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Membership: Economics and Political Economy**

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Abstract

The recent Global Crisis are posing challenges to the stability of the European Monetary Integration process. The pillar of the European Monetary Integration is the evolution of the European Monetary Union (EMU). Being the EMU the establishment of a currency union, such as international agreement implies for the member countries the inability to use exchange rates and national monetary policy to deal with real and financial shocks. It is natural then to wonder under which conditions the net benefits of a currency union are likely to be positive, comparing the abovementioned limitations with the medium long term gains in having on the one side perpetual fixed exchange rates and on the other side the delegation of the monetary policy action to an independent and supranational central bank, i.e. the European Central Bank (ECB) that manages the European Monetary Union (EMU). A natural question arises: how to evaluate the economic pros and cons in having the EMU membership? The aim of this paper is to analyse the economics and the political economy of the EMU membership.

KEYWORDS: OPTIMAL CURRENCY AREA, EUROPEAN MONETARY INTEGRATION, MONETARY POLICY, POLITICAL ECONOMICS

JEL Classification: E52, E58, E03

1. Introduction

The recent Global Crisis are posing challenges to the stability of the European Monetary Integration process. The pillar of the European Monetary Integration is the evolution of the European Monetary Union (EMU); in fact we can map the integration process as a two stages process: the Common Market era, which lasted from 1958 to 1993; the Union era, which started in 1994 and gained new impetus after the Global Crisis with the Four Presidents' Report of December 2012.

Being the EMU the establishment of a currency union, such as international agreement implies for the member countries the inability to use exchange rates and national monetary policy to deal with real and financial shocks. It is natural then to wonder under which conditions the net benefits of a currency union are likely to be positive, comparing the abovementioned limitations with the medium long term gains in having on the one side perpetual fixed exchange rates and on the other side the delegation of the monetary policy action to an independent and supranational central bank, i.e. the European Central Bank (ECB) that manages the European Monetary Union (EMU). A natural question arises: how to evaluate the economic pros and cons in having the EMU membership?

The aim of this paper is to analyse the economics and the political economy of the EMU membership. The discussion is organized as follows. After recognizing that the best starting point to evaluate the expected benefits and costs of the EMU membership is the standard and general theory of optimum currency areas, the study highlights that in the real world the crucial actors in designing and implementing the overall process are the national policymakers, with their own costs and benefits evaluation.

Therefore a political economy framework is adopted. Using a delegation setting – where the principals are the citizens and the delegated players are the politicians – the incentives to be country member of the EMU are discussed, where – other things being equals - the incumbent governments choose their EMU attitude comparing the medium long term advantages in both fixing the exchange rates and having an independent and supranational central bank with the costs in losing the flexibility of the monetary tools to address and fix short term macroeconomic unbalances. Further the exploration takes in account that the politicians time to time can please the citizens and/or specific lobbies – as the financial ones - in determining their willingness in being actively involved in the EMU process. Overall, the analysis concludes that the political perception of the net benefits of the EMU is an endogenous and dynamic variable that can change over time, triggering in turn impulses that can strengthen or destabilize the EMU evolution.

2. Economics

Other things being equal, the success of the European monetary integration process depends on its effectiveness in helping participating countries to reach their economic goals. For each country the decision to be member of the European Monetary Union (EMU) implies a complete and irreversible separation from its monetary powers, at least for two and intertwined points of view: exchange rate determination and monetary policy decisions.

In fact jointing the EMU the member countries fix their exchange rates and delegates the monetary policy choices to the European Central Bank (ECB). In principle the EMU choice can lead to potential economic benefits as well as costs. To evaluate the economics of the pros and cons it is a matter of fact that the theory of optimum currency areas remains the traditional workhorse, at least as starting point for further elaborations that take into account the costs and benefits of the political actors, that we elaborate in the next paragraph.

The literature on Optimum Currency Area (OCA) originated more than fifty years ago¹, becoming in the last two decades the theoretical base of the debate about the viability and the desirability of the EMU². The debate started after the launch of the European Monetary System in 1979, when the majority of the currencies of the then European Community fixed their exchange rates around a central parity known as a European Currency Unit (ECU), and then it became even more vivid when the European currency - the Euro – was introduced.

In a nutshell, the OCA approach had the merits to highlight which conditions can increase in a country the attitude to joint international agreements that perpetually fix the exchange rate and delegate the monetary policy action to an independent central bank. The OCA rationale in justifying the EMU can be summarized as follows.

Consider how the citizens of an individual European country j may address the decision of joint the EMU. First of all a relevant benefit of fixed exchange rates is that they provided a more predictable basis for trade decisions compared to floating rates; in other words the monetary transaction costs are likely to be lower. The monetary transaction gains will be higher the more the European country j trades with the EMU member countries, including the mobility and the flexibility of the factors of production (labour and capital, including financial flows). Therefore the EMU gains are positively associated with the degree of economic integration in the markets for inputs and outputs, as well as with their efficiency³.

¹ Mundell 1961, McKinnon 1963 and Kenen 1969.

² Buiter 1999, Jonung and Drea 2010, Krugman 2012. See also Goodhart 1995 and Bordo and Jonung 1999. Mongelli 2002 described the evolution of the OCA theory into four phases: pioneering (from the early 1960s to the early 1970s), reconciliation (during the 1970s), reassessment (in the 1980s and early 1990s) and empirical (from the mid-1990s) phases.

³ On the degree of mobility and efficiency in the EU markets see Bayoumi and Eichengreen 1996, OECD 1999, Rose and Van Wincoop 2001, Fidrmuc 2001, Bun and Klaassens 2002, Mahlberg and Kronberger 2002, Mongelli 2002, EU Commission 2004, De Grauwe and Mongelli 2005, Dellas and Tavlás 2005, Andres et al. 2008, Buscher and Gabrish 2009, Chukwuemeka 2011. On the effects of specific EMU membership cases see Monga 2004, Rabanal 2009, Baas 2014.

At the same time the rationale of the delegation of the monetary policy to an independent central bank is that the political biases can't influence the monetary action⁴. The relationships between citizen preferences, political biases, monetary policy and central bank governance has been highlighted in the modern literature on monetary economics.

Up to thirty years ago, economic theory did not attribute importance to the concept of central bank governance. These institutional arrangements became important when economic theory started stressing their role in determining macroeconomic performances, i.e. during the New Classical Revolution, with the role of central bank design being confirmed in the New Keynesian analysis of monetary policy.⁵ The theoretical bottom line can be summarized as follows: policymakers tend to use monetary tools with a short sighted perspective, using the inflation tax to smooth different kinds of macroeconomic shocks - real, fiscal⁶, banking⁷ and external shocks - and trying to exploit the trade-off between real gains and nominal (inflationary) costs.⁸ This inflation tax finances the stabilization policies. However, the more efficient markets are, the greater the risk that the short sighted monetary policies produce just inflation. In fact, rational private agents fully anticipate the political incentives to use the inflation tax, fully adjusting the nominal variables⁹. In this framework, the Friedman-Lucas proposition on monetary policy neutrality holds.¹⁰ Furthermore, the political inflation bias can dynamically generate greater uncertainty and negative externalities (such as moral hazard risk). As a result, the inflation tax is inefficiently used in a systematic way, becoming potentially high and volatile and producing only macroeconomic distortions.

The inefficient use of inflation tax has been empirically confirmed since optimal taxation theory does not find any support in the data.¹¹ The optimal taxation theory claims that the benevolent policymaker chooses the rate of any taxation – including the inflation tax – to minimize the present value of the social cost; consequently inflation and tax rates have a positive relationship. If the optimal taxation theory fails empirically, it is natural to conclude that the government is not benevolent, being affected by inflation biases.¹²

⁴ Updates of CBI indexes in Dincer and Eichengreen 2013.

⁵ For excellent reviews, see Cukierman (1996), Eijffinger and de Haan (1996), Cukierman (2008) and Walsh (2008). The inefficiency use of the inflation tax by the government seems to be the common features of the different theoretical explanations of CBI effectiveness. Eijffinger and de Haan (1996) discuss three strands of the literature – the public choice view, the fiscal view and the time inconsistency view. While the first two views highlight the reasons why the governments in charge can like the accommodative monetary policies, the third one explains their ineffectiveness using the rational expectations hypothesis. Bibow (2010) illustrates the views of Friedman and Keynes on CBI, while Goodfriend (2012) reviews CBI as it emerged first under the gold standard and later with fiat money.

⁶ On the relationships between fiscal deficits and CBI see Burdekin and Laney 2016.

⁷ On the economics and empirics of inflationary bias in having monetary and banking powers' consolidation see Lima et al. 2016.

⁸ On the interconnections between banking and fiscal shocks see Bordo and Meissner 2016.

⁹ See Bernanke (2013a) on the gains in having long sighting independent central banker instead of short sighting politicians.

¹⁰ On ageing and CBI see Farvaque et al. 2008. On social trust and CBI see Berggren et al. 2015.

¹¹ Friedman (1968), Lucas (1973).

¹² For a survey, see Delhy Nolivos and Vuletin (2014).

¹² Delhy Nolivos and Vuletin (2014) reach a different conclusion: they endogenize the optimal taxation as a function of the CBI, which is the exogenous variable and conclude that higher CBI results in a lower level of optimal taxation. However, the article does not explain why the CBI level is exogenous, i.e. why the social planner does not define at the same time both the optimal taxation and the CBI level.

Therefore banning the use of the monetary policy for inflation tax purposes became the social goal. This institutional setting gained momentum and the relationship (governance) between the policymaker – who designs the overall economic policy – and the central bank – who is responsible for the monetary policy – became crucial in avoiding the inflation bias¹³. Furthermore, the more markets were rational, the more the rules of the game between policymakers and central bankers gained momentum.¹⁴ Thus, the optimal central bank governance has to be essentially a medal with two sides.

On the one side, the central banker has to be independent, i.e. the central bank enjoys the ability to implement the non-inflationary monetary policy without any external (political) short sighted interference. The central banker becomes a veto player against inflationary monetary policies. On the other side, the central banker has to be conservative, where conservativeness refers to the importance that he/she assigns to price stability in its relation to other macroeconomic objectives¹⁵. The conservativeness is the necessary step to avoid that the central banker himself/herself becomes a source of inflation bias. Independence and conservativeness become the conditions to implement credible non-inflationary monetary policies.¹⁶ Independence can be considered a device to implement conservative monetary policies¹⁷, and in general monetary policy rules¹⁸. However, private agents trust the central banker only if effective rules on accountability and transparency hold. In other words, a conservative central bank is credible if it works in an institutional setting that guarantees independence and accountability, acting in a transparent way and implementing an effective communication policy¹⁹.

The relationship between central bank independence (CBI) and accountability represents the core of the so-called central bank governance.²⁰ Central bank governance became the institutional setting for implementing the day by day monetary policy: given the long run goal to avoid the risk of inflation, the modern central banker can also smooth the real business cycles using monetary policy rules.²¹ Monetary policy becomes the final outcome of a complex interaction between three main components: monetary institutions, central banker preferences and policy rules.

¹³ On central bank independence as a special case of the general relationships between agency delegation and democracy see Strausz 2011, de Figueredo and Stiglitz 2015.

¹⁴ Barro and Gordon (1983), Backus and Driffill (1985), Rogoff (1985), Lohmann (1997) explore the role of the rules of the game in determining the outcomes of the overall macroeconomic policy, while Sargent and Wallace (1981), Niemann (2011), Niemann et al. (2013) and Martin (2013) focus their attention on fiscal policy.

¹⁵ On central bank independence and conservativeness see Berlemaun and Hielscher 2016.

¹⁶ On the relationship between CBI and central banker conservativeness, see also Eijffinger and Hoeberichts (1998), McCallum (1995) and Fischer (1995). On monetary conservativeness and fiscal policy, see Niemann (2011).

¹⁷ Eijffinger and Hoeberichts (1998, 2008) shed light on the tradeoff between conservativeness and independence: downgrading in central bank independence can increase the central banker conservativeness. The first article used the neoclassic framework while the second one applied a new Keynesian model to obtain the same result.

¹⁸ On the relationship between CBI and the Taylor rule see Maslowska 2011b.

¹⁹ On transparency, see Eijffinger and Geraats (2006), Hughes Hallett and Libich (2006). On communication, see Cukierman and Meltzer (1986), Goodfriend (1986), Issing (2005a) and Blinder et al. (2008).

²⁰ Briault et al. (1996), Morris and Lybek (2004), Frisell et al. (2008), Crowe and Meade (2008), Hasan and Mester (2010).

²¹ Bernanke and Gertler (1995), Gertler et al. (1999), Woodford (2003), Gali and Monacelli (2005), Taylor (1993), Henderson and McKibbin (1993), Persson and Tabellini (1993), Walsh (1995), Svensson (1997). Recently, Taylor (2013) casted doubts on the role of the CBI in generating rules based monetary policies.

