# The Economics of European Monetary Integration: The Pros and Cons of EMU Membership

# Donato Masciandaro and Davide Romelli

## 1. Introduction

The recent global crisis challenged the stability of the European monetary integration process. That process, which is closely linked to the evolution of the European Monetary Union (EMU), has gone through two stages: the Common Market era, which ran from 1958 through 1993, and the Monetary Union era, which started in 1994 and gained new impetus after the global crisis with the publication of the Four Presidents' Report in December 2012. The aim of the EMU has been to stabilize exchange rates, inflation and interest rates in order to boost capital mobility and trade, thereby promoting the growth of member countries. Thus far, the data show that there has been nominal convergence of inflation and interest rates, while real convergence of per capita income has not occurred among the original euro area participants.<sup>1</sup>

The creation of a currency union implies that its member countries can no longer use exchange rates and national monetary policies as tools for dealing with real and financial shocks. These limitations need to be compared with the medium to long-run benefits of a fixed exchange rate and the delegation of monetary policy to an independent, supranational central bank – the European Central Bank (ECB). In this context, the pros and cons of a currency union need to be evaluated.

Our approach in this regard is to assume that the relevant decisions are adopted on the basis of a political cost-benefit analysis that weighs the expected economic gains and losses through the lens of the electorate and/or certain ideologies. Such approach revisits the standard approach of optimal currency areas, zooming on the political actors that shape time to time each country decision, where the above mentioned traditional theory "ignores the "political economy" factors that made currency areas coincident with countries in the first place (...). If the USSR were an optimal currency area before its break —up it should have presumably remained so afterwards" (Goodhart, 1998). The political economy approach, which expresses monetary union as a transfer of sovereignty, seems to be more consistent with a truly theory of optimal currency areas (Bolton and Huang 2018).

The aim of this chapter is to review the economic and the political economy of the European Monetary Union. Section 2 introduces the traditional theory of optimal currency areas (OCA theory) as a starting point for evaluating the expected costs and benefits of a currency union. Section 3 discusses a more recent political-economy approach that enriches OCA theory and highlights the crucial role played by national policymakers in designing and implementing the overall process of adopting a single currency. In

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<sup>&</sup>lt;sup>1</sup> Franks et al. (2018).

this context, the economic and political-economy approaches are complementary, rather than alternative, tools. In this section, we also discuss the incentives for a country to join a single currency area. Section 4 concludes with a discussion of the pivotal role played by public and political perceptions in determining the net benefits of the EMU. These elements, which are endogenous and might change over time, could trigger mechanisms that either strengthen or destabilize the currency union.

## 2. The Economics of European Monetary Integration

All else equal, the success of the European monetary integration process depends on its effectiveness in allowing its member countries to maintain constant and stable growth rates. Importantly, a decision to establish a monetary union involves a complete and irreversible separation of countries' monetary powers in terms of both exchange-rate determination and monetary policy autonomy.

In fact, when countries join the EMU, they fix their exchange rates and delegate their monetary policies to the European Central Bank (ECB), which implements these policies at the supranational level. This has economic costs and benefits. In terms of evaluating the economic pros and cons of currency unions, OCA theory remain the traditional workhorse. This theory can also be used as a starting point for further elaborations that take the costs and benefits of the political actors involved in the process into account, as we discuss in section 3.

The literature on OCA first emerged in the 1960s (see Mundell, 1961; McKinnon 1963 and Kenen, 1969). Over the last three decades, it has become the theoretical basis for evaluating the viability and desirability of the EMU.<sup>2</sup> Today, the OCA approach is used to evaluate whether regional areas – such as the European Union or the United States – can be considered as optimal currency areas (Bayoumi and Eichengreen, 2017). In Europe, this debate started after the launch of the European Monetary System in 1979, when the majority of the countries in the European Community fixed their exchange rates around a central parity known as the European currency unit (ECU). It became even more vivid with the introduction of a single European currency – the euro –as an accounting currency on January 1, 1999. The euro was put into circulation on January 1, 2002.

In a nutshell, the OCA approach has certain merits because it highlights the conditions that might favour the development of an international agreement aimed at fixing the exchange rate and delegating monetary policy to an independent central bank. The OCA theory's rationale for the EMU can be summarized as follows. Consider how the citizens of an individual European country *j* may address the

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<sup>&</sup>lt;sup>2</sup> Buiter (1999), Jonung and Drea (2010), Krugman (2012). See also Goodhart (1995) and Bordo and Jonung (1999). Mongelli (2002) describes the evolution of OCA theory as occurring in 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).

decision to join the single currency. A relevant benefit of fixed exchange rates is that they provided a more predictable basis for trade decisions than floating rates. In other words, the monetary transaction costs are likely to be lower. The monetary transaction gains will be higher the more country *j* trades with other members of the single currency, which would also favour the mobility and flexibility of the factors of production (labour and capital). Therefore, the gains from joining the single currency are positively related not only to the degree of economic integration in the markets for inputs and outputs, but also to the efficiency of those markets.<sup>3</sup>

The OCA theory's rationale for delegating monetary policy to an independent central bank is to further insulate monetary actions from political biases. At the same time, the OCA approach stresses that the medium- to long-term advantages of currency union membership have to be compared with the short-term costs of losing the ability to use national monetary tools to address short-term macroeconomic imbalances (Table 1).

Table 1: Pros and Cons of Joining a Monetary Union

EXPECTED PROS	EXPECTED CONS
Medium- to Long-term Horizon	Short-term Horizon
1) Exchange-rate stability	1) National policymakers cannot use monetary
2) Monetary stability	policy to address macroeconomic unbalances

Notably, in the traditional OCA approach, the role of political incentives has progressively emerged through the focus on the relationships among citizens' preferences, political biases, monetary policy and central-bank governance. Until the late 1980s, economic theory did not attribute much importance to the concept of central bank governance. However, these institutional arