foundations of the EMU institutions set up by the Maastricht Accords of the early 1990s. These were born out of a number of de facto circumstances, but drew support from the theories prevailing in the couple of decades after Friedman (1968), which had been widely applied in Anglo-Saxon countries in the Eighties[2]. While analyses of the former aspect (in terms of political relations between the different participating countries, their relative bargaining powers and interests, the necessities deriving from the impossible 'trilogy' and other considerations relative to the benefits of complementing a the single market with a single currency) are relatively abundant[3], systematically relating the birth of EMU institutions to the then prevailing theoretical ideas is a task largely neglected in the economic literature,

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[2] According to Stiglitz (2013b), 'Much of the euro's design reflects the neoliberal economic doctrines that prevailed when the single currency was conceived. It was thought that keeping inflation low was necessary and almost sufficient for growth and stability; that making central banks independent was the only way to ensure confidence in the monetary system; that low debt and deficits would ensure economic convergence among member countries; and that a single market, with money and people flowing freely, would ensure efficiency and stability.'

[3] The literature on this is rather ample. We can simply refer to Gros, Thygesen (1993), Eichengreen (1993), Wyplosz (1997), Feldstein (1997). For a recent survey of the political aspects of the European integration see Spolaore, 2013.

possibly because some analysts think of the European institutional set up as of a 'bricolage of odds and ends' (Collignon, 2001:25). Buti (2003) offers a first theoretical justification of this set up, but does not cover some aspects of this and, obviously, misses consideration of the new results of the past decade. Beetsma, Giuliodori (2010) has the advantage of a more recent viewpoint on the macroeconomic costs and benefits of the EMU institutional architecture, but pays less attention to the state of the art supporting it. Finally, Schelke (2013) is very good at indicating the basic theoretical roots of EMU institutions but lacks details and updates.

A related exercise that is worth trying is to check the validity of the European institutions in the light of the developments of the literature after mid-Eighties. We will show that the EMU institutional design seems to be no longer justified on these terms, i.e. with respect to current theories, which have countered almost all the conclusions of monetarism and new classical macroeconomics.[4] This is particularly so in the realm of fiscal policy, the value of multipliers and policies needed for debt consolidation for which the fallacy of conceptions popular a couple of decades ago has been shown. Theoretical advances are in profound contrast with stickiness of European institutions and the persistence of unsound policies. This raises the issue whether there are different explanations - in terms, e.g., of the opposing interests of the member states and their relative bargaining power - for the continuation of the old route.

The rest of the paper is organized as follows. After having briefly described the specific evolution of the crisis in the EMU and linked it to the Eurozone's institutional architecture (section 2), we trace this architecture back to the monetarist and new-classical macroeconomic theories that got wide acceptance from the end of the 1960s (section 3). In section 4 we show that in the last two decades or so all the pillars of such theories have been demolished, whereas the original EMU institutions are still there almost untouched. Critical to the existence of the deflationary bias of European institutions and policies were studies that predicated low values of income multipliers (section 5). This credence has now been shown to be incorrect (section 6), which no longer justifies its persistent influx, in particular in so far as devising policies for exiting the crisis is concerned (section 7). We then direct our attention to other possible explanatory factors (section 8). Section 9 concludes.

2. THE CRISIS

In Europe the financial crisis sprouted under forms very different from those characterizing the United States. This was due both to the different type of financial system and to the specific financial and macroeconomic imbalances between the different EMU countries that had loomed un-tackled: some member

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[4] According to Stiglitz (2013b), each of the doctrines on which the EMU institutions where built 'has proved to be wrong.'

countries, with specific structural features and higher inflation rates, experienced current account deficits and accumulated (private) debt towards other member countries. Such imbalances were built into the existence of a uniform monetary policy that led to differences in the real rates of interests in the presence of structural divergences among the member countries. The mechanism creating imbalances was self-reinforcing. In fact, free capital inflows and external financing of banks nourished a speculative boom in constructions and financial assets that added to inflation. Absence of common policies, such as wage and industrial policy, financial regulation, etc. made it possible for the bubble to grow and burst as soon as the financial crisis imported from the USA erupted. To save financial intermediaries required intervention of national governments and an increase in public deficits, thus threatening the whole European financial system.

There was no sign of significant public debt tensions *before the crisis*, with the partial exception of Greece. The debt/Gdp ratio in the Union had indeed lowered. Tensions within the EMU exploded almost by chance – in the case of Greece, when the new government disclosed its predecessor's misconduct – or as a direct consequence of the crisis and the need for government intervention to cope with it, as in Ireland. Expectations of insolvency then arose. The Greek and Irish shocks could have been smoothly absorbed, with no domino effect, had a federal government – or at least some kind of coordinated expansionary fiscal action, instead of the constraints deriving from the Stability and Growth Pact (SGP) and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (usually referred to as 'fiscal compact')[5] – and a non-conservative central bank acting as a lender of last resort to governments been in place.

Each country having to deal with the effects of private debt crisis implied that many countries *had to expand their budget deficits*[6]. But in the process, as a public debt crisis began to loom and as, again, the approach to this crisis was at the level of each country, with scarce involvement of the EMU level, each country took a contractionary fiscal stance. This aimed at reducing the size of the deficit/GDP and debt/GDP ratios and warding off insolvency, which financial markets related to these ratios. However, simultaneous contraction by practically all member countries implied an increase – rather than a reduction – in the ratios, as not only the numerators of the ratios, but also their denominator were eventually lowered, more than proportionally.

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[5] As is well known, the SGP was agreed on in 1997, since the EMU was created. The fiscal compact, instead, was decided in 2011.

[6] Generally speaking, an increase in private debt should trigger a build-up in government debt, according to the debt deflation dynamics analyzed by Fisher (1933) and Minsky (1982). As De Grauwe (2010: 3) notes, this occurs through two channels: first, governments relieve banks of their debt; and second, the public deficit increases by reason of automatic stabilizers and Keynesian discretionary policies. Alter, Beyer (2013) construct contagion indices based on measures for aggregated spillover effects. Results of their empirical estimates show growing interdependencies between banks and sovereigns, which represents a potential source of systemic risk.

Both the roots of the crisis and the type of policies implemented to face it lie in the institutional set up of the EMU. We have no enough space here to deal with these issues and concentrate on the theoretical sources of the EMU institutions[7].

3. THE THEORETICAL FOUNDATIONS OF EMU INSTITUTIONS: THE VIRTUES OF MARKETS IN A CURRENCY UNION

As seen in the previous section, the institutional architecture of the EMU has been characterized until recently by the existence of only one common institution, the ECB, and absence or weakness of other common institutions in fields such as financial regulation, wage policy, regional and industrial policy. The role that could be played by such common institutions, where the term institution is meant to refer to agents or 'organisations', is taken over by rules, i.e. institutions as a set of relationships or behavioral patterns of agents. The basic rule which the Union relies on is the market: the working of markets is intended as to offer the basic mechanism for regulating the economic activity within the Union. Other rules aim at constraining the action both of the only common public institution and of the countries' governments. The former is expressed by the choice of a model of independent and conservative central bank. The latter by the SGP.

In this and the following two sections we deal with these two ideas that seem to be central in the EMU construction: the conviction of the possibility of markets to solve problems, on the one side, and the need for constraining the action of public agents, on the other.

By looking at the report 'One market, one money' (and the background studies prepared for it) that evaluates the benefits and costs of the EMU, one can see how profoundly this assessment and the track suggested for monetary unification were influenced by the then dominant theories (European Commission, 1990, 1991). Buti (2003) explicitly recognizes the importance of the debate in the 1970s and 1980s on the EMU construction, in addition to the decisive influence of the national central banks, and in particular of the Bundesbank. The theoretical foundations of EMU institutions can thus be traced back, apart from the theory of optimal currency areas (OCA), to a number of analytical contributions introduced, mostly, since the second half of the 1960s up to mid-1980s.

However, having to do with an array of rules that were agreed upon in a rather long period of time, partially as a result of compromises and bargaining, this can be done only in an approximate way and more than one theoretical result can often be linked to the real institutional architecture that has been devised. Therefore there are several possible rationales for this institutional set up. The basic idea is that benefits can be derived from the implementation of free markets. Simply adding a single money to a unitary market solves most problems deriving from the (possibly) diverging conduct of private agents and keeps undisciplined agents in line. However, given the power of command of public agents, the

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[7] For a more detailed review see Acocella (2013).

ineffectiveness of their instruments as well as the potential dangers that can result from their use, ruling their conduct is necessary.

The basic inspiration of EMU lies in Mundell's (1961) approach to OCA. Obviously enough, both direct and indirect benefits can accrue from monetary unification. However, also costs can arise, especially from the point of view of specific countries. In order to avoid them, in the case of asymmetric shocks, some conditions must be fulfilled acting as a substitute of the instrument of exchange rate variation, which can no longer be used. An obvious condition is the existence of government transfers to the countries hit by such shocks from those that are not. In the absence of a federal state, another equilibrating mechanism, offered by markets could help to avoid the costs of asymmetric shocks, i.e. flexibility of wages and prices and/or labour mobility.

Flexibility of prices in product markets, in principle, should be ensured by free circulation of goods and the elimination of non-tariff barriers deriving from the Single Market coming into force since January 1st, 1993. Other measures of liberalisation in the service markets would have completed the picture of free and open markets throughout Europe, that would lead to an optimal performance of the EMU. Flexibility of wages might be problematic for the reasons we will deal with below. If, however, the outcome of scarcely flexible wages is unemployment, labour mobility across countries could guarantee proper working of the labour market.

Then, at least in principle, the countries adopting a single currency could have been ensured the possibility to avoid the costs deriving from asymmetric shocks. From a practical point of view, there may be an insufficient degree of flexibility in labour markets. Obtaining flexibility is then a requisite for the functioning of the monetary union and becomes a policy target[8].

From another point of view, the possibility for countries entering the currency union to ensure benefits, at no cost, by relying on well-functioning markets derives from the fact that each country loses an instrument (exchange rate variations), but is also relieved of one target (or constraint), that of current account (or, more generally, of the balance of payments) equilibrium (Blanchard, Giavazzi, 2002). An argument can be put forward that is even more in favour of participating to a currency union. This was first introduced with reference to participation to the European Monetary System (EMS) established in 1979: giving up exchange rate variations would introduce an external constraint favouring a virtuous conduct of both public and private agents. Governments of high-inflation countries would tie their (inflationary) hands by committing to a fixed exchange rate with lower-inflation countries (Giavazzi, Pagano, 1988; Sibert, 1999; see also Carli, 1996). Thus, monetary policy would credibly[9] be delegated to an external entity and private agents would no longer expect their government to inflate the economy

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[8] 'The original Mundell argument, of real wage flexibility as a precondition for an OCA, was thus turned on its head: rather than being an OCA at the beginning, Member States must implement deep institutional reforms in order to become an OCA' (Schelke, 2013: 40).

[9] The importance of the concept of credibility for understainding the foundations of the EMU will be clear shortly.

and would act consistently. As a consequence they would adjust their conduct and rely on instruments other than higher mark-ups to pursue their revenue or profit targets.[10]

4. GOVERNMENT IS THE BEAST: FINDING THE APPROPRIATE SETTING FOR THE CENTRAL BANK

In the vision of the EMU architects problems do not come from markets, which should indeed be freed of any obstacle (or at least of regulations and obstacles deriving from the government action[11]). They come from the discretionary action of public agents, as in each time period these tend to pursue targets that are unattainable in the presence of private agents having either backward- or forward-looking expectations. In attempting to get their objectives, governments are fooled by the private sector, and a suboptimal outcome results. Discretionary monetary and fiscal policy are ineffective with respect to real variables and the first best desired by public agents can never be obtained, but complying to some kind of rules can at least ensure a second- -best outcome.

4.1. *The role of monetary policy*

In more technical terms, monetary policy aiming at higher employment and income is ineffective in the long run, when there is no trade-off between unemployment and inflation (the long-run Phillips curve is vertical) (Phelps, 1967; Friedman 1968). Thus any monetary expansion trying to reduce the 'market' rate of unemployment below the 'natural' one is doomed to failure and can only cause inflation[12]. Monetary policy should pursue a target of monetary stability, rather than try to influence real variables. This can explain why the ECB has been assigned a monetary target (price stability) instead of a dual or multiple mandate, as in the case of Federal Reserve. To be sure, *price stability* would not be the proper objective, as the Friedman (1969) rule must be obeyed, which should ensure (at least in a completely flexible price context) a zero nominal interest rate and a *deflation* rate equal to the real interest rate on safe assets[13]. The decision taken by the ECB to choose an inflation target less, but close to, 2% – then a positive one – is only apparently contrary to the Friedman rule, as in reality prices are not completely flexible and hedonic prices may be of some importance[14].

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[10] A note of cautiousness is however offered by Ozkan, Sibert and Sutherland (1999).

[11] What G. Carli called "'lacci' and 'lacciuoli'" (see Carli, 2003).

[12] In any case, discretionary monetary policy can even aggravate cyclical oscillations because of a long and variable effect time lag. Then rules must be adhered to in monetary action (Friedman, 1960).

[13] This will be relevant when it comes to explaining why the ECB has chosen an inflation target less, but close to, 2%.

[14] On the relevance of price and wage adjustment costs to depart from the Friedman rule see Schmitt-Grohé, Uribe, 2004.

The issue of the independence of the ECB seems however more remote from Friedman's thought. In his opinion attributing the central bank an independent status is a second-best option, for political as well as for economic considerations. In so far as the latter are concerned, rules are preferable to independence, as the main objectives of monetary policy are to avoid money itself to be a factor of major disturbances in the system and to offer a stable background for the economy[15]. It is true that his objections to independence refer to a situation where the central bank is given 'a good deal of separate power', whereas the ECB is governed by a rule (i.e. an inflation target). However, this rule must be obeyed to in the medium run, which implies that cyclical manipulations of the interest rate (or the monetary base) are not only possible, but also desirable. This is exactly the kind of monetary conduct Friedman wanted to avoid (Friedman, 1962).

We must thus refer to theoretical foundations of the ECB organization and target other than Friedman's thought, even if Friedman's (1962) argument contains the seeds of further thought justifying an independent and conservative central bank. This anticipation of further developments can be linked to one of the arguments he makes use of, in particular, when, in the case of an independent central banker, he is critic of the uncertain degree and the personality of those in charge with monetary control, who may or may not give an assurance of a steady and firm conduct. This argument preludes to the assertion of the virtues of commitment and of a conservative central banker, which are linked to the passage from backward- to forward-looking expectations.

4.2. *Rational expectations, the neutrality proposition and the need for a conservative central bank*

Introduction of rational expectations (REs) led, first, to a statement of the ineffectiveness of monetary policy that was even more forceful than that stated by Friedman (Sargent and Wallace, 1975). Similarly, with rational forward looking expectations, fiscal policy was considered to be ineffective as an instrument for managing income levels (Barro, 1974), a result we will consider into detail shortly. A proposition of policy neutrality or policy 'invariance' was thus stated with regard to the two most important macroeconomic policy instruments. From a more general point of view Lucas (1976) showed that if the private sector has REs, it can fool any attempt by either the central bank or the government to pursue a given target for any real variable through the use of any instrument.

In the same vein, any promise by governments that is time inconsistent is deemed to be not credible by private agents having forward-looking expectations (Kydland, Prescott, 1977). This result can be avoided by self-restraint of the policymaker, whose temptation to cheat is balanced by a fear that he might lose

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[15] Most recently, J. B. Taylor reaches very similar conclusion with respect to the issue of independence vs rules: 'In the absence of a rules-based framework it appears that formal Federal Reserve independence does not generate good monetary policy outcomes' (Taylor, 2013: 17).

his *reputation* and no longer be able to act effectively, in case of repeated interactions with the private sector. However, in a world with uncertainty, signals are more difficult to interpret and then the best practical solution to the problem of time inconsistency is that the policymaker credibly *commits* to some rule (Barro, Gordon, 1983)[16].

In order to eliminate this tendency to create inflation, the inflation bias, that may be present in the constituency and the government, many possible rules have been suggested, such as those tying money growth to some macroeconomic indicator. An alternative is for the constituency or government to delegate monetary policy to a conservative central banker, i.e. a banker assigning employment a lower *weight* than the society's or the government's. Rogoff (1985) shows that this will be able to attain a lower level of inflation without reducing employment. However, appointing a conservative central banker introduces a conflict with the government that can be avoided by introducing rules that govern the independent monetary authority, i.e. by establishing a *target* conservative central bank (Svensson, 1997). These represent the best way for obtaining a commitment not to pursue inflationary, but ineffective, policies. We are thus (almost) back to Friedman, with two (not insignificant) details added: one is that rules are a way to cope with a more general problem faced by governments, that of their credibility: the other is that, once price stability is not in question, stabilization policies are possible. But this is exactly the description of the status of the ECB, which has to guarantee a certain inflation rate in the medium run as its pre-eminent target, but can also pursue other objectives, provided that these do not prejudge the attainment of its predominant one.

5. AGAINST DISCRETIONARY AND CO-ORDINATED FISCAL ACTION

The rules for fiscal policy set by the EMU (introduction of the responsibility for it of each country and no coordination among the member countries, limits to budget deficits and public debts) have numerous theoretical roots, apart from the need for commitment and adoption of rules, as an effect of time inconsistency, an argument that can be applied not only to monetary policy, but also to any other public action.

By referring to political economy contributions, which we do in sub-section 5.1, one can first have an analytical justification for the assumption underlying Barro, Gordon's (1983) model, according to which the government's desired unemployment rate is lower than the natural one. In this way one goes to the roots of time inconsistency. In addition, this literature can explain the tendency towards accumulation of public deficit and debt. This offers an additional specific justification for constraints imposed on discretionary fiscal action.

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[16] The pay-offs to a long-term player whose preferences are uncertain to his short-term opponent and mimicking a committed player are practically equivalent to those deriving from commitment (Fudenberg, Levine, 1992; Schmidt, 1993; Cripps, Thomas, 1994).

The ineffectiveness of this action due to ultra-rationality (Barro, 1974) and the low values of multipliers deriving from time inconsistency and rational expectations go in the same direction (see sub-section 5.2).

Finally, the possible negative influence of coordinated fiscal action on the price level and the capacity of monetary counter-action, which are the object of sub-section 5.3, justify absence of fiscal coordination and application of the principle of subsidiarity to this matter.

5.1. *Limiting the populistic tendencies of governments*

Having referred to the concepts of political conflicts, rational expectations and commitment for explaining the theoretical bases of the monetary policy set up in the EMU is useful for understanding other institutional aspects of the Union, namely introduction of fiscal policy rules.

We have dealt with the conflict between monetary and fiscal authorities *en passant*, almost incidentally, in the previous section. Consideration of political motivations is needed in order to explain this situation not as a possible curiosum, but as a real one, deriving from the need to limit populistic tendencies of politicians who aim at maintaining or gaining power.