In this chapter and for our purposes, the huge CBI literature can be described as a two-stage process.²² Initially the scholars involved in the field went on to verify the theoretical conjectures with comparative, institutional and empirical analysis. After constructing indices of independence of the central bank, and having historical alternative models of independent and dependent monetary authorities, the literature has attempted to determine whether the degree of independence²³ could be considered a driver in explaining the most important macroeconomic phenomena: inflation, public debt and interest rates, income and growth.²⁴

The assumption was to verify if the existence of the monetary veto player reduces the intended and unintended effects of the misuse of the inflation tax and produces positive spillovers on other macro variables. In the first wave of studies, central bank independence was essentially considered an exogenous (independent) variable that can be useful to explain macro trends.

The step forward in the research was to consider the degree of CBI as an endogenous (dependent) variable that has to be explained.²⁵ Which are the drivers that can motivate the decision of one or more countries to maintain or reform their monetary regimes, i.e. the degree of independence of their central banks? Why and how policymakers are forced to implement monetary reforms that reduce their powers in using the inflation tax, increasing the degree of independence of the central bank?

²² Vuletin and Zhu (2011) claimed that up to 2011 around 9000 articles has been devoted to the role of CBI on inflation.

²³ On the relationship between CBI and the Taylor rule see Maslowska 2011b.

²⁴ After the seminal central bank independence indices proposed by Bade and Parkin (1982) and by Grilli et al. (1991) – revised in Masciandaro and Spinelli (1994) – and followed by the Cukierman (1992) indices, many different indicators have been proposed; for a discussion see Berger et al. (2001). Cukierman (1992) was the first to distinguish legal and de facto indicators of independence. Updates of these indices were proposed in Cukierman et al. (1992), Cukierman et al. (2002) and Jacome and Vazquez (2008) for the Cukierman index, and in Arnone et al. (2009) and Arnone and Romelli (2013) for the Grilli, Masciandaro and Tabellini index. Crowe and Meade (2008) developed measures of central bank independence and transparency. Vuletin and Zhu (2011) proposed a new de facto index of independence, identifying two different mechanisms embedded in the measure of the turnover rate of central bank governor. Lupusor (2012) shows empirically how legal independence cannot be considered a sufficient condition to avoid the political pressures on the monetary policy stance.

On the historical alternative models of independent and dependent monetary authorities see Vicarelli et al. (1988) and Wood (2008). On the FED, see Waller (2011), Bernanke (2013b), Gorton and Metrick (2013); on the FED and the Bank of England, see Goodfriend (2012); on the Bundesbank, see Issing (2005b) and Beyer et al. (2008); on the Bank of Italy, see Gaiotti and Secchi (2012).

Grilli et al. (1991), Cukierman (1994), Cukierman et al. (1992), Cukierman and Webb (1995) and Berger et al. (2001) investigate the relationship between the inflation rate and CBI. See also Alesina and Summers (1993), Alesina and Gatti (1995), Gutierrez (2003), Jacome and Vazquez (2008), Klomp and de Haan (2010b) performed a meta-regression analysis of 59 studies, examining the relationship between inflation and CBI. They still confirmed the existence of a negative and significant relation between inflation and CBI in OECD countries, although the results are sensitive to the indicator used and the estimation period chosen. The legal CBI has been considered a major determinant of macroeconomic performance – Cukierman (2008), de Haan et al. (2008), Carlstrom and Fuerst (2009), Alpanda and Honig (2009), Alesina and Stella (2010), Klomp and de Haan (2010a). More recently, the literature has been re-examining the relationship between CBI and the conduct of monetary policy – Down (2009), Maslowska (2011), Alpanda and Honig (2009) on the effect of CBI on financial stability – Cihak (2007), Klompt and de Haan (2009) – as well as on inflation – Klompt and de Haan (2010b), Arnone and Romelli (2013) – and finally on government deficits – Bodea (2013).

On public debt and interest rates, see Grilli et al. (1991), Alesina and Summers (1993) and Cukierman (1994).

On income and growth, see Grilli et al. (1991), Alesina and Summers (1993), Cukierman et al. (1993), Cukierman (1994) and Berger et al. (2001).

²⁵ See Masciandaro (1995) and Berger et al. (2001); note the difference between institutional setting endogeneity and inflationary bias endogeneity. The endogeneity of CBI is systematically reviewed in Hayo and Hefeker (2001). Romelli (2015) also considers the endogeneity of CBI in a large sample of countries and shows that both the probability of reforming central bank legislation, as well as the level of CBI can be related to an array of macro and politico-economic indicators.

Various interpretative hypotheses have been advanced to explain the genesis of the political process that leads a monetary regime to assume given characteristics. Development in endogenizing central bank independence – i.e. its effectiveness – has been the subject of analysis in both economics and political science.²⁶

Some scholars sustain the possibility that the degree of CBI depends on the level to which constituencies strongly averse to the use of the inflation tax are present, which drives policymakers to bolster the status of the central bank (*the constituency view*).²⁷ Others have stressed that the aversion to use the inflation tax is structurally written in the features of the overall legislative and/or political system, which influence the policymakers' decision on whether to have a setting of monetary powers with an independent central bank (*the institutional view*).²⁸ Others have stressed the role of culture and tradition of monetary stability in a country in influencing the policymaker's choices (*the culture view*).²⁹ These three views share the role of the preferences of the citizens in determining the degree of CBI. In the constituency view, the present preferences against the use of the inflation tax are relevant; in the institutional and culture views, the past anti-inflationary preferences influence the present policymaker's decisions.

²⁶ Very good reference books on how central banks policies and their institutional settings have changed, as well as on the causes of these changes are Siklos (2002) and Siklos et al. (2010).

²⁷ See Maxfield (1997). Posen (1995), noting that there are distributive consequences in the choices of monetary regimes, stated that there is no reason to assume that the adoption of central bank independence is self-enforcing; that choice requires political support, and the financial sector is positioned to provide that support. de Haan and van't Hag (1995) raised doubts about Posen's theory. On the relationships between financial sector preferences, low inflation and central bank independence see also Miller (1998), who provides an interest group theory of CBI. Empirical analyses, which faced the CBI endogeneity question, are supplied by Brumm (2006, 2011).

²⁸ See Moser (1999). See also Cukierman (1994); however, his predictions are tested and rejected by Cukierman and Webb (1995) and by de Haan and van't Hag (1995). Vaubel (1997) suggests that central banks, even if formally independent, can be captured; Sieg (1997) proposes a formal model of a captured independent central bank. Bernhard (1998) claims that information asymmetries of the monetary policy process can create conflicts between government ministers, their backbench legislators and, in multiparty government, their coalition partners; an independent central bank can help overcome these conflicts. Goodman (1991) argues that conservative government with expected short tenure will adopt an independent central bank to limit the ability of future government; see also Milesi-Ferretti (1995). Lohmann (1997) argued that the federalist nature of a government and the use of coalitions in forming government could increase the CBI likelihood. On the relationship between government partisanship and central bank structure see Alesina (1989), Alesina and Sachs (1988). See also Bagheri and Habibi (1998). de Haan and van't Hag (1995) test the hypothesis that governments planning to incur higher deficits may wish to increase credibility by granting more central bank independence. However, they find no supporting evidence for this hypothesis. Moser (1999) analyses the relationship between the central bank independence and the features – checks and balances – of the legislative systems; Banaian and Luksetich (2001) demonstrated the connections between economic and political freedom and CBI attributes. Keefer and Stasavage (2003) introduce a theoretical model and empirical evidence on this issue. Wood (2008) used an historical perspective to discuss how the CBI ultimately depends on the government needs. Acemoglu et al. (2008) shows the relationship between inflation, CBI and political institutions, where the CBI effectiveness depends on the political distortions. Bodea and Hicks (2015) discussed the relationship between inflation, CBI and democratic institutions. Bodea (2010) analysed the simultaneous choice of both the level of CBI and the exchange rate regime.

²⁹ Berger (1997), Berger et al. (2001). Hayo (1998) claim that people's preferences with respect to price stability matter in explaining low inflation rate, and that the central bank independence is just one aspect of a stability regime, with two competing interpretation on the role of the institutional design: preference – instrument interpretation versus historical-feedback interpretation. Franzese (1999) claims that the effectiveness of central bank independence depends on every variable in the broader political – economic environment. In Eggertsson and Le Borgne (2010) the society – with all agents having homogeneous preferences – determines the CBI solving a delegation problem with a trade – off between costs and benefits. Recently Crowe (2008) demonstrated that CBI is more likely to occur in societies where preferences over different policy dimensions – one is the monetary policy dimension – are heterogeneous. See also Eijffinger and Stadhouders (2003), Acemoglu et al. (2008), Quintyn and Gollwitzer (2010), Hielscher and Markwardt (2012), Berggren et al. (2014).

Furthermore, it is worth noting that the three views can be intertwined in studying under which economic, institutional and cultural conditions reforms of the CBI take or not place. It is also evident that these studies acquire greater importance in periods – as the present one – when there is a tendency to reform, or at least to question, the design of the central bank governance³⁰.

All in all, our short review of the literature recalls that, whatever the adopted view in explaining the evolution of CBI, the research was focused on two crucial elements; on the one side, the social preferences; on the other side, the incentives and constraints that shape the behaviour of the agent responsible for the monetary setting design, i.e. the incumbent policymaker.

Therefore, coming back to the analysis of the relationship between the OCA framework and the monetary policy design, the general conclusion is that the rationale of the overall setting is based on the key assumption that all the citizens, or at least the majority of the voters, dislike the political biases in using the inflation tax and like monetary stability.

Then, applying the general principles the specific case of the EMU, the monetary stability gains will be higher the more the European country j is affected by political biases in the monetary policy decisions, i.e. the more its inflation is likely to be higher/volatile than the EMU inflation managed by the ECB. Therefore the EMU gains are positively associated with the relative degree of inflation rate instability of country j . All in all, monetary transaction gains and monetary stability benefits can motivated a EMU joining.

At the same time however membership in the EMU may involve potential risks. These risks arise because country j that becomes EMU member gives up its possibilities to use both exchange rate and monetary policy to address and fix macroeconomic shocks. In other words country j may face monetary stabilization losses in being EMU member. The missing opportunity to use national monetary powers can be counteracted if the EMU is characterized by effective non- monetary supranational policies. Therefore the less the EMU will be a smoothing device for addressing and fixing non- monetary shocks using non- monetary tools, the less convenient will be from the point of view of country j to be member of the currency union. Put in another way losses due to the missing monetary smother can reduce the citizens willpower to be in a in a currency union.

The shape and the dimension of the monetary stabilization losses will depend on the same drivers that influence the monetary gains, i.e. mobility and efficiency in the markets for inputs and outputs. Less integration and efficiency call for supranational stabilization policies different from the monetary ones; the more such as policies are missing the higher the monetary stabilization losses will be.

³⁰ On CBI after the Crisis see Cecchetti 2013, Bayoumi et al. 2014, Buitier 2014, Fisher 2015, Williams 2015, Masciandaro and Romelli 2015, Balls et al. 2016, Aklin and Kern 2016. On central bank governance after the Crisis see Nier 2009, BIS 2011, Khan 2016.

Furthermore it is worth mentioning that the more recent literature of the optimum currency area pointed out that both gains and losses can be endogenous, rather than exogenous³¹. Putting it in other way, dimensions and features of benefits and losses can depend on how the currency area is designed and implemented. The shape of the transaction costs, the integration in the markets for goods, services and human capital, the political biases, as well as the shocks and their absorbers can be dynamically influenced by the evolution of the currency area establishment and implementation.

On this respect many observers interpreted the convergence of most EU countries toward meeting the EU criteria by 1999 and the subsequent establishment of the ECB as a proof of the endogeneity of the EMI process.

However, at the end of the day, it is evident that so far the economics of the pros and cons of EMU membership didn't produce a complete and final answer. The observation is even more true when the current stylized facts are considered; for example that today the degree of financial integration as well the state of the art in the banking regulation design are both deeply different respect to the 1990s and 2000s³².

3. Political Economy

The economic analysis can become more rich and dynamic if we add one more dimension, i.e. the political costs and benefits analysis of the EMU membership implemented by the national policymaker. In doing so we adopt a political economy approach, noting that for each country j it is true that the citizens delegate their decisions on currency area membership to their elected politicians³³. In other words we qualify our political economy perspective in the more simple and general meaning: we wish to explore the interplay between the political nature of the decisions concerning the country attitude toward the EMU membership and the economic implications of such as decisions in terms of EMU progress or regress.

Our framework is based on three hypotheses. First of all, gains and losses of the EMU membership are variables computed by the incumbent policymaker, who maintains or reforms the country monetary regime following his/her own preferences.

Secondly, the EMU membership is a process, rather a binary choice. In fact the EMU participation implies a series of actions in terms of both monetary and non-monetary (fiscal and structural) policy decisions. A member country adopts the Euro as its legal tender and delegates its management to the ECB; but at the same time their policymakers still have the discretion to implement national policies and to contribute in designing and implementing supranational reforms that can strengthen or weak the EMU

³¹ Frankel and Rose 1997 and 1999, Glick and Rose 2002.

³² Aizenman 2016, see also Handler 2013.

³³ Here the political economy framework introduced in Masciandaro 2009 is applied.

setting³⁴. Therefore for each country j it is possible to define an attitude y in favour of the EMU membership, that can go from zero and one, i.e. $0 < y < 1$.

