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A TALE OF TWO CITIES: EXIT POLICIES IN WASHINGTON AND FRANKFURT

Nicola Acocella[1]

ABSTRACT

In this paper we study policy reactions to the crisis across the Atlantic, with specific emphasis on its Eastern side. We want to explain the different attitude of European policymakers vis-à-vis their USA homologues and to this end we choose the perspective of the historical roots of European monetary union (EMU) institutions.

Classification JEL: *exit policies, monetary policy, fiscal policy, institutions*
Keywords: *B22, E58, E63, P52*

1. INTRODUCTION

As is well known, the current crisis was born in the USA in 2007 but soon spread to Europe. Its (proximate) roots were in the accumulation of private debt. In 2009 its pace began slowing down in the USA as an effect of public intervention while accelerating in Europe 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 study policy reactions to the crisis across the Atlantic, with specific emphasis on its Eastern side. We want to explain the different attitude of European policymakers *vis-à-vis* their USA homologues and to this end we choose the perspective of the historical roots of European monetary union (EMU) institutions.

In the USA both fiscal and monetary policy were active in counteracting recessionary impulses, with a clear Keynesian imprint. Monetary policy was also innovative, as it devised various types of unconventional measures that 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 did not offer any expansionary impulse, but acted in the opposite direction.

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This different reaction is consistent with the foundations of European institutions, which found their roots both in a number of de facto circumstances, but drew theoretical support in the theories prevailing at the time. However, they seem to be no longer justified on these terms, i.e. with respect to current theories, which have countered almost all the conclusions of theories that were asserted by the end of the Sixties and widely applied in Anglo-Saxon countries in the Eighties and Continental Europe in the Nineties. This raises the issue whether there are different explanations for the continuation of such out-dated policies, in terms, e.g., of the opposing interests of the member states and their relative bargaining power.

The rest of the paper is organized as follows. The next section briefly describes the evolution of the crisis and policy responses in Washington and Frankfurt. Section 3 deals with the impact of the EMU institutional architecture on the dynamics of the crisis with an implicit comparison with that of the USA. Section 4 sketches the historical roots of EMU institutions and the different interests and targets pursued by the participating countries. In section 5 we study the analytical foundations of the main building blocks of EMU institutions both at the time they were devised and in the light of current economic thought. In section 6 we suggest some possible explanations of the hysteresis shown by European institutions and policies and try to answer the issue why European policymakers seem to be still slaves of economic theories fashionable in the Seventies. Section 7 concludes.

2. EXIT POLICIES IN WASHINGTON AND FRANKFURT

2.1. The evolution of the crisis in the USA and Europe

The financial turmoil initiated in 2007 in the USA and turned into a deep crisis in terms of the main macroeconomic indicators. The financial problems soon hit Europe too and began to cause recession also here. In 2009 the GDP went down by 2.6 per cent in the USA and by 4.4 per cent in the Euro-area. In 2010, on the top of the private debt problem – and to a large extent as an outcome of public policy measures enacted to cope with it – a public debt issue arose in Europe. Sovereign debts in some countries – the so-called PIIGS countries, i.e., Portugal, Ireland, Italy, Greece and Spain – were hit by speculation and spreads between the interest rate paid on them and that of German Bunds soared to unsustainable levels.

2.2. Policies in Washington

Expansionary monetary policy was soon enacted in the USA. It first tended to support ailing financial institutions and then to facilitate economic recovery. To this end various rounds of unconventional measures have been undertaken – ‘Quantitative easing’ (QE) 1 to 3.

The fiscal stance too has always been expansionary. Conspicuous discretionary measures were taken, beginning with G. W. Bush TARP (implying a $700 bn.

purchasing of nonperforming financial assets from the balance sheet of private banks, infusion of funds into GM, Citigroup and AIG), continuing with President Obama's ARRA in 2009, which led to an additional expenditure (and tax cuts and transfers) of $787 bn. It is true that part of the discretionary impulse could be simply explained by a structural feature such as the paucity of automatic stabilizers in that country (Dolls et al., 2012b). However, it testifies the will of the American administration to counter the recession, even at the cost of public debt accumulation. A struggle has then emerged towards the end of 2012 between the Obama administration and the opposition as to the way to cope with the 'fiscal cliff'. A debt ceiling has limited the possibility of prolonging the fiscal expansionary stance and the discretionary impulse will be (moderately) negative in next years. As a consequence of policy intervention GDP in the USA has risen at an average rate of 2.3 per cent since 2009.

2.3. Policies in Frankfurt

Practically all the Euro-area countries, Germany included, have responded to the crisis with a moderately expansionary fiscal stance, up to 2010. This has been followed by a contractionary orientation after the emergence of a public debt issue. A strengthening of the Stability and growth pact (SGP) has then been decided.[1] This has failed to pursue its claimed target, i.e. a fall in deficit/GDP and debt/GDP ratios in order to tame the speculation. In fact, the recession has lowered the denominator of these ratios and conjured up the spectrum of a future crisis of confidence. After a drop by 4.4 per cent in 2009 the Euro-area GDP expanded only by 2 per cent in 2010 and 1.4 per cent in 2011, to fall again by .6 per cent last year.[2]
Monetary policy response had been expansionary until April 2011. The European Central Bank has used 12-month and 36-month long term refinancing operations (LTRO) (a form of quantitative easing) since 2009. These operations have continued in 2011 and 2012. In addition, the ECB instituted a Securities Markets Programme (SMP),[3] by which it purchased bonds issued by the countries under speculative attack

[1] For an inquiry on the size of both automatic stabilizers effects and the discretionary fiscal stance of European countries see Dolls et al. (2012a). As said, an inverse relationship between the two components of fiscal policy is found by Dolls et al. (2012b). In March 2011 the Pact was toughened, requiring drastic action to reduce the debt/GDP ratio and instituting ex ante surveillance of national budgets and in December 2011 the fiscal compact was agreed on.

[2] Indeed, the previous growth record of Euro-area countries is not much better, as compared not only with the United States but also with other EU countries such as Denmark, Sweden and the UK. This low growth, in our view, was largely due to the deflationary bias of the Maastricht Treaty and the Stability and Growth Pact, as well as the lack of common industrial and growth policies.

[3] According to the ECB "the design and implementation of such measures remains focused on the ECB's primary objective", namely price stability. Ostensibly they will only "remove the major roadblocks" to the effectiveness of standard policies and "by their nature are temporary to the extent that they have to be strictly commensurate to the degree of dysfunctionality of markets that is hampering the transmission mechanism. The central bank must guard against the danger that the necessary measures in a crisis period would evolve into a dependency as conditions normalize" (Trichet, 2010; ECB, 2010a). The main

to the tune of several hundred billion euros[4]. In this sense European monetary policy shared some features with the Federal Reserve's policy of quantitative easing, but we show later that the analogy is only apparent.