These tendencies have first been explained by the school of public choice, starting from the idea of the political process as determined by a collection of self-interested decisions (Buchanan, Tullock, 1962). This applies not only to politicians, but also to other agents. In so far as politicians are concerned, the attempt to maximize the length of their office (Downs 1957) or to win elections (Nordhaus,1975), their partisan inclinations (Hibbs, 1977; Wittman, 1977) or their representation of interest groups can lead them to attempt to reach a higher employment target than the natural one, to run budget deficits, to accumulate public debt, etc.[17] This is possible if there arise principal-agent problems, as an effect of 'rational ignorance' (Downs, 1957) or asymmetric information (also Dixit, 1996)[18]. To be sure, similar problems affect not only macroeconomic policies but also the provision of public goods and are particularly important if the principal is composed of a large group of individuals (Olson, 1965). Also the kind of electoral system chosen, e.g. proportional representation, or electoral uncertainty can exacerbate the tendency to enlarge expenditures and deficits.[19]

The need then arises of devising rules, especially constitutional ones, to be decided by following a unanimity procedure. Quasi-rational individuals could agree to limit the temptation to draw short-run benefits and agree on such subjects as balanced budget rules, limits to governmental growth and transfers (Brennan, Buchanan, 1980; Buchanan, Brennan, 1981). One could thus explain both the

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[17] A rather complete review of the political economy literature in the years before the late 1980s is in Tabellini, Alesina (1988). The most notable exception in their survey is the 'public choice' literature. Alesina, Tabellini (1990) explain the bias to accumulating deficits and debt.

[18] As is well known, the literature on asymmetric information was inaugurated by Akerlof (1970).

[19] There is a wide literature on the subject (see Arnott, 2006).

reason why the SGP was required to be constitutionally grounded (Inman, 1996)[20] and the recent provision of the fiscal compact according to which constitutional rules constraining discretionary fiscal policy should be passed.

In addition, this literature gives support to transferring some decisions to institutions not plagued by time inconsistency and opportunistic behavior to acquire credible commitment by delegating some decisions to agents with different time preferences or with incentive structures different from those of politicians as in the case of independent central banks (De Haan, Sturm, 1992, Cukierman, 1994, Akhtar, 1995) and independent authorities (Majone, 1994, 1996).

5.2. *Ineffectiveness of fiscal policy: low value of multipliers*

The neoclassical and New Keynesian approach[21] that incorporate some sort of Barro-Ricardo (consumption smoothing) effect – and thus assert a low value of multipliers – tend to suggest fiscal policy ineffectiveness for expansionary purposes and, in the case of a crisis, the need for fiscal contraction. Even in these neoclassical and New Keynesian models, separable utility, deep habits consumption, rule-of-thumb consumers, spending reversals could restore positive and significant Keynesian-like effects of public spending increases on output (Hebous, 2010). In the absence of such mechanisms some kind of Barro-Ricardo effect would not only imply ineffectiveness of Keynesian policies, but also suggest the need for fiscal consolidation, under the form either of a reduction in expenditures or of a rise in taxes[22]. This suggestion would be strengthened considering also the negative long term effect of debt on growth.

Indeed, some empirical researches found a positive effect of government expenditure cuts both in a short- and a long-run perspective. This was the conclusion of Giavazzi, Pagano (1990), who explained the positive effects on consumption of the cuts of the 1980s in the Danish and Irish public expenditure as deriving from households' expectations of permanent cuts in the level of government budget. Along similar lines followed Alesina, Perotti (1995a, 1997), Giavazzi, Pagano (1996)[23]. The negative effect of the debt on growth had been stated – long before Reinhart, Rogoff (2010), Checherita, Rother, 2010; and Kumar, Woo (2010) –by Modigliani (1961), Diamond (1965), Saint-Paul (1992).

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[20] This was not the real outcome for the SGP, and constitutionalisation of the fiscal rules has to wait until the fiscal compact, whose enforcement could also be ensured by the European Court of Justice.

[21] The New Keynesian approach emerged first at the beginning of the 1990s, but it was not until the 2000s that it was refined in a way as to allow for some positive real effect of fiscal policy. Then it had no practical influence on EMU institutions different from that of other neoclassical theories.

[22] Fiscal consolidation has limited relevance in the SGP but will be a central aspect of the 'fiscal compact'.

[23] More recently, see Barro, Redlick (2009), Alesina, Ardagna (1998, 2010), Broadbent, Daly (2010).

This *'fin de siècle'* credo of low or negative values of multipliers and of negative effects on growth deriving from the accumulation of debt was certainly not in favour of traditional Keynesian fiscal action and imbalances and can be thought as influencing the draft of the EMU institutional set up. In addition, it has also inspired the idea of an expansionary fiscal consolidation (the doctrine of 'expansionary austerity') that has been at the basis of exit policies from the crisis (see section 7).

In this perspective it is not strange that active fiscal policy had been put in plaster by the SGP and (more recently) the European fiscal compact has been agreed on. But these limitations on discretionary fiscal policy cannot be fully understood without considering open economies explicitly, in the context of other European institutions, which we do in the following sub-section.

5.3. *Inefficiency and negative spillovers of fiscal policy coordination*

Theoretical models of open economies are of specific interest to us. In this context, the impact of budget policies on the real exchange rate plays an important role in determining the size of the multiplier effect, as this could be increased by the real exchange rate depreciation[24]. Also other effects must be taken into account in an open economy, such as existence of incomplete international financial markets (Kollman, 2009) and the possibility of a home bias in consumption (Ravn, Schmitt-Grohé and Uribe, 2007): both increase the expansionary impact of public expenditure. In an open-economy context also positive spillover effects operating via trade have a special interest. Beetsma et al. (2006, 2009, 2011) explore the international spillovers from fiscal policy shocks in Europe. A fiscal expansion stimulates domestic activity, which leads to more foreign exports and, hence, higher foreign output. Erceg, Gust and Lopez Salido (2007) and Spilimbergo, Symansky, Blanchard and Cottarelli (2008) argue in fact that fiscal coordination increases multiplier effects.

Some of these effects are scarcely relevant in the context of the EMU. In fact, changes in the real exchange rate are possible only to the extent to which the price level can be lowered in the country with an expansionary fiscal policy, which contradicts what one should expect to happen in a monetary union. Also the home bias is limited in the EU in so far as the effect of national protectionist policies is concerned, as both trade and non-trade barriers were drastically lifted. In fact, the income multiplier is reduced by the high value of the propensity to import from other EU countries. This high propensity, instead, while having a negative impact on expansionary fiscal action in one country only, would *per se* support a coordinated fiscal action.