Thirdly the policymakers are politicians, and as such, they are held accountable at elections for how they have managed to please voters. All politicians are career-oriented agents, motivated by the goal of pleasing voters in order to win elections. The main difference among various types of politicians concerns which kinds of voters they wish to please in the first place. Therefore, the EMU in/off preferences are likely to change over time following political preferences, which are not automatically coincident with the social ones.

Consider an economy with rational expectations and uncertainty. We suppose that the citizens would like to define the optimal level of EMU attitude (EMUA) or willingness, i.e. where the potential pros and cons in joining the EMU are taken into account in a complete and systematic way. Citizens care about the optimal level of EMU attitude according to a classic well-behaved concave function $u = U(y)$: social welfare increases with the optimal level of EMUA. Linear preferences are used:

$$U(y) = y \quad (1)$$

In a democracy, citizens assign to the elected policymaker the task of designing the optimal level of EMUA. For the sake of simplicity, we suppose that the elected policymaker represents both the legislative and the executive powers, i.e. the interests of the majority of the Parliament and of the government in charge are perfectly aligned.

The incumbent policymaker is delegated by society to define and implement the optimal level of EMUA. The policymaker reward is based on how he/she (hereafter she) carries out her job, i.e. defining and implementing the level of EMUA.

3.1 Benevolent Politician

Our policymaker is a politician. We assume that the policymaker wishes to please the citizens; alternatively, we could also assume that the policymaker aim is to please specific constituencies, i.e. the lobbies. Initially we adopt the *helping hand view* of the policymaker's type: she wishes to please citizens rather than a particular constituency or lobby (*grabbing hand view*). It will be interesting to demonstrate that, notwithstanding the policymaker wishes to please the citizens, the final outcome – the actual EMUA – can be different from the social optimal one.

The level y of EMUA is determined by the policymaker's ability Ω and by her effort α :

$$y = \alpha + \Omega \quad (2)$$

³⁴ For an index of the EMU integration see Dorrucchi et al 2015; the EMU membership attitude can be evaluated for example looking at the role that specific countries play or have played in the process of the European monetary integration; for Belgium and Italy see Maes and Quaglia 2003.

Let us describe the delegation framework. The sequence of events is as follows:

- 1) Society chooses to delegate to the policymaker the task of designing the optimal level of EMUA;
- 2) Next, the policymaker chooses effort a , before knowing her ability Ω in implementing this particular task (building up the EMUA decisions is not a usual nor a day by day operation);
- 3) The policymaker implements her EMUA decisions, revealing her ability Ω ;
- 4) Citizens observe the EMUA decisions, but not the relationship between effort and ability, since they cannot distinguish innate talent from contingent effort, and reward the policymaker for this task.

Coming back to the policymaker, her utility function, denote by Z_{HH} , is defined as:

$$Z_{HH} = R(U) - C(a) \quad (3)$$

where $R(U)$ is the reward function and $C(a)$ is the cost function. The political reward is function of the social utility, while the political costs are function of the effort in implementing the task. The policymaker evaluates every task assignment while taking into account the political rewards and costs in doing so. Let us describe the three crucial features of the policymaker:

- a) Ability: the ability of the policymaker is a random variable with the usual normal distribution (where we denote by Ω_{AV} the mean);
- b) Political Reward: The incumbent policymaker wishes to be re-elected. The government needs to provide enough utility to the majority of voters; then her utility function is the social welfare function U .

In general, the policymaker wishes to please voters and her goal is the alignment of interest between her and citizens. Then each delegated task – i.e. each specific alignment – can be more or less convenient from the policymaker's point of view in terms of political gains. We denote the political value she assigns to fulfil the specific task on EMUW by β – with $0 \leq \beta \leq 1$. Therefore:

$$R(U) = \beta U$$

The incentives alignment between the policymaker and citizens is a necessary and sufficient condition to find the optimal behaviour of the policymaker. In other words the policymaker fully internalize the medium long term gains of the EMU membership, which are in any case weighted via their spillovers in terms of consensus.

For example, the policymaker knows that the EMU membership can increase the country credibility in avoiding the use of the inflation tax to address fiscal policies. In fact it is worth noting that – at least up the Global Crisis - the sovereign interest rates sharply converged in the Euro area. The countries that joined the

EMU experienced a decade of growing fiscal convergence in the sovereign risk premium, which increased the attitude towards further EMI steps. It is worth noting that the possibility to increase the public debt with decreasing costs can produce also political gains for the incumbent government. The same is true regarding the convergence to low inflation. The more the citizens dislike the inflation tax and the politicians like increasing levels of public debt the more the EMU attitude will increase.

At the same time – as we will see below – the policymaker internalizes the risks of the EMU membership. But one more step is necessary to find out the effective political reward. The reward will be useful if the citizens' utility exceeds the minimum threshold of utility W that they expect from an incumbent government (political competition condition). Citizens compare government performances with the expected performances of outside politicians. The political competition condition can be defined as follows:

$$R_{HH} = \beta \Pr(U \geq W) \quad (4)$$

Therefore, the usefulness of the political reward will depend on condition (4).

c) Political Costs: The policymaker knows that if the country joins the EMU, failures in addressing and fix macroeconomic problems may arise. At the same time, the EMU membership implies the implementation of fiscal and structural policies that can be costly for the incumbent government, at least in the short term.

In other words, we assume that from the policymaker's point of view the political costs of the EMU membership will depend on her expectations of facing macroeconomic shocks. From the citizens' point of view, the government can be a natural scapegoat in each crisis, but she is not able to use the exchange rate and/or monetary policy tools to implement the needed stabilization policies.

Therefore, the policymaker's cost function can assume the following simple specification:

$$C(a) = ca^2 \quad (5)$$

Where:

$$c = c_0 + c_1 \text{probFC}$$

prob represents a probability between zero and one that a macroeconomic shock with political costs can occur. Thus, the political cost of the EMU attitude depends on how the incumbent government is blamed when the macroeconomic shocks occurred, i.e. on the size of reputation losses.

The shock can be an external one, triggered for example by a sudden stop of financial inflows. The external crisis is a manifestation of the so called Mundell's trilemma: financial openness and the autonomy of the ECB policy intertwined with the irreversible fixed exchange regime can produce short term macroeconomic losses for country j .

During the Global Crisis the capital flight turmoil hit the peripheral EU countries raising doubts on their convenience - as well as on their capacity – to remain EMU members.

The same is true if a fiscal shock occurs. When entering a currency union, member countries modify the nature of their sovereign liabilities in a crucial way, i.e. they stop to have the control over the currency in which their debt is issued. The national fiscal sustainability will become associated with the EMU performances. If the market sentiments change the high debt EU countries will suffer credibility losses that can heighten the sovereign spreads and trigger a self-fulfilling run.

The fiscal shock can be intertwined with a banking shocks. In EU countries with high bank-sovereign interdependence where the national private banks hold large shares of sovereign debt, the fiscal shock that increases the sovereign spread can also trigger a bank self-fulfilling run.

In both cases the temptation to have again the national control over the currency increases, in order to use the inflation tax to address and fix the fiscal unbalances; it is a matter of fact that in similar circumstances countries with their own national currencies can use inflation and depreciation to facilitate a painful but quick solution to avoid a fiscal and/or banking crisis. The EMU attitude is likely to decrease.

Finally, the shock can be also the need to implement structural policies in order to increase the flexibility of prices and wages³⁵. The more the structural reforms can trigger consensus losses, the higher will be the political costs in increasing the EMU attitude.

When a shock occurs, citizens can be more or less sensitive. From the government's point of view, the crisis likelihood *per se* is not relevant, but its political cost affects her reputation. The reputation sensibility is represented by the parameter c_1 . The attitude in favour of the EMI process is likely to decrease.

We will see in what follows that the size of the reputational costs can determine the difference between the optimal EMUA and the actual one. As a result, for the incumbent policymaker the political cost in having the EMU membership is represented by the likelihood of facing a macroeconomic crisis without the possibility of implementing the desired *ad hoc* exchange rate and/or monetary policy.

Establishing the level of EMUA is a two-step process: (i) defining the policymaker effort and (ii) evaluating the level of EMUA. In defining her optimal effort a_1 , the policymaker maximizes her objective function. Then her ability Ω_{HH} becomes evident, the level of EMUA can be evaluated using the EMUA equation (2) and her final political reward can be calculated using the political competition equation (4). It follows that the policymaker maximizes social welfare net of costs of executing the task:

$$\text{Max } Z_{HH} = R(U) - c(a_1),$$

where,

$$R(U) - c(a_1) = \beta U - c(a_1)$$

³⁵ When a country joins EMU, this can results in the need in implementing institutional changes in the area of fiscal and structural policies; see among others Henderlein 2003.

Given that the level of social utility is equal to the level of EMUA, which is function of the policymaker effort, it is evident that both the rewards and the costs depend on the effort:

$$\beta(a_1 + \Omega) - ca_1^2$$

From the first order condition the optimal effort will be:

$$\frac{\partial Z_{HH}}{\partial a_1} = \beta - 2ca_1 = 0$$

implying that (Figure 1):

$$a_1 = \frac{\beta}{2c_1}$$

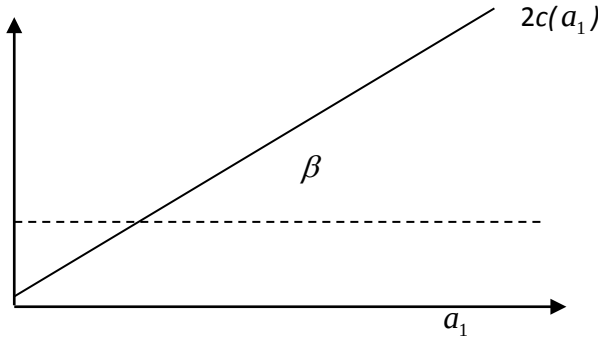


Figure 1

Given a_1 , the effective political reward of the policymaker will depend on the condition of political competition (4):

$$R_{HH} = \beta \Pr(U \geq W)$$

Voters are rational. They realise that the alternative to re-electing the incumbent policymaker is to get another politician with average ability. Given their expectations a^e on effort, it follows that:

$$W = a^e + \Omega_{AV}$$

Then:

$$R_{HH} = \beta \Pr(\Omega + a_1 \geq \Omega_{AV} + a^e)$$

$$R_{HH} = \beta \Pr(\Omega - \Omega_{AV} \geq a^e - a_1) \quad (5)$$

Nature chooses the ability of the incumbent policymaker, Ω_{HH} . It follows that:

$$R_{HH} = \beta \Pr(\Omega_{HH} - \Omega_{AV} \geq a^e - a_1) \quad (6)$$

When expectations are perfectly matched ($a^e = a_1$), the effective political reward will be positive if the ability of the incumbent policymaker is greater than average:

$$\Omega_{HH} > \Omega_{AV} \quad (7)$$

The equilibrium level y of the EMUA will be determined by the policymaker's ability Ω_{HH} and by her effort a_1 :

$$y_{HH} = a_1 + \Omega_{HH} = \frac{\beta}{2c_1} + \Omega_{HH} \quad (8)$$

Given the exogenous policymaker ability, on one hand the level of EMUA depends on how politically relevant it is for the government to decide on the EMU membership pleasing the majority of voters. In other words, the policymaker's perception of the relevance of the EMU decisions matters. On the other hand, the government takes into account the expected costs of EMU joining when macroeconomic shocks have to be addressed.

The parameter c_1 can be easily used to show under which conditions the actual level of EMUW would be different from the social optimal one. In fact, we can suppose that the citizens acknowledge the need in extraordinary time to address macro shocks using all the exchange rate/monetary tools, which is perfectly consistent with the aim to avoid in normal times the political control on monetary policy. The social optimal value of the reaction parameter c_1^{soc} is different from zero: for the sake of simplicity, we can assume that:

$$c_1^{soc} = 1.$$

Now, if the reputational costs for the government in facing macro shocks is particularly high, it is likely that $c_1 > c_1^{soc}$. Consequently, the EMU attitude of the policymaker will be lower than the social optimally one.

The adopted framework can help us in identifying the potential drivers of a change in the EMU attitude. In general any macroeconomic event that influences the policymaker's gains and costs in being a EMU member can produce incentives to modify her attitude.

On the one side, consider the case in which society's aversion against the inflation tax is decreasing. In our model, this would correspond to a decrease in the parameter β , which would, in turn, decrease the gains from maintaining/adopting a high level of EMU attitude (Figure 2):

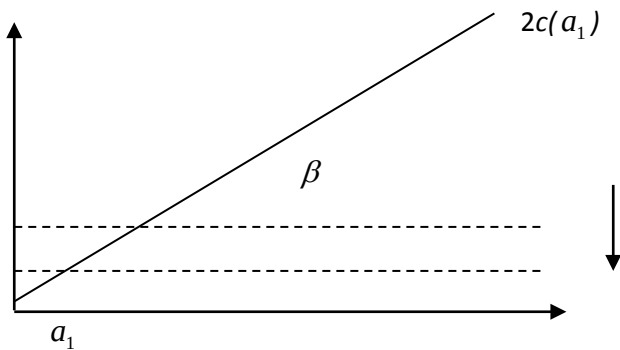


Figure 2

The citizens aversion against inflation can decrease in specific macroeconomic circumstances. For example the current period has stressed that some economies are prone to liquidity traps³⁶. At the same time the secular stagnation assumption posits that situations of anaemic growth are more than temporary³⁷. In situations of non- temporary liquidity trap or secular stagnation, it is more likely that in some EMU countries the citizens feel that progress in integration aren't necessary, and they could even be damaging.