After April 2011, despite the feebleness of the economic recovery in that year, the ECB prematurely initiated an exit strategy and insisted on this course for some months. Finally, in November this stance was abandoned and substituted by an expansionary one.[5] In July–September 2012 the ECB decided to undertake Outright Monetary Transactions in secondary markets to support sovereign bonds' demand in the euro area. These are not true unconventional monetary policy measures similar to the American or British-style QE, not only because they are limited to a subset of European countries (those having an 'appropriate' EFSF/ESM programme designed to reduce the deficit and debt/GDP ratios)[6], whereas QE in the US and UK has targeted those countries' entire debt, but also because the impact of the interventions should be sterilised in order to re-absorb the liquidity injected. Even if the immediate targets of the ECB interventions resemble those of the Federal Reserve, i.e. driving down the interest rate on government bonds, the final objectives differ. For the Fed the fundamental aim is to lower long-term interest rates so as to foster private investment, whereas the ECB is basically seeking to make up for the EMU's lack of consistent and credible institutional architecture and, ultimately, to ensure the survival of the euro, which has emerged in the course of the crisis as the true issue at stake. Notwithstanding this profound difference, until now (May 2013), OMT have been able to stop the speculative component of spreads between PIIG countries and the German Bund. Had the ECB decided to commit earlier to unlimited support of sovereign debt, the crisis in the Eurozone might have followed a different course[7].

2.4. Why so much difference?

As we have seen, in the USA steady expansionary policies were adopted with no hesitation. In the EMU only monetary policy has been – all in all – expansionary, but premature exit policies have been adopted for a certain time, whereas fiscal policy has always been contractionary since 2010. The outcomes in macroeconomic terms are clearly in favour of the USA.

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preoccupation of the ECB has been to ensure that the Programme can avoid having an impact on monetary conditions. Such an impact has been repeatedly denied, even if some analysts doubt that (Henderson Global Investors, 2010).

[4] The Programme involved buying a little more than €200 billion bonds. After it had been terminated in September 2012, bonds held by the ECB were still €218 billion at the end of February, 2013.

[5] The ECB increased the main refinancing operations rate by a quarter of a point twice in April and July 2011 to lower it in four legs, in November, December 2011, July 2012 and May 2013.

[6] A European Financial Stability Facility (EFSF) was first established in 2010, that was later substituted by a European Stability Mechanism (ESM), to begin operating in 2013.

[7] On this see also De Grauwe and Ji (2013a).

Striking the proper balance between restoring normality and avoiding protracted depression is the crux of the matter of exit policies. This has proved to be all the harder in a currency union like the EMU, which is not a federal state and has no common fiscal policy. In the current institutional setting the exit strategies adopted within the EMU derive from a bias towards being premature and so tend to aggravate the risk of prolonged depression. The bias stems from the fact that some deficiencies of the institutional architecture have prevailed and impatience and the pressure of markets have imposed premature adoption of exit strategies.

3. THE INSTITUTIONAL ARCHITECTURE AND THE DYNAMICS OF THE CRISIS IN THE EMU [8]

3.1. Introduction

The Euro-area crisis is usually described as characterized by the dynamics of the public debt in specific countries, in particular the PIIGS countries. This characterization raises a number of questions. First, how did this dynamics link to that of private debt, which was at the origin of the crisis? Then, to what extent was the piling up of public debt the outcome of improper policy conduct by the national policymakers of PIIGS countries and of an inappropriate EMU institutional setting? Finally, was there bad management of the crisis by European policymakers?

In the next subsection we explain how the public debt crisis emerged to a large extent as a consequence of a private debt crisis nourished by the EMU institutions. In subsection 3.3 we show how these institutions helped the public debt crisis precipitate into a depression. In the last subsection we point to the main shortcomings of the EMU institutions vis-à-vis those of USA.

3.2. The trend in private debt

The accumulation of private debt in some countries (not only the PIIGS) was built into the way the Euro-area institutions were (and are) shaped, which caused macroeconomic imbalances to arise. In fact, differences in real interest rates derive from virtually equal nominal rates throughout the area but different inflation rates[9]. Such differences tended to stimulate borrowing and speculative operations in the real estate and stock markets in the less advanced member states (De Grauwe, 2010a).

[8] This section partly draws on Acocella (2011).

[9] The macroeconomic imbalances within the Euro-area depend on a number of circumstances. Here, we concentrate on the differing wage and price trends. These, in turn, are to some extent tied to untackled structural factors, as underlined by Balassa (1964) and Samuelson (1964). Moreover, the degree of competition in labour and goods markets is different as an effect of the historical, structural and policy factors that influence price competition and wage bargaining. There is in fact no simple way of explaining why the rate of increase in wages declined in Germany and Austria after the advent of EMU and rose in other countries, creating new inflation differentials or widening existing ones.

Expectations of high real growth convinced people of the sustainability of debt (EEAG, 2011).[10] Free capital movements and a common monetary policy that was expansionary until 2006 actually fuelled this process. Again, absence of any common financial supervisor, regulator or rescue body 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 the intervention of national governments and an increase in public deficits, thus threatening the whole European financial system, as we will see in the next subsection.

Contrary to the conclusions of Blanchard and Giavazzi (2002),[11] the Union should not have adopted a position of benign neglect with respect to the impact on current account imbalances, as these are a potential source of problems and disruption. This attitude faced real difficulties. For one thing, imbalances could not be properly dealt with under the Euro-area's institutional arrangements (see in particular De Grauwe, 2009 and Harashima, 2011). Sticking to these, i.e., with no innovation introduced in the institutional architecture of EMU, each country should undertake policies to resolve the imbalances on its own, and the deflationary effects could snowball. In fact, different countries tried to cope in different ways. Some took a contractionary budget stance; others did not, preferring higher employment in the short run, and instead enacted labour market reform to remedy the deterioration in the real exchange rate. Labour market flexibility has thus increased substantially in a number of EMU countries (see, e.g., Damiani et al., 2011). Contrary to the opinion of some authors (Zemanek et al., 2010, and references therein), this has not significantly reduced inflation differentials, first of all because Germany reacted by further trimming wage increases (De Grauwe, 2009). Moreover, the reforms were not really effective when the crisis erupted; in some countries (such as Spain) they had created an army of temporary workers that compounded the recession. Some countries, such as Greece, neither shrank their budget nor enacted labour market reform in the last decade,[12] which might help to explain the strength of the tensions accumulated.