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[24] The possibility of this outcome is investigated by: Frankel, Razin (1987), who assume tax financing of public expenditures and an exogenous supply of money; Obstfeld, Rogoff (1995), who consider circumstances leading to an interest rate reduction, namely short-run price rigidities and consumption smoothing; Corsetti, Meier and Muller (2009), who point to expectations of a systematic reduction over time of future government spending that preclude a real interest rate rise

This conclusion misses interactions between fiscal and monetary policies, which have an impact on the nature and the value of spillovers and fiscal multipliers. In a monetary union such as the EMU assigning monetary authorities the primary target of price stability implies a negative spillover of fiscal policy: in fact, any expansionary fiscal action by one country has an impact on the union's price level and thus calls for a deflationary intervention by the ECB. Beetsma, Bovenberg (1998), Beetsma, Uhlig (1999), Beetsma et al. (2001)[25], while using different modelling approaches,[26] all find negative effects on income from fully-coordinated fiscal expansion, due to the deflationary reaction of the central bank.

According to Beetsma, Bovenberg (1998), in a monetary union such as the EMU, time inconsistency provides the rationale for a conservative central bank and against the coordination of national fiscal policies. In fact, in their analysis, the system suffers from both a spending bias and an inflation bias and thus faces a trade-off between them. By adjusting either monetary or fiscal institutions, not both, only a suboptimal outcome can result. Monetary unification enhances the strategic position of the monetary authority and introduces a disciplinary effect on governments. Fiscal coordination would eliminate this disciplinary effect and worsen the strategic position of the central bank. The need for introducing subsidiarity in fiscal policymaking is thus asserted.

The only problem left is then whether existence of a committed central bank alone and national fiscal authorities can avoid the negative effects on price stability of free-riding by the latter[27] or if other institutions are needed to complement the type of central bank that has been chosen. Beetsma, Uhlig (1999) claim that a pact of the kind of the SGP can reduce the negative spillovers arising from political distortions that can be exacerbated in a monetary union.[28] Beetsma, Uhlig (1999) give two possible justifications for constraining the action of national fiscal policy: one refers to a country, closed or open, which wants to draft a fiscal constitutional rule in order to tie the hands of its own government, based on the arguments developed in sub-section 5.1); the other lies in the existence, in a monetary union, of negative spillovers deriving from a country's budgetary policy and accumulation of debt on the common inflation rate.

The same problem, i.e. sufficiency of a committed central bank for ensuring price stability, has been investigated from another point of view. The 'unpleasant monetarist arithmetic' of Sargent, Wallace (1981) held first the view of the insufficiency of a monetary policy rule for price stability, due to rational expectations. Given this kind of expectations, bond financing of public expenditures and tight money could give rise to immediate inflation. Along similar

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[25] And, more recently, Beetsma (2008), Beetsma, Giuliodori (2010), Michalak, Engwerda and Plasmans (2009).

[26] Michalak, Engwerda and Plasmans (2009) use a New Keynesian model in continuous time, whereas the other papers cited do not use micro-founded models.

[27] See also, more recently, Chari, Kehoe (2007, 2008).

[28] This issue is reviewed at length in Beetsma, Giuliodori (2010: section 7).

lines Woodford (1996) applied the fiscal theory of the price level[29] to the case of the EMU and, in the absence of fiscal self-discipline of governments, found that it supported introduction of limits to public deficit and debt as a way to complement the monetary rule chosen by the common central bank – or even to set up a precondition for this bank to be charged with maintaining price stability.

A final justification for setting limits to national fiscal policy in the context of a common monetary system was suggested by Casella (1989): a country's fiscal deficit has negative spillovers on the interest rates and the bonds' prices of the area and should then be limited.

Then, in the years preceding the constitution of the EMU the rationales were laid for advocating rules setting constraints to discretionary fiscal policy. These were:

1. time inconsistency;

2. political economy considerations about the attempts of governments to force the unemployment rate below the natural one;

3. ineffectiveness of fiscal action, with possibly negative multipliers and effects of accumulated public debt on growth;

4. negative spillovers on the real interest rates abroad;

5. negative spillovers on the price level, aggravated by policy coordination and the ensuing monetary policy counter-reaction.

The SGP was only the legal transposition of such statements, reflecting the idea that the true problems of the EMU set up were not only that of designing an independent and conservative central bank but also of ensuring that no harm could derive from fiscal policy[30].

6. RIP VAN WINKLE AND THE REBUTTAL OF THE THEORETICAL CONVICTIONS OF THE 1970S AND 1980S

6.1. *Disproving the basic theoretical convictions underlying the EMU institutions*

Only a few economists and observers[31] warned at the time about – or have pointed out later – the fragility or the limits of this project. Almost a decade ago Alan Blinder claimed that 'a sharp revision of the naively optimistic views (about the capacity of economic policy to control the economy) held by some economists circa 1966 was called for. But … the pendulum may have swung just a bit too far'

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[29] The theory had been developed by Leeper (1991), Sims (1994). For a critique see Buiter (2002).

[30] Buti (2003: 5) quotes Mervyn King as saying that the real obsession of central bankers is not inflation but fiscal policy (King, 1995).

[31] See Eichengreen, Frieden (2000). For the practical absence of anti-cyclical policies and the limitation of the European budget see Buiter, Corsetti, Roubini (1993). For perverse incentives leading to self-realizing speculative attack created by the Maastricht Treaty see Eichengreen, Wyplosz (1993); on the compromises between different positions leading to the Treaty see Bini Smaghi, Padoa Schioppa, Papadia (1994); on the issue of coordination between monetary and fiscal policy see also the largely or partly critical contributions by Bryson (1994), Allsopp, Vines (1996), Dixit, Lambertini (2001), Onorante (2006).

(Blinder, 2004: 26), producing a similar naively optimistic views about the virtues of markets and the central bank conservativeness.

Blinder's words are even more actual nowadays as economic theory has further questioned the system of beliefs that had emerged in the fifteen-twenty years or so after 1966, even if it still retains some assumptions that led to the propositions featuring that credo. Three decades later, Rip van Winkle's[32] faith in the credo would again be crowded out by the analytical developments intervened in these years. Think of: the limited practical relevance of the surprise effect, recognized by Lucas (1996: 679) himself; the irrelevance of many critiques to the 'classical' theory of economic policy (in particular, Tinbergen's 'golden rule' about controlling the economy) based on rational expectations (Blinder, 1998: 8; Acocella, Di Bartolomeo, Hughes Hallett, 2012[33]); the theoretical and practical limits to time inconsistency and thus to related prescriptions of monetary policy rules that should replace discretionary action (Blinder, 1998: 56); existence of a long-run non vertical Phillips curve (Hughes Hallett, 2000; Graham, Snower, 2008; Benigno, Ricci, 2011; Acocella, Di Bartolomeo, Tirelli, 2013); the need for more active fiscal policy and regulation (especially of financial markets and institutions[34]) once some unrealistic assumptions of current models are ruled out[35]; critique of the arguments put forward by Rogoff (1985) (and Bade, Parkin, 1978 before him) advanced by Posen (1994) and Hayo (1998), who highlight that both political independence and inflation are the outcome of structural economic and social factors that make the central bank statutes to have no impact on inflation; empirical findings suggesting that countries that adopt inflation targeting have not attained better monetary policy performance relative to a control group of highly successful non-inflation targeters (Mishkin, Schmidt-Hebbel, 2007); sub-optimality of a conservative central bank in a monetary union with active trade

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[32] Rip van Winkle is the character created by Washington Irvin and evoked by Gordon (1976) who made a terrible 'environmental' mistake awaking up in the republican America, after sleeping for twenty-years, by declaring himself a devote subject of King George III.