On the other side, any situation that changes the policymaker's political costs c_1 can produce incentives to modify the EMU attitude. The policymaker's incentives to decrease the EMIA in order to open again the possibility to implement exchange rate and/or monetary accommodation are likely to increase if the incumbent governments are facing severe macroeconomic shocks (Figure 3):

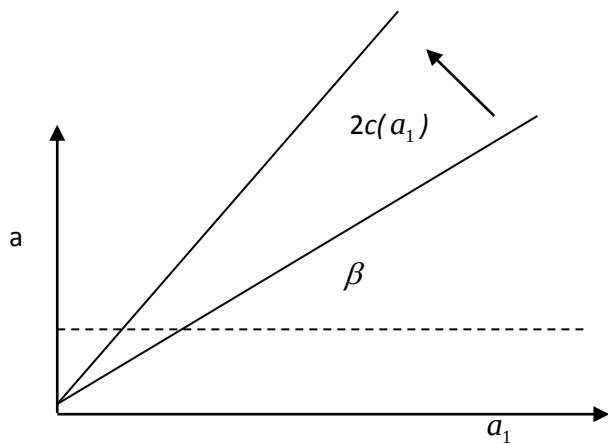


Figure 3

Considering again the situations of liquidity trap or secular stagnation, the case for EMU advances rest on a balance between the benefits of avoiding the political use of the inflation tax in the normal times and the potential costs of missing the use of national exchange rates and monetary policy tools in extraordinary times. This balance may well be different country by country and politician buy politician. The more the national politician perceives that the marginal costs are becoming higher than the marginal benefits the more a drop in the EMU attitude is likely to occur.

³⁶ See Krugman 1998 and Eggertsson and Woodford 2003.

³⁷ See Summers 2014, Eggertsson and Mehotra 2014, Eggertsson et al. 2016a, Eggertsson et al. 2016b.

3.2 Captured Politician

Alternatively we can use a *grabbing hand* (GH) view of the political actor. According to the grabbing hand approach, policymakers are motivated by the aim to please the interest of specific, well-defined voters in order to win elections. In our case, the financial industry may be considered a highly organised and powerful interest group which can influence political competition.

The financial industry is likely to be a smaller and more coherent group than the consumers of their services, and therefore politically better organised. The GH policymaker, in defining the EMUW level, depends on the financial industry view of the topic, if this can strongly determine her/his re-election (hereafter his). For the point of the policymaker any misalignment compared to public preferences in order to be consistent with lobby preferences can be considered only if a potential political reward emerges.

The preferences of the financial constituency can be written as:

$$V = (1 + \delta)y_2 - f \quad (9)$$

The parameter δ represents how different the importance of the EMUA goal for the financial constituency is compared to other citizens. The more the financial industry is interested in joint the EMU the greater the parameter $\delta \geq 0$ will be. At the same time it is possible that the financial industry dislikes the EMU; in this case it will that : $\delta \leq 0$.

The parameter $f > 0$ (*lobbying commitment*) represents the capturing costs. The financial industry can invest an amount of resources in campaign contributions, which can potentially change the chances of re-election of the incumbent policymaker. Campaign contributions can be contingent upon the effort of the policymaker; for simplicity $f = ka_2$. The parameter k represents the *lobbying cost* of the financial industry: the greater the necessary investment to implement campaign contributions the higher the value of the parameter will be. The alignment between the lobby's wishes and the politician's conduct is costly.

The purpose of campaign contributions is to influence the incumbent's chances of winning elections. Let us assume that the policymaker's effort a_2 devoted to implementing the central bank regime is observable by financial professionals, given that they can be considered insider agents compared to other citizens.

The GH policymaker chooses his effort while taking into account the lobby goal function. The GH policymaker needs to provide enough utility to the financial lobby. He will align his function with the

interests of the financial industry. The reason is simple: the GH policymaker knows that campaign contributions can reduce the political competition in his favour, although the effect on voters is stochastic.

This assumption can be simply represented by suggesting that the lobby is able to influence voters' reservation utility using campaign contributions:

$$W' = a^e + \Omega_{AV} - M$$

The variable M represents the *voting effect* of campaign contributions on voters. We can suppose that the voting effect is stochastically distributed:

$$M = mf$$

Where m is a random variable with standardized normal distribution $(0;1)$. The campaign contributions may change the incumbent government's chances of remaining in charge modifying citizens' reservation utility. In general the effect of campaign contributions on voter sentiment is uncertain. The GH knows *ex ante* that if he pleases the financial industry he certainly gains its favour – i.e. contributions – while voter reaction is uncertain. The incumbent government being supported directly or indirectly by the financial industry can produce a mixed reaction in voter sentiment; the final effect is unknown *ex ante*. Nature determines *ex post* if the political effect of campaign contributions implemented by the financial industry is positive, neutral or negative, i.e. $0 \leq m_{GH} \leq 0$.

Returning to the policymaker, his utility function Z_{GH} is defined as:

$$Z_{GH} = R(V) - C(a) \quad (9)$$

The GH policymaker reward function depends on the financial industry function V . As usual, we denote the political value he assigns to fulfil the specific mandate on EMUA with β ; therefore:

$$R(V) = \beta V$$

We assume that from the GH policymaker's point of view, the political costs of implementing an increasing level of EMUW are the usual ones, i.e. the cost function assumes the same specification (5):

$$C(a) = ca^2 \quad (5)$$

Therefore, given the utility function Z_{GH} of the GH government, his optimal behaviour will be the result of the following maximization:

$$\max Z_{GH} = \max[R(V) - c(a_2)]$$

Where:

$$R(V) = \beta V = \beta[(1 + \delta)y_2 - f] = \beta[(1 + \delta)(a_2 + \Omega) - ka_2] \quad (10)$$

Given the cost function (5) we have:

$$R(V) - C(a_2) = \beta[(1 + \delta)(a_2 + \Omega) - ka_2] - c(a_2^2)$$

It follows that the GH policymaker maximizes the financial industry welfare net of costs of executing the task. From the first order condition:

$$\frac{\delta Z_{GH}}{\delta a_2} = \beta[(1 + \delta)] - 2ca_2 = 0$$

The optimal effort will be (Figure 4):

$$a_2 = \frac{\beta(1 + \delta - k)}{2c}$$

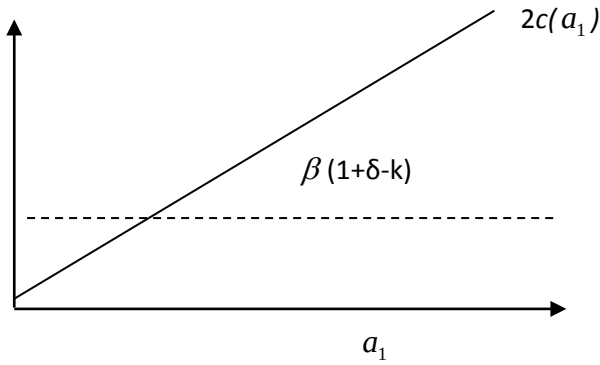


Figure 4

Figure 4 describes the marginal reward function and the marginal cost function of the policymaker (vertical axis); as in the case of the HH policymaker, only the latter depends on effort (horizontal axis).