3.3. The public debt

Unlike the private sector debt, before the crisis the public debt had been reduced in all the Euro-area countries except Germany and Portugal only. In the area as a whole it fell from 69 per cent of GDP in 2000 to 66 per cent in 2007 (Eurostat, 2011). As to the peripheral countries, their past histories are quite varied.[13] So there is little basis for

[10] See Blanchard and Giavazzi (2002) on the sustainability of current account deficits.

[11] For a recent reappraisal of the relevance of the issue, see Giavazzi and Spaventa (2010).

[12] On the contrary, the proportion of temporary jobs actually decreased from 1999 to 2006 (see Lampousaki, 2008).

[13] Spain had a low debt/GDP ratio before EMU and halved it to 36 per cent in 2007. After 1999 Portugal ran deficits larger than those of Germany and France (3.6 per cent against 2.1 and 2.6 per cent, respectively, in 1999-2007), but smaller than those of a number of other EMU countries. As for Ireland, it had a high debt ratio until 1985 but succeeded in reducing it to a record low of 25 per cent in 2007 thanks to rapid GDP

the analysis of the EEAG (2011) according to which these countries were marked by excessive public spending and borrowing. In practice, the only such country was Greece. And, all in all, there was no sign of significant public debt tensions *before the crisis*, with the exception of Greece, whose difficulties were disclosed in the course of the crisis but actually stemmed from previous conduct. The EEAG report is thus mistaken in attributing the crisis to moral hazard,[14] i.e. a lax attitude on the part of the PIIGS governments owing to the expectation of being bailed out by other European countries.[15]

When it comes to the management of the crisis, matters stand somewhat differently. Initially, many countries had to expand their budget deficits greatly to cope with the financial crisis[16]. But in the process, the size of the deficit/GDP ratio depended on the governments' response, specifically on the deflationary fiscal policies initiated in 2010 by all the EMU countries as each government sought to ward off insolvency, which tended to contain the numerator of that ratio, but eventually reduced the denominator too. 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, as in Ireland. Expectations of insolvency then arose.

Some analysts (EEAG, 2011, for one) hold that the shocks would have been avoided simply by enacting a stiffer SGP and a credible no-bailout clause. However, this would not have worked with Greece, which could still have violated it, not reporting the true state of its public finances. In the case of Ireland, this would simply have made it harder to rescue the banks. And the measures proposed would have had an extra deflationary effect, causing additional difficulties for other countries. In fact, the burden of the bank rescue was aggravated by the bad design of the euro area's first bailout fund, the European Financial Stability Facility, which charged high interest rates and sent a negative signal (of significant default risk) to the markets (De Grauwe, 2011). Finally, making the SGP more rigid would have aggravated the deflationary effects.

3.4. The role of institutions

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growth. Greece, then, is the only case of high and rising debt since the formation of the EMU. Italy also lowered the debt/GDP ratio until 2008, but it then turned sharply upwards as an effect of the crisis. The poor prospects for reasonably high growth in the medium run then fuelled speculation.

[14] The underlying idea is in Sinn (2010).

[15] According to De Grauwe (2011) the thesis that the crisis was ultimately determined by moral hazard at banks is also untenable. In fact, it is hard to imagine that the root cause of excessive risk-taking by private banks was some expectation of being bailed out by the governments, in Europe or elsewhere.

[16] 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 (2010b: 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.

In this subsection we point out the specific EMU institutional features that explain the different steps of the EMU crisis, having an eye to USA institutions.

Generally speaking and apart from fiscal policy, absence or weakness of a number of common institutions in the EMU didn't help prevent the private debt crisis to arise. We refer to common policies in fields such as financial regulation, wage policy, regional and industrial policy[17]. As seen in the previous sub-sections, the accumulation of private debt by some EMU countries derived from structural imbalances. Failing an adequately high labour mobility[18], imbalances should have been prevented by an appropriate wage policy, under the form of price and incomes policy, and/or by a proper regional and industrial policy. The former could have set a dynamics of wages related to that of productivity and an appropriate price regulation. The latter should have pointed to the growth of 'peripheral' economies, to an extent much higher than the actual one, thus requiring a more significant EU budget. Thus absence of a common and active government in the monetary union explains current account deficits, speculative bubbles and the accumulation of private debt in PIIGS countries.

The SGP – i.e., again, a passive rather than active fiscal policy – contributed too to the accumulation of public debt in most PIIGS countries and the ensuing speculative operations that aggravated it. A limited but timely intervention by a federal government such as the USA one would have avoided precipitating the financial position of those countries. Moreover, the conservative nature of the ECB contributed to the late and insufficient rescue interventions. Operating in the primary market of government bonds would have been more effective for the ECB not only in limiting speculative operations but also in promoting the real economy recovery.[19] Had a federal government and a non-conservative central bank been in place, the Greek and Irish shocks might have occurred, but they could have been smoothly absorbed, with no domino effect.

In addition to formal institutions and specific policies we should finally mention the value judgments underlying them. Relying on punishment by markets in order to reduce moral hazard has been at the heart of the interventions to cope with the public debt crisis and the route actually followed for fixing EMU institutions, in particular for stiffening the mechanism of the SGP and devising the bailout mechanism. This not only is a partial and highly expensive remedy to the crisis, but can even be a further factor of systemic crisis: in fact, bondholders will run for cover every time they fear the likelihood of a default, with the possibility of creating a self-fulfilling mechanism of crisis. A system of stick and carrot would have been more effective (De Grauwe, 2010b, 2011; De Grauwe and Ji, 2013b).

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[17] To be sure, in this case the USA is not a good reference point. In fact, as to regulation, it had abundantly deregulated financial markets in the Eighties. As for wage policy, apart from a few attempts many decades ago, the USA has never adopted such policy. Finally, the USA regional and industrial policies have always been very weak too.

[18] Different languages and historical factors explain to a large extent the lower mobility in Europe as compared to that in the USA.

[19] Remember the final objectives of the ECB (see sub-section 2.3) as opposed to those of the Federal Reserve.

In a nutshell, responsibility for the crisis is to a large extent attributable to the unsuitable institutions for an area too heterogeneous in terms of economic growth and inflation. An area whose only common policy is that of a conservative central bank can face shocks of the kind and size that have hit Europe only at the cost of depression. The difficulty of facing the crisis in a unified monetary policy having no other common policies, notably federal fiscal policy, has been recognized by the then President of the ECB himself. In fact, he said: 'We must remain mindful that the Euro-area consists of 16 sovereign states. It is not a fully-fledged political union or a fiscal federation, within a unified government bond market' (Trichet, 2010).