[33] Public action can be facilitated by rational expectations. In what circumstances this can happen depends on the number of targets and that of the instruments available to the government and the private sector (Acocella, Di Bartolomeo, Hughes Hallett, 2012). When the *policymaker* has a sufficient number of instruments available he can make use of appropriate announcements of future policies (e.g., to exercise what the Federal Reserve calls 'forward guidance': see Woodford, 2007, 2008; Williams, 2011) in order to pursue its targets in a shorter period of time.

[34] Europe and the USA have slowly moved to introduce tough regulation in this field. Remarkable is the new position of the IMF, which now advocates exceptional and limited direct controls of capital movements, reversing the pro free market position adopted in the previous 40 years (IMF, 2012).

[35] We refer to the assumptions that lead to full inter-temporal consumption smoothing – such as perfect foresight or rational expectations, infinitely-living agents, altruism, absence of liquidity constraint, etc. – and limit effectiveness of fiscal policy. As to the possible negative impact on real activity of imperfections in financial markets, see Bernanke, Gertler (1989, 1990); Greenwald, Stiglitz (1988, 1990, 1993), Kiyotaki, Moore (1997, 2002); Bernanke, Gertler, Gilchrist (1999) and a lot more recent contributions.

unions (Acocella, Di Bartolomeo and Tirelli, 2007a; 2007b); [36] critique of the Friedman rule and the need for an inflation target well above zero (Tirelli, Di Bartolomeo and Acocella, 2010)[37].

We have omitted from the above sketch of the reversal in most convictions of some decades ago any mention of issues concerning the effects of fiscal variables. This is not because they are scarcely relevant. Quite the contrary, they deserve specific attention, as they had an influence not only on the initial institutional set up, and thus on the management of the public debt crisis,[38] but also, more recently, on the strengthening of previous rules (the introduction of a fiscal compact), that might prelude to further problems in the future. The next sub-section will deal with the former issue. We defer discussion of the latter to section 7.

6.2. *The issue of multipliers and fiscal policy*

Doubts with respect to some tenets of the assertion of very low spending and tax multipliers were first raised by Blanchard, Perotti (2002), which gave a substantially Keynesian answer to the issue of the effects of tax and expenditure increases on income. In fact, they found that the former have a contractionary effect, while the latter have an expansionary one. The authors did not engage in a discussion about debt consolidation strategies, but one could hardly assert that, on the basis of their findings a policy of expenditure reductions and (to a less extent) of tax increases, while certainly contributing to the reduction of the numerator of the debt/GDP ratio, would give an impulse to the denominator. Instead, their findings *might* support a Keynesian-type attitude of debt consolidation not based on a budget contraction, at least in so far as the effects on income are concerned.

Again, of specific relevance are some analyses that take account of open economies (in some cases the EMU) and spillover effects. In order to quantify these effects, Coenen, Wieland (2002) constructed a small macro-econometric model of the USA, the Euro area and Japan and found that international spillovers

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[36] The validity of the conclusions of Beetsma, Bovenberg (1998) strictly depends on their assumption of absence of labour markets distortions (Acocella, Di Bartolomeo and Tirelli, 2007b). More specifically, when trade unions operate fiscal coordination ensures better outcomes with a conservative central bank, while being detrimental with a populist one (Acocella, Di Bartolomeo and Tirelli, 2007a), which is paradoxical with respect to the institutional arrangements of the EMU.

[37] To be sure, there are analysts thinking that after thirty years of successful anti-inflationary action by central banks, the advantages of anchoring businesses and households' expectations at price stability should not be lost (Kohn, 2010). Accepting the argument of the beneficial effects of anchoring inflation expectation, however, does not rule out choosing a moderately higher inflation rate target, as this would not impair expectations anchoring, while having a significant positive impact on unemployment and growth, especially in the EMU.

[38] Think of prescriptions for the management of the crisis and the conditions imposed on countries in need of financial assistance from the EMU and the IMF.

of domestic shocks turn out to be rather small when exchange rates are flexible and short-term interest rates are set according to policy rules that focus on stabilizing domestic variables. Beetsma et al. (2006) combined a panel VAR model in government spending, net taxes and GDP with a panel trade model. They found that a public spending increase (tax reduction) equal to 1% of GDP implies 2.3% (0.6%) more foreign exports over the first two years, on average. If Germany initiates such budget change, the effect on the GDP of its trading partners is 0.23% (0.06%) over the first two years. These figures are likely to indicate lower bounds for the effects that will actually occur (Beetsma et al., 2006). Beetsma et al. (2008) found that a 1% of GDP public spending impulse produces a 1.2% output rise on impact and a 1.6% peak response of output. In addition, rising imports and falling exports together produce an impact fall of the trade balance of 0.5% of GDP and a peak fall of 0.8% of GDP. The public budget moves into a deficit of 0.7% of GDP on impact. Similar results are in Beetsma, Giuliodori's (2011)[39] estimation of the effects of government purchases on income in open European economies, which are higher than one on average in the short- to medium-run. The public and trade balance deteriorate. Even if the value of the multiplier is greater than one, it is reduced in open economies because of leakages. This strengthens the rationale behind a concerted fiscal expansion among European countries and, by contrast, implies that decisions to introduce fiscal discipline – either independently decided by a country or imposed by some common rule – have cumulative negative effects that may impair reaching the target of a reduction in the debt/GDP ratio.

Recent analyses have shown that the value of multipliers is strictly dependent on the time of reference of the effects as well as on the state of the economy.