Given a_2 , the effective political reward of the GH policymaker will depend on the condition of political competition (4):

$$R_{GH} = \beta \Pr(U \geq W')$$

Where:

$$W' = a^e + \Omega_{AV} - m_{AV} f$$

$$W' = a^e + \Omega_{AV}$$

Then:

$$\begin{aligned} R_{GH} &= \beta \Pr(\Omega + a_2 \geq \Omega_{AV} + a^e) \\ R_{GH} &= \beta \Pr(\Omega - \Omega_{AV} \geq a^e - a_1) \end{aligned} \quad (4c)$$

Comparing conditions (4a) and (4c) it is evident that the HH policymaker and the GH policymaker face the same condition *ex ante*. Both agents wish to pick up their optimal effect, given that they do not know their ability and in the case of the GH policymaker he does not know the final effect of lobbying activity on voters.

Nature chooses the ability of the incumbent policymaker Ω_{GH} . It follows that the effective reward will be:

$$R_{GH} = \beta \Pr(\Omega_{GH} - \Omega_{AV} \geq a^e - a_2 - m_{GH} k a_2)$$

When expectations are perfectly matched ($a^e = a_2$) the effective political reward will be positive if the ability of the incumbent policymaker is greater than average, taking into account the *ex post* effect of campaign contributions:

$$(\Omega_{GH} > \Omega_{AV} - m_{GN} k a_2) \quad (4d)$$

The equilibrium level y of EMUA will be determined by the GH policymaker's ability Ω_{GH} and by his effort a_2 :

$$y_{GH} = a_2 + \Omega_{GH} = \frac{\beta(1 + \delta - k)}{2c} + \Omega_{GH} \quad (11)$$

Finally we can compare the two policymakers. Given the ability of the government and comparing (8) and (11) we have the effect on the EMUA of different types of policymaker. From

$$y_{HH} = a_1 + \Omega_{HH} = \frac{\beta}{2c} + \Omega_{HH} \quad (8)$$

$$y_{GH} = a_2 + \Omega_{GH} = \frac{\beta(1+\delta-k)}{2c} + \Omega_{GH} \quad (11)$$

$$\text{If } \Omega_{HH} = \Omega_{GH} \quad (12)$$

We have that:

$$y_{HH} > y_{GH} \text{ if } k - \delta > 0 \quad (13)$$

When the financial industry is in favour of the EMU – i.e. $\delta \geq 0$ - the EMUA level is greater when the government is HH type rather than GH type if the lobbying cost is higher compared to the EMU propensity of the financial industry. Needless to say, the HH policymaker implements an increasingly higher level of EMUA compared to the GH policymaker when the financial lobby dislikes higher level of integration - $\delta \leq 0$.

Also the EMU attitude of the lobbies can depend on specific macroeconomic conditions. Using again the cases when liquidity traps or secular stagnations seem to be non-temporary phenomena, it is possible that in such as situations some lobbies can decrease their EMU attitude. The more the incumbent policymaker is a GH politician the higher the probability that a fall in the EMUA level will occur.

4. Conclusion

Triggered by the Great Crisis started in 2007-2008 some structural questions regarding the existing macroeconomic trade- offs within the EMU have become more evident. It is a matter of fact that in the run-up phase to the EMU there was an intense debate as to whether such as European currency union characterized by an independent and supranational central bank, imperfect and fragmented markets for inputs and outputs, national non – monetary policies with incomplete and partial coordination could progressively reap the net benefits on an OCA via a gradual convergence of policies and performances. After the establishment of the Eurozone however the idea that the country benefits were endogenously associated with the EMU progress became the dominant one and the possibility of unpleasant macroeconomic dilemmas remained relatively hidden, or really state and/or country contingent.

Then the Great Crisis came, and in the aftermath its main lesson is that huge financial shocks intertwined with sensible real and fiscal heterogeneities among member countries can pose relevant threat to the sustainability of the EMU.

When a country cannot use exchange rate flexibility and discretionary monetary policies may find that deep differential growth interacting with financial imbalances – including the fiscal ones - call for viable effective European institutions and policies in order to maintain a safe and sound membership in the

currency union. In absence of supranational institutional devices, the adverse shocks may magnify the already existing real and financial asymmetries, destabilizing the EMU, given that the political attitude in favour of the currency union membership is a dynamic variable, depending on economic and political drivers.

How to capture in a simple and systematic way the pros and cons of the EMU membership? In this chapter we offered a general framework to discuss the economics and the political economy of the EMI process. The bottom line is that the net benefits of EMU benefits are calculated by the national incumbent policymakers, which are politicians, i.e. career concerned players that try to maximize their consensus, pleasing the voters and/or the lobbies. In doing so they influence the country attitude in evaluating the medium long term gains in fixing the exchange rates and establishing an independent and supranational central bank versus the costs in losing the monetary flexibility to smooth short term macroeconomic unbalances and/or in implementing fiscal and structural policies that can be politically costly in terms of consensus. The role of the political willingness in being a more or less active player in the EMU process can trigger time to time centripetal or centrifugal forces that can respectively reinforce or weak the robustness of the EMU institutional setting.

Putting it in another way, direction and speed of the EMU process depend on two different and intertwined endogeneity phenomena: endogeneity in the pros and cons evolution of the EMU membership; endogeneity in the political weighting of such as benefits and costs.

All in all, the final message is that in each country the EMU attitude is an endogenous and dynamic variable, which is characterized by booms and busts depending on the political evaluation of the economic costs and benefits of the currency union membership. In turn the cycles of the national EMU attitudes are likely to accelerate or decelerate the EMU evolution, including the safe and sound functioning of its currency – the Euro – and the credibility of its monetary actor, i.e. the ECB.

How the interplay between the single political decisions in each member country can affect the common path of the economic supranational institutions is an extremely interesting exploration that deserves further research efforts.

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