4. THE HISTORICAL ROOTS OF EUROPEAN INSTITUTIONS

As is well known, European institutions after 1957 were little more than a customs union. In 1992 the Maastricht accords established the creation of the EMU. In some sense this was the prosecution of an old idea dating back to the Werner plan of 1969. However, this was amended of all the institutions and macroeconomic policies which had been foreseen in that plan. Further decisions established an independent central bank having price stability as its pre-eminent target.

The EMU construction was heavily influenced both by some practical circumstances that had matured in the previous two decades and by some developments of economic theory since the late sixties[20].

From the former point of view notable is the rising weight and bargaining power of Germany among European countries (Gros, Thygesen, 1992: chap. 1), due to its rapid growth and the unification with Eastern *lander*. This country was thus able to pursue its scarce interests in implementing appropriate policies to close long-run divergences in economic performance (Gros, Thygesen, 1992: 318) while having institutions that tended primarily to price stability and avoided re-alignments of nominal exchange rates by 'deficit' countries (particularly in the aftermath of its re-unification). In the more indulgent interpretation of the German 'vision' underlying the EMU construction, in due time a common currency could integrate European economies and make them converge: monetary unification could ensure the structural changes necessary for creating a stable macroeconomic context (in particular, uniform wage and price dynamics). A unique currency ruled by a conservative central bank would impose the

[20] See, e.g., Lambertini, Rovelli (2004).

The pre-dominant theoretical influence was that of optimal currency areas (Mundell, 1961), even if many economists had manifested their reserves and critiques (Cesarano, 1997, 2006). The antecedents of the Single Act are well represented by Gros and Thygesen (1992). A French and Italian memorandum had criticized the European Monetary System bias against 'deficit' countries as well absence of mechanisms designed to achieve structural change and growth. The German answer was of a monetarist kind, in asking for monetary unification and the institution of a central bank capable of acting as "catlysts in the efforts to achieve the necessary convergence of economic policies in the member states" (Gros and Thygesen (1992: 313-4). German reply, anticipating real developments in the European institutional architecture, is thus closely linked to theoretical innovations since the end of the 1960s as well as to the traditional stance of Bundesbank, fully accepted by the German government.

virtues of automatic rules and external constraints, leading not only to nominal, but also to real convergence. From this perspective, the Eurozone has been referred to as an updated – even if geographically reduced - version of Gold standard.

In so far as the evolution of economic thought is concerned, of fundamental importance were the ideas of: a long-run vertical Phillips curve[21]; existence of a negative correlation between inflation and growth; the need to ensure constraints on lax fiscal policies that would have prevented harmful time inconsistency and accumulation of public debt[22], the more so in the presence of coordination between national fiscal authorities[23]; the positive impact on inflation and employment of an independent and conservative central bank[24]. In this perspective it is not strange that until recently[25] the only common institution in the EMU has been a conservative central bank and that the idea of alternative institutions to preside over price stability has been given up even if they had produced positive outcomes in some EMU countries (Acocella, Leoni, 2007) and a conservative bank is a suboptimal solution in that environment (Acocella, Di Bartolomeo, Tirelli, 2007a; 2007b).

Only a few economists and observers[26] warned at the time – or have pointed out later – about the fragility of this project. The financial crisis that hit Europe was initiated by the Greek shock in 2009. However, about 20 years after Maastricht, persistence of structural imbalances implies that any adverse shock hitting a peripheral country would have led to similar consequences.

5. THE ROLE OF THE HISTORY OF ECONOMIC THOUGHT: THE THEORETICAL INNOVATIONS OF THE 1970S AND THEIR RECENT MISE-EN-QUESTION

[21] See, e.g., European Commission (1990: 22), Goodhart (1994).

[22] Reference is to arguments by Rogoff in favour of a conservative central banker (Rogoff, 1985) as well as to *political economy* ones (see, e.g., Alesina, Tabellini, 1990; Alesina, Perotti, 1995b). These are recalled, e.g., by De Haan, Sturm (1992), Cukierman (1994), Akhtar (1995).

[23] In monetary unions time inconsistency justifies a conservative central bank and absence of coordination between fiscal policies (Beetsma, Bovenberg, 1998). These conclusions, however, strictly depend on the 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.

[24] The influence of these ideas should be compared to that of the Keynesian thought on the statute of the Fed, though the amendments of the 1970s, which required the Board and the FOMC 'to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates'

[25] Common financial regulatory bodies were set in 2009-2010, but are to a large extent still to take off.

[26] 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 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 Dixit, Lambertini (2001), Leitemo (2004), Onorante (2006).

Almost a decade ago Alan Blinder claimed that 'a sharp revision of the naively optimistic views (about the virtues of markets) held by some economists circa 1966 was called for …(as) the pendulum may have swung just a bit too far.' (Blinder, 2004a: 26).

These words are even more actual nowadays as economic theory has further questioned the credo that had emerged at the end of the 1970s. After thirty years Rip van Winkle's[27] faith in the 1970s credo would again be crowded out by the analytical developments of the following years. Think of: the limited practical relevance of surprise effects, 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[28]); 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 (Graham and Snower, 2008; Benigno and Ricci, 2011; Acocella, Di Bartolomeo, Tirelli, 2013); the need for more active fiscal policy and regulation (especially of financial markets and institutions[29]) once some unrealistic assumptions of current models are ruled out[30]; critique of the arguments put forward by Rogoff (1985) and Bade and Parkin (1978) according to which a conservative central bank can reduce inflation and its political independence lowers inflation by disciplining public spending decisions, with no negative impact on unemployment and growth (see 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 have no impact on inflation); critique of the Friedman rule and the need for an inflation target well above zero (Tirelli, Di Bartolomeo, Acocella, 2010).

Of special interest are two myths of the literature that have inspired the European construction first and its policy to combat the crisis: the idea of a limit beyond which an increase in public debt would have negative consequences on growth (Reinhart and Rogoff, 2010; Kumar and Woo, 2010); the assertion of very low spending and tax

[27] 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.

[28] 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 and Hughes Hallett, 2012). When the *policymaker* has a sufficient number of instruments available he can make use of appropriate announcements of future policies (to exercise what the Federal Reserve calls "*forward guidance*" (Woodford, 2007, 2008; and Williams, 2011).

[29] 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).