A rather complete and detailed empirical analysis of the effects of fiscal consolidation is in IMF (2010), which takes account of numerous aspects of the effects of fiscal consolidation policies: in particular, their timing (i.e., whether they are short- or long-term), the monetary policy stance, the expansionary or contractionary nature of budget policies of other countries. Its conclusion is that, first, 'the idea that fiscal austerity triggers faster growth in the short term finds little support in the data. Fiscal retrenchment typically has contractionary short-term effects on economic activity, with lower output and higher unemployment…, (but) fiscal consolidation is likely to be beneficial over the long term'. In addition, a budget cut is the less expansionary the lower the interest rate (as monetary policy has little room for partially accommodating their deflationary effects), the lower the likelihood of a currency depreciation and the less expansionary are the policies of other countries, which gives little scope for raising net export.

Of a similar nature is the result of more recent theoretical and empirical research. Some point out that smoother fiscal consolidations are more successful than stiffer ones (Batini, Callegari, Melina, 2012). Other studies stress the efficacy of fiscal policy in severely depressed economies when central banks do not offset its effects (DeLong, Summers, 2012). Blanchard, Leigh (2013). More generally,

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[39] This paper also offers a good review of the results of existing empirical tests.

fiscal multipliers are shown to be asymmetric and regime-dependent, 'being stronger in recessions than in expansions, in particular in presence of financial market stress, so that contractionary effects can become very severe when fiscal consolidations are pursued' (Semmler, Semmler, 2013: 2), as an effect either of some economies being locked in a bad equilibrium (De Grauwe, 2011) or of macroeconomic non-linearities (Semmler, Semmler, 2013). This result is confirmed by the analysis of seven structural DSGE models used for policy action as well as two academic DSGE models (Coenen et al, 2012). The analysis shows, however, that a permanent fiscal stimulus implies lower values of the initial multipliers and a negative impact on income in the long run. Finally, Papadimitriou, Nikiforos and Zezza (2013) find a multiplier of 2.5, capable of explaining the failure of the 'Troika' expansionary contraction prescriptions for Greece.

These findings have important consequences for our topic, in so far as both institutional and short run implications are concerned. We will briefly deal with the former in the next sub-section and with the latter in section 7.

6.3. *Inconsistency of the EMU institutions and alternative institutions*

The high value of multipliers in open economies strengthens the rationale behind a concerted fiscal expansion among European countries and, by contrast, imply that decisions to introduce fiscal discipline – either decentralized of imposed by some common rule such as the SGP – have cumulative negative effects that may impair reaching the target of a reduction in the deficit and debt/GDP ratios, at least in the short run. By paraphrasing Auerbach, Gorodnichenko's (2012: 17) words, coordinated 'fiscal activism may be more valuable than previously thought'.

In addition, the foundations of the SGP (later on, also of the fiscal compact) are weakened by reconsideration of the issue of the relationship between fiscal and monetary action in the Union. We have seen above that the validity of the conclusions of Beetsma, Bovenberg (1998) strictly depends on their assumption of absence of labour markets distortions (Acocella, Di Bartolomeo and Tirelli, 2007b). More specifically, when trade unions operate, fiscal coordination ensures better outcomes with a conservative central bank, while being detrimental with a populist one (Acocella, Di Bartolomeo and Tirelli, 2007a), which is paradoxical with respect to the institutional arrangements of the EMU.

7. INSTITUTIONS AND POLICIES IN TIME OF CRISIS: SHORT- AND LONG-RUN EFFECTS OF FISCAL CONSOLIDATION

Variability and regime-dependency of multipliers make it necessary to distinguish between the different possible aims of fiscal action. If the aim is that of expanding the economy, a *short-run* multiplier larger than one is enough to suggest the need for an expansionary fiscal action. This should have no negative effect on the

deficit- and debt-to-Gdp ratios, *in the short run*. On the contrary, the effect on these should be positive. Thus the idea of an expansionary fiscal consolidation (the doctrine of 'expansionary austerity') that was at the basis of exit policies from the crisis in Japan in 1996 and more recently in the EMU has been disproved the 'new' conventional wisdom among economists that inspired a number of policy attitudes and interventions in the last couple of decades

Variability of multipliers does not guarantee, however, that the effect of fiscal expansion is positive also in the long run. In so far as this context is considered, a necessary and sufficient condition for an expansionary fiscal consolidation to lead to a reduced debt/Gdp ratio in the long run is that the multiplier is higher than the inverse of this ratio (Cozzi, 2013; Nuti, 2013). This is especially good news for highly indebted countries, as it widens the range of the values of multipliers that make for expansionary fiscal policy to reduce the debt/Gdp ratio. For a country such as Italy, a value higher than .7 would be enough to suggest a fiscal expansionary action as an instrument of fiscal 'consolidation'. However, one must be sure that the multiplier considered is a *long-run*, not a short-run, one.

This may not be the case for Italy, and – changing what needs to be changed – for other European countries as well. However, a two-stage exit strategy could be followed within the EMU. In the first stage, a coordinated fiscal stimulus could raise the Union's GDP and alleviate the negative effects of the crisis. As the positive effects of the stimulus fade away, the phase of consolidating public debt could follow, either through more traditional policies or by revising other aspects of the EMU institutional set-up[40].

8. Why are European policymakers still slaves of economic theories fashionable in the Seventies? Physiological lags and perverse ties.

Differently from the United States, neither the theoretical progress of the 1990s and the following decade nor the depth of the crisis that has hit the EMU countries have produced a substantial change in the institutional architecture of EMU and current policy attitudes. The deflationary bias of the former has even been stressed by introducing a 'fiscal compact'. [41]

Policy actions only partly depend on economic theory. There are a number of factors explaining why theoretical innovations may not translate into adopted policies (see, e.g., Galbraith, 1987). Vested interests and some autonomy in the dynamics of political orientations can contribute to that.

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[40] An issue different from that of the effects of the value of multipliers for the desirability of a contractionary or an expansionary fiscal stance is that of the effects of the debt/gdp ratio on optimal growth. On this issue, see Checherita, Hughes Hallett, Rother (2014).

[41] From this point of view Rip van Winkle would certainly not be hit by the institutional changes introduced in the EMU. He could still declare himself a convinced supporter of the theories asserted by Friedman or Barro, Lucas, Sargent Wallace, without repeating an 'environmental' mistake.