[30] In a few lines we will deal with the introduction of assumptions that moderate intertemporal consumption smoothing and limit effectiveness of fiscal policy. As to the possible negative impact on real activity of imperfections in financial markets, see Bernanke and Gertler (1989, 1990); Greenwald and Stiglitz (1988, 1990, 1993), Kiyotaki and Moore (1997, 2002); Bernanke, Gertler and Gilchrist (1999) and a lot more recent contributions.

multipliers. The former has recently been demolished almost by chance as a consequence of a Ph.D. investigation. The latter has passed through a long process of both theoretical refinements and empirical evaluations.

The policy prescriptions deriving from neoclassical and New Keynesian theories incorporating some sort of Barro-Ricardo effect tend to suggest the virtues of fiscal contraction, insisting on its positive effects on both the demand- and supply-side as well as its long term benefits (Hebous, 2010), especially if one adds the negative long term impact of debt on growth already cited**.**

However, even in these neoclassical and New Keynesian models separable utility, deep habits consumption, rule-of-thumb consumers, spending reversals could restore even significantly positive Keynesian-like effects of public spending increases on output (Hebous, 2010).

Of specific interest for us are theoretical models of open economies. 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. Under certain circumstances the real exchange rate can depreciate. The possibility of this outcome is investigated by: Frankel and Razin (1987), who assume tax financing of public expenditures and an exogenous supply of money; Obstfeld and Rogoff (1995), who consider circumstances leading to a interest rates 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 precludes a real interest rate rise. 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 et al., 2007): both increase the impact of public expenditure expansion. In an open-economy context also positive spillover effects have a special interest. They operate via trade. 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 et al. (2008) argue that fiscal coordination increases multiplier effects.

Interactions between fiscal and monetary policymakers have an impact on the nature and the value of spillovers and fiscal multipliers. In a monetary union such as EMU assigning monetary authorities the primary target of price stability implies a further negative spillover: in fact, any expansionary fiscal action by one country has an impact on the union's price level and thus calls for deflationary intervention by the ECB. Beetsma and Bovenberg (1998), Beetsma and Uhlig (1999), Beetsma et al. (2001 a,b,c) and Michalak et al. (2009), while using different modelling approaches,[31] all find negative effects on income from fully-coordinated fiscal expansion, due to the reaction of the central bank to inflationary policies. A partially-coordinated fiscal stimulus is less harmful. As said before, Acocella et al. (2007) criticizes this approach, as it does not consider the conduct of strategic trade unions, which could be moderated by fiscal coordination and a conservative central bank. However, the prevailing view is that

[31] Michalak et al. (2009) use a New Keynesian model in continuous time, whereas the others do not use micro-founded models.

negative spillovers are the pre-dominant kind of spillovers in the EMU (see, more extensively, Beetsma, 2008 and Beetsma and Giuliodori, 2010). The only problem is then whether existence of a committed central bank can avoid the negative effects on price stability of free-riding by national fiscal authorities (as asserted by Chari and Kehoe, 2007) or if other institutions are needed to complement the type of central bank that has been chosen for the union (a pact of the kind of the SGP, as claimed by Beetsma and Uhlig, 1999, in order to reduce negative spillovers arising from political distortions, which can be exacerbated in a monetary union).[32]

Apart from these analyses, which did not have an influence on the prevailing views of analysts and policymakers until a few years ago, the idea was diffuse of very low fiscal multipliers. On the one hand this implied ineffectiveness of Keynesian policies. On the other, considering also the negative long term effect of debt, fiscal consolidation was needed and either a reduction in expenditures or a rise in taxes would have been effective without doing short-run negative effects if the income multiplier of each is less than one. If this is the case, in fact, the numerator of the deficit (and also of the debt) to GDP ratio will diminish more than the denominator also in the short run. Since in many cases empirical research has found such values of the multipliers, it may appear natural that some authors have concluded that fiscal consolidation requires expenditure cuts and/or tax increases. Obviously enough, the value of multipliers is strictly dependent on the time of reference of the effects.

Some empirical research on consolidation policies has led to an assertion of the effectiveness of government expenditures cuts, rather than tax hikes, also from a short run perspective. Exit strategies for fiscal imbalances based on public spending reduction, in addition to, or more than, tax increases have thus been advocated. The *fil rouge* in urging such strategies is in the analysis of Giavazzi and Pagano (1990) – who explain 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 – and the following findings, along similar lines, of Alesina and Perotti (1995a, 97), Giavazzi and Pagano (1996), Barro and Redlick (2009), Alesina and Ardagna (1998, 2010), Broadbent and Daly (2010).

We can call this *'fin de siécle'* credo of the possibility of expansionary fiscal consolidation the new conventional wisdom among economists that has inspired a number of policy attitudes and interventions in the last decade or so. In some countries (as in Japan in the first half of the 1990s and in the major industrialized countries at the beginning of the current crisis) Keynesian policies were adopted, but more recent interventions in these countries, notably in Europe, seem to follow the 'conventional wisdom'. [33]

Doubts with respect to some tenets of this conventional wisdom are raised in Blanchard and Perotti (2002), which give a substantially Keynesian answer to the issue of the effects of tax and expenditure increases on income: from the point of view

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

[33] According to Kuttner and Posen (2001, p. 128), quoted by Fontana (2009) the idea of expansionary fiscal contractions was also invoked – with negative consequences – in Japan in late 1996 to legislate a large increase in value added taxes.

of their effects on income, the former have a contractionary effect, while the latter have an expansionary one. Blanchard and Perotti (2002) do not engage in a discussion about debt consolidation strategies, but one could hardly assert that 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. From this point of view we would say that their findings 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.

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 and Wieland (2002) construct a small macroeconometric model of the USA, the Euro area and Japan and find that international spillovers 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. By contrast, Beetsma et al. (2006) combine a panel VAR model in government spending, net taxes and GDP with a panel trade model. They find 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 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) find 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 and Giuliodori's (2011)[34] estimation of the effects of government purchases in open European economies, which are consistent with the neo-Keynesian framework. This strengthens the rationale behind a concerted fiscal expansion envisaged among European countries and, by contrast, implies that decentralized, but in the same direction, decisions to introduce fiscal discipline have cumulative negative effects that may impair reaching the target of a reduction in the debt/GDP ratio.

A more complete and detailed empirical analysis of the effects of fiscal consolidation is in IMF (2010)[35], which takes into account a number of 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

[34] Beetsma and Giuliodori's (2011) offer a good review of the results of existing empirical tests.