Hinting at the role of interests of different EMU countries may be useful. Germany has created a system powerful enough not to suffer from the deflationary bias of the EMU institutions, because of the real devaluation it operated since the 1990s, in particular in the early 2000s, and its ability to build a successful system to compete in Europe (and to some extent outside the area). By contrast, peripheral countries (most of the PIIGS) still think that they may draw some profit from the external constraint of fixed exchange rates and other EMU institutions. They might like reforming some of these institutions but are not powerful enough to counter German opposition. This help explain why they accepted a number of institutional changes, among which the incredibly asymmetric provisions of the Macroeconomic imbalance procedure introduced in 2011, which has been tailored to the German interests[42]. Fragmentation between the different European countries is thus rising, even if it appears to be repressed, until now.

The performance of EMU countries since the institution of the euro has been worse than that of European non-EMU countries at a comparable stage of development (i.e., Denmark, Sweden and UK), in terms not only of the unemployment rate and the GDP rate of growth, but also of inflation. These countries benefitted from flexible exchange rates and, in the case of the Bank of England, don't have a political independent and conservative central bank. To be fair, the economic performance of non-EMU countries had been already better before 1999, but the EMU has only succeeded in reducing the gap in terms of price stability, at the expenses of higher growth- and unemployment-rate gaps (see table 1).

Table 1. *A comparison of growth, unemployment and inflation rates, EMU and European non-EMU countries, 1991-2012*

GDP % growth rates at constant prices	1991-98	1999-2012
EMU	1.8	1.3
DK, SW, UK	1.9	1.7
Unemployment rates (%)		
EMU	10.4	8.9
DK, SW, UK	7.9	6.0
Inflation rates (Consumer price index, %)		
EMU	3.1	2.1
DK, SW, UK	2.6	2.0
Source: European Commission (2013 and various years)		

The most recent economic evolution and the depth of the crisis seem to have an influence on political attitudes. The level of unemployment is still climbing everywhere in Europe. France, the Netherlands and other formerly virtuous countries are facing rather serious difficulties that have led also to a deterioration

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[42] Bibow is very specific in that. See in particular Bibow (2012: 25, footnote 5).

of the deficit/GDP ratio. A very dangerous situation is thus emerging that might be a prelude to a vast authoritarian attitude throughout Europe. This might help explain why Germany could accept some attenuation of its tough stance.

9. Institutions, exit policies and the 'Great recession': some lessons as a way of conclusions

The evolution of economic thought can contribute to explain the differences between the policies that were adopted on the two sides of the Atlantic through its influence on the respective institutions. American institutions were to some extent influenced by Keynesian thought and the innovations introduced in the decades immediately following the second half of the 1960s had an impact mainly on actual policies, not on the institutional framing. The Employment Act of 1946 made promoting employment a target of the Federal government. In so far as monetary policy is concerned, the Federal Reserve Reform Act of 1977 added the dual mandate of ensuring employment together with price stability to the original target of preserving financial stability[43], thus not being much influenced by the diffuse concern over inflation and the theoretical innovations of those years. By contrast, EMU institutions were built under the influence of those innovations.

Time has passed which should have led to a radical change of most of the still current institutional architecture, but a sort of hysteresis is in place. This has a number of possible explanations, such as those underlined by Galbraith (1987). However, in order to explain it one should refer not only to normal and physiological lags, but also the opposing interests, the value judgments and visions prevailing in some European countries and the dominant role of Germany, which conveys them.

Beyond differences between the USA and the EMU, however, some common issues arising from the effects of the crisis and the policies adopted to tame it should be stressed. Both new risks and new opportunities arise.

First, the current level of long-term interest rates is presently negative (Turner, 2012: 11) as an effect of the liquidity glut. This raises the risk of speculative bubbles. Interest rates will certainly increase in the near future. If this does not take place smoothly, financial risks will arise threatening again the real economy. At the same time, negative long-term interest rates are the effect of the huge amount of long-term government bonds held by central banks as a consequence of their unconventional operations. This empowers central banks with an additional policy tool to control expectations and choose among multiple equilibria by targeting both short- and long-term interest rates (Adão et al, 2011)[44].

It is certainly difficult to manage policy action and revive economic prospects in a situation where interest rates hit the zero-lower boundary and the debt/Gdp ratios are climbing. Devising new policies or re-discovering old routes as a way to cope with the new situation is a challenging prospect. Slightly rising the current

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[43] Bernanke (2013).
[44] For a review of possible consequences of these operations see International Monetary Fund (2013).

inflationary targets, redistributing wealth, adopting a co-ordinated expansionary policy design, both within countries (regions) and among them, are some of the most obvious such policies.

The reasons for co-ordinated policy action should be stressed and detailed. First the dividing line between fiscal and monetary policy has been blurred (Iwata, 2012) and the reasons in favour of political independence of central banks and for assigning them an anti-inflationary target seem to be much less founded now than some decades ago. In addition, as shown before, the advantages of their political independence have largely failed to materialize in practice, as the performance of the economy in countries with independent and conservative central banks has not been better than elsewhere. Moreover, high debt/Gdp ratios can make independent monetary policy financially destabilizing. For this reason, in particular, central banks cannot be assigned the function of a lender of last resort for the private sector while being excluded from a similar function in favour of the public sector. Finally, policy decentralization consistent with the appropriate assignment of instruments to targets fails to produce net benefits 'in a complex non-linear system with risk — including instrument uncertainty – and where one is concerned not just with the ultimate equilibrium (which in practice may never be attained) but with real-time performance, one should use all the instruments at one's disposal, and coordination among policymakers is essential' (Stiglitz, 2013a: 15).

Co-ordinated policy action has an international counterpart. Globalization has made international linkages more copious and stronger. On the one side, this has generally reduced the effectiveness of national policies. On the other, the need for international co-operation has increased. Defection from agreed targets is always advantageous, more so for small countries, but larger countries have powerful weapons to discourage it. The true problem lies in the interests pressing for free trade and capital movements inside these countries.

Some of the previous considerations are of special relevance in the case of the EMU. The list of targets attributed to the existing institutions needs no addition, but the weights attached to each of them should certainly be revised, beginning with the ECB targets. As to instruments, a lot are missing, notably active, co-ordinated (across states) fiscal policy as well as common industrial policy and labour policy, i.e. all the instruments that empower a federal state. A final notation has to do with improper assignment of instrument to targets, that of monetary policy for structural changes (Hetzel, 2013)[45], which was the unsuccessful way devised by the founders of the EMU for coping with the structural differences existing among the member countries.

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[45] A parallel could be drawn with the Federal Reserve's improper attempt to offset the negative effects of growing inequality by lowering interest rates and relaxing regulations, thereby helping create a housing bubble (Stiglitz, 2013). In the case of the Fed, at least the set of statutory targets is larger than that of the ECB. Then the latter's attempt to pursue structural targets is even more striking.

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