[35] A previous review of the literature on empirical effects of fiscal policy had been conducted by Hemming et al. (2002). The general conclusion of this review was that the impact on output of a fiscal stimulus was generally positive, albeit a small one in some cases, depending on a number of circumstance variable from country to country and even from one episode to another.

beneficial over the long term'. In addition, a budget cut is less expansionary the lower the interest rate (as monetary policy has little room for partially accommodating their deflationary effects), the lower the possibility of a currency depreciation and the less expansionary are the policies of other countries, which gives little scope for raising net export.

6. WHY EUROPEAN POLICYMAKERS ARE STILL SLAVES OF ECONOMIC THEORIES FASHIONABLE IN THE SEVENTIES? PHYSIOLOGICAL LAGS AND PERVERSE TIES.

After more than twenty years of implementation of dated theories and its certainly not superb outcomes, it seems difficult to begin re-thinking of policies in Europe. Differently from the United States, neither theoretical progress of the Ninenties 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 former has even stressed its deflationary bias by introducing the 'fiscal compact'. [36]

Policy actions always depend on both economic theory and practical political orientations and interests. The latter partly reflect the former, but are to some extent independent of them, and there are a number of factors explaining this diversity (see, e.g., Galbraith, 1987).

Among the latter we would like to underline the still opposing interests of different EMU countries, at least according to the views prevailing in political circles. Germany and some other countries have created a system powerful enough not to suffer from the deflationary bias of the EMU institutions, because of their ability to successfully compete in Europe (and to some extent outside the area). By contrast, peripheral countries (most of the PIIGS) still think that they may draw profit from the external constrain of fixed exchange rates and other EMU institutions. They might like changing these institutions but are not powerful enough to counter German opposition. Fragmentation between the different European countries is rising.

However, the 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 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. Then positions are slowly changing.

7. CONCLUSIONS

[36] 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, Sargent and Wallace, Barro or Lucas, without repeating an 'environmental' mistake.

The evolution of economic thought can contribute to explain differences only in so far as EMU institutions were built at a time when the state of economic analysis seemed to justify them. 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, 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 and visions among European countries and the dominant role of Germany.

REFERENCES

Acocella N. (2011), *The deflationary bias of exit strategies in the EMU countries*, W.P. No. 82/2011, Memotef, Sapienza Università di Roma; 'Review of Economic Conditions in Italy', 2-3: 471-93.

Acocella N., G. Di Bartolomeo and A. Hughes Hallett (2012), *The theory of economic policy in a strategic context*, Cambridge: Cambridge University Press.

Acocella N., G. Di Bartolomeo and P. Tirelli (2007a), *Fiscal leadership and coordination in the EMU*, 'Open Economies Review', 18(3): 281-9.

Acocella N., G. Di Bartolomeo and P. Tirelli (2007b), *Monetary conservatism and fiscal coordination in a monetary union*, 'Economics Letters', 94: 56-63.

Acocella N., G. Di Bartolomeo and P. Tirelli (2013), *Trend inflation, the labor market wedge, and the non-vertical Phillips curve*, 'Journal of Policy Modeling', forthcoming.

Acocella N., R. Leoni (a cura di) (2007), *Social pacts, employment and growth: A reappraisal of Ezio Tarantelli's thought*, Physica-Verlag: Springer.

Akhtar A. (1995), *Monetary policy goals and central bank independence*, 'BNL Quarterly Review', 178 September.

Alesina A., R. Perotti (1995a), *Fiscal expansions and fiscal adjustments in OECD countries*, 'Economic Policy*',* 10(21): 205–248.

Alesina A., R. Perotti (1995b), *The political economy of budget deficit*, 'IMF Staff Papers', 42: 1-31.

Alesina A., R. Perotti (1997), *Fiscal Adjustments in OECD Countries: Composition and macroeconomic effects*, 'IMF Staff Papers', 44: 210–48.

Alesina A., S. Ardagna (1998), *Tales of Fiscal adjustment*, 'Economic Policy', 13(27): 487–545.

Alesina A., S. Ardagna (2010), "Large changes in fiscal policy: Taxes versus spending", in *Tax Policy and the Economy*, Vol. 24, J.R. Brown (ed), Cambridge, Massachusetts: National Bureau of Economic Research.

Alesina A., G. Tabellini (1990), *A positive theory of fiscal deficits and government debt in a democracy*, 'Review of Economic Studies', 57: 403-14.

Bade R., M. Parkin (1978), Central bank laws and monetary policies: A preliminary investigation. The Australian monetary system in the 1970's, Clayton, Monash University

Balassa B. (1964), *The purchasing power parity doctrine: A reappraisal*, 'Journal of Political Economy', 72: 584-596.

Barro R. J., C. J. Redlick (2009), *Macroeconomic effects from government purchases and taxes*, NBER W.P. No. 15369 (Cambridge, Massachusetts: National Bureau of Economic Research).

Beetsma R.M.W.J (2008), *A survey of the effects of discretionary fiscal policy*, 'Studier i Finanspolitik', 2: 1–37.

Beetsma R.M.W.J., A.L. Bovenberg. (1998), *Monetary union without fiscal coordination may discipline policymakers*, 'Journal of International Economics', 45(2): 239–58.

Beetsma R.M.W.J., A.L. Bovenberg (2001a), *The optimality of a monetary union without a fiscal union*, 'Journal of Money, Credit and Banking', 33: 179-204.

Beetsma R.M.W.J., A.L. Bovenberg (2001b), *Structural distortions and decentralized fiscal policies in EMU*, CEPR Discussion Paper No. 2851.

Beetsma R.M.W.J, X. Debrun and F. Klaassen (2001c), *Is fiscal policy coordination in EMU desirable?*, 'Swedish Economic Policy Review', 8: 57-98.

Beetsma R.M.W.J., H. Uhlig (1999), *An Analysis of the Stability and Growth Pact*, 'Economic Journal', 109(458): 546–71.

Beetsma R.M.W.J., M. Giuliodori (2010), *The macroeconomic costs and benefits of the EMU and other monetary unions: an overview of recent research*, 'Journal of Economic Literature', 48: 603–641.

Beetsma R.M.W.J., M. Giuliodori (2011), *The effects of government purchases shocks: review and estimates for the EU*, 'The Economic Journal', 121: F4–F32.

Beetsma R.M.W.J., M. Giuliodori and F. Klaassen (2006), *Trade spillovers of fiscal policy in the European Union: a panel analysis*, 'Economic Policy', 21(48): 639–87.

Beetsma R.M.W.J., M. Giuliodori, and F. Klaassen (2008), *The effects of public spending shocks on trade balances and budget deficits in the EU*, 'Journal of the European Economic Association', 6(2–3): 414–23.

Beetsma R.M.W.J., M. Giuliodori, and F. Klaassen (2009), *Temporal aggregation and SVAR identification, with an application to fiscal policy*, 'Economics Letters', 105(3): 253–5.

Benigno P., L. A. Ricci (2011), *The inflation-output trade-off with downward wage rigidities*, 'American Economic Review', 101(4): 1436-66.

Bernanke B., M. Gertler (1989), *Agency costs, net worth and business fluctuations*, 'American Economic Review', 79: 14-31.

Bernanke B., M. Gertler (1990), *Financial fragility and economic performance*, 'Quarterly Journal of Economics', 105: 87-114.

Bernanke B., M. Gertler and S. Gilchrist (1999), "The Financial Accelerator in Quantitative Business Cycle Framework", in J. Taylor, M. Woodford (eds), *Handbook of Macroeconomics*, vol 1C, Amsterdam: North Holland.

Bini Smaghi L., T. Padoa Schioppa and F. Papadia (1994), *The transition to Emu in the Maastricht Treaty*, Princeton Essays in International Finance, 194, November.

Blanchard O.J., R. Perotti (2002), *An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output*, 'Quarterly Journal of Economics', 107: 1329–68.

Blanchard O.J., F. Giavazzi (2002), *Current account deficits in the euro area: the end of the Feldstein-Horioka puzzle?*, 'Brookings Papers on Economic Activity', 33:147-18.

Blinder A.S. (1998), *Central banking in theory and in practice*, Cambridge, Mass.: MIT Press.

Blinder A.S. (2004a), *The case against the case against discretionary fiscal policy*, CEPS W.P. No. 100.

Blinder A.S. (2004b), *The quite revolution: Central banking goes modern*, New Haven, CT: Yale University Press.

Broadbent B., K. Daly (2010), *Limiting the fall-out from fiscal adjustment*, Goldman Sachs Global Economics Paper No. 195 (New York: Goldman Sachs).

Buiter W., G. Corsetti and N. Roubini (1993), *Excessive deficits: Sense and nonsense in the Treaty of Maast*richt, 'Economic Policy', 16: 57-100.

Cesarano F. (1997), *Currency areas and equilibrium*, 'Open Economies Review', 8: 51-59; reprinted in F. Cesarano, *Money and monetary systems*, London: Elgar, 2006.

Cesarano F. (2006), *The equilibrium approach to optimum currency areas*, 'BNL Quarterly Review', LIX: 193-209; reprinted in F. Cesarano, *Money and monetary system*s, London: Elgar, 2006.

Chari V., P.J. Kehoe (2007), *On the need for fiscal constraints in a monetary union*, 'Journal of Monetary Economics', 54(8): 2399–2408.

Coenen G., V. Wieland (2002), *Inflation dynamics and international linkages: a model of the United States, the euro area and Japan*, European Central Bank, W.P. Series 181.

Corsetti G., A. Meier and G. Müller (2009), *Fiscal stimulus with spending reversals*, International Monetary Fund W.P. No. 09/106.

Cukierman A. (1994), *Commitment through delegation, political influence and central bank independence*, in J.O. De Beaufort Wijnholds, S.C.W. Eijffinger, L.H. Hoogduin (eds), *A framework for monetary stability*, London: Kluwer.

Damiani M., F. Pompei and A. Ricci (2011), "Temporary job protection and productivity growth in EU economies", mimeo.

De Grauwe P. (2009), *The fragility of Eurozone's institutions*, 'Open Economies Review*',* published online.

De Grauwe P. (2010a), *Economics of the monetary union,* Oxford: Oxford University Press.

De Grauwe P. (2010b), *The financial crisis and the future of the Euro-zone*, Bruges European economic briefings, no. 21.

De Grauwe P. (2011), *A less punishing, more forgiving approach to the debt crisis in the eurozone*, Ceps policy brief, no. 230.

De Grauwe P., Y. Ji (2013a), *More evidence that financial markets imposed excessive austerity on the Eurozone*, Bruges European economic briefings, 5 February.

De Grauwe P., Y. Ji (2013b), *Self-fulfilling crises in the Eurozone: An empirical test*, 'Journal of International Money and Finance', 34: 15–36.

De Haan J., J. Sturm (1992), *The case for central bank independence*, 'BNL Quarterly Review', 45, September.

Dixit, A., L. Lambertini (2001), *Monetary-fiscal policy interactions and commitment versus discretion in a monetary union*, 'European Economic Review', 45: 977-987.

Dolls M, C. Fuest and A. Peichl (2012a), *Automatic stabilizers and economic crisis: US vs. Europe*, 'Journal of Public Economics', 96: 279-294.

Dolls M., C. Fuest and A. Peichl (2012b), *Automatic stabilization and discretionary fiscal policy in the financial crisis*, 'IZA Journal of Labor Policy', 1:4 doi:10.1186/2193-9004-1-4.

ECB (2010a), *ECB decides on measures to address severe tensions in financial markets*, Press release, 10 May.

EEAG (2011), *The EEAG Report on the European economy 2011,* Munich: Cesifo.

Eichengreen B., C. Wyplosz (1993), *The unstable EMS*, 'Brookings Papers on Economic Activity', 1: 51-124.

Eichengreen B., J.A. Frieden (2000), *The political economy of European monetary unification*, Boulder: Westview Press.

Erceg, C., C. Gust and D. Lopez Salido (2007), "The transmission of domestic shocks in the open economy", ch. 2 in NBER, *International dimensions of monetary policy*, 89146, New York.

European Commission (1990), *One market, one money*, 'European Economy', 44, October.

Eurostat (2011), *General government debt,* 20 May.

Fisher I., (1933), *The debt-deflation theory of the Great Depression*, 'Econometrica', 1: 337-357.

Fontana G. (2009), *The transmission mechanism of fiscal policy: a critical assessment of current theories and empirical methodologies*, 'Journal of Post Keynesian Economics', 31(4): 587-604.

Frankel J., A. Razin (1987), *Spending, Taxes and Real Exchange Rates*, IMF W.P. No. 87/62.

Galbraith J. K. (1987), *Economics in perspective*. *A Critical History*, Boston: Houghton Mifflin Company.

Giavazzi F., M. Pagano (1990), *Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries*, *NBER Macroeconomics Annual*, Vol. 5 (Cambridge, Massachusetts: National Bureau of Economic Research).

Giavazzi F., M. Pagano (1996), *Non-Keynesian effects of fiscal policy changes: International evidence and the Swedish experience*, 'Swedish Economic Policy Review', 3(1): 67–103.

Giavazzi F., L. Spaventa (2010), *Why the current account may matter in a monetary union: Lessons from the financial crisis in the Euro area*, CEPR Discussion Papers, 8008.

Goodhart C.A.E. (1994), *What should central bank do? What should be their macroeconomic objectives and operations?*, 'Economic Journal', 104 1424-36.

Gordon R. J. (1976), *Recent developments in the theory of inflation and unemployment*, 'Journal of Monetary Economics', 2: 185-219.

Graham L., D.J. Snower (2008), *Hyperbolic discounting and the Phillips Curve*, 'Journal of Money, Credit and Banking', 40: 427-448.

Greenwald B., J. Stiglitz (1988), 'Imperfect Information, Finance Constraints and Business Fluctuations', in Kohn, M. and S. Tsiang (eds.), *Finance Constraints, Expectations and Macroeconomics*, Oxford: Oxford University Press.

Greenwald B., J. Stiglitz (1990), 'Macroeconomic models with equity and credit rationing', in Hubbard, R.G. (ed.), *Asymmetric Information, Corporate Finance and Investment*, Chicago: University of Chicago Press.

Greenwald B., J. Stiglitz (1993), *Financial Market Imperfections and Business Cycles*, 'Quarterly Journal of Economics', 108: 77-114.

Gros D., N. Thygesen (1992), *European monetary integration*, London: Longman.

Hayo B. (1998), Inflation culture, central bank independence and price stability, 'European Journal of Political Economy', 14: 241-63

Harashima T. (2011), *A mechanism of inflation differentials and current account imbalances in the euro area*, Munich Personal RePEc Archive Paper no. 28121, 18 January.

Hebous S. (2010), *The effects of discretionary fiscal policy on macroeconomic aggregates: a reappraisal*, Goethe University Frankfurt, July 2009, Munich personal Repec archive Paper No. 23300, online at http://mpra.ub.uni-muenchen.de/23300/.

Hemming R., M. Kell, and S. Mahfouz (2002), *The effectiveness of fiscal policy in stimulating economic activity: A review of the literature*, IMF W.P. No. 02/208.

Henderson Global Investors (2010), "ECB SMP looks suspiciously like QE", 26 May.

Hughes Hallett A. (2000), *Aggregate Phillips curves are not always vertical: heterogeneity and mismatch in multiregion or multisector economies*, Macroeconomic Dynamics, 4: 534-46.

International Monetary Fund (2010), *Recovery, risk, and rebalancing, world economic and financial furveys*, World Economic Outlook, October.

International Monetary Fund (2012), *Liberalizing capital flows and managing outflows*, March 13.

Kollmann R. (2009), *Government purchases and the real exchange rate*, CEPR Discussion Papers No. 7427.

Kumar M.S., J. Woo (2010), *Public debt and growth*, IMF W.P. No. 10/174.

Kuttner K.N., A.S. Posen (2001), *The Great Recession: Lessons for macroeconomic policy from Japan*, 'Brookings Papers on Economic Activity', 2: 93–185.

Kiyotaki N., J. Moore (1997), *Credit cycles*, 'Journal of Political Economy', 105: 211-248.

Kiyotaki N., J. Moore (2002), *Balance-Sheet contagion*, 'American Economic Review', 92(2): 46-50.

Lambertini L., R. Rovelli (2004), *Independent or coordinated? Monetary and fiscal policy in EMU*, in R. Beetsma, C. Favero, A. Missale, A. Muscatelli, P. Natale, P. Tirelli, (eds.), *Monetary*

policy, fiscal policies and labour markets. Macroeconomic policymaking in the EMU, Cambridge: Cambridge University Press.

Lampousaki S. (2008), *Permanent and temporary employment in public and private sectors*, INE/GSEE-ADEDY, January, 14.

Leitemo K. (2004), *A game between the fiscal and the monetary authorities under inflation targeting*, 'European Journal of Political Economy', 20: 709-724.

Lucas R. E. (1996), *Nobel lecture: Monetary neutrality*, 'Journal of Political Economy', 104: 661-682.

Michalak T., J. Engwerda and J. Plasmans (2009), *Strategic interactions between fiscal and monetary authorities in a multi-country new-keynesian model of a monetary union*, CESifo W.P. No. 2534.

Minsky H. (1982), *Can "It" happen again?: Essays on instability and finance,* New York: Sharpe M.E.

Mundell R.A. (1961), *The theory of optimum currency areas*, 'American Economic Review', 51: 657-664.

Obstfeld M., K. Rogoff (1995), *Exchange rate dynamics redux*, 'Journal of Political Economy', 103(3): 624-660.

Onorante L. (2006), *Interaction of fiscal policies on the Euro area: how much pressure on the ECB?*, European University Institute W.P. No. 2006/9.

Posen A. (1994), *Is central bank independence the result of effective opposition to inflation? Evidence of endogenous monetary policy institutions*, Harvard University, Cambridge Mass, mimeo.

Ravn M., S. Schmitt-Grohé and M. Uribe (2007), "Explaining the effects of government spending shocks on consumption and the real exchange rate", mimeo, EUI Florence and Duke University.

Reinhart C., K. Rogoff (2010), *Growth in a time of debt*, NBER W.P. 15639.

Rogoff K. (1985), *The optimal degree of commitment to an intermediate monetary target*, 'Quarterly Journal of Economics', 100: 1169-1189.

Samuelson P.A. (1964), *Theoretical notes on trade problems*, 'Review of Economics and Statistics', 46: 245-154.

Sinn H. W. (2010), *Wir sehen unser Geld nicht wieder* (www.bild.de/BILD/politik/wirtshcaft/2010/04/24/hans-werner-sinn-warnt-vor grieschenland-hilfen/wirsehen-unser-geld-nicht-wieder.html).

Tirelli P., G. Di Bartolomeo and N. Acocella (2010), *The optimal inflation rate revisited*, W.P. No. 76, Memotef, Sapienza Università di Roma.

Trichet, J.-C. (2010), "Reflections on the nature of monetary policy non-standard measures and finance theory", Opening address at the *ECB Central Banking Conference,* Frankfurt, 18 November.

Williams J.C. (2011), *Unconventional monetary policy: Lessons from the past three years*, Economic Letter, 2011-31, Federal Reserve of San Francisco, October.

Woodford M. (2007), *The case for forecast targeting as a monetary policy strategy*, 'Journal of Economic Perspectives', 21: 3-24.

Woodford M. (2008), *Forward guidance for monetary policy: Is it still possible?*, 'Vox', 17 January.

Zemanek, H., A. Belke and G. Schnabl (2010), *Current account balances and structural adjustment in the euro area*, 'International Economics and Economic Policy*',* 7: 83-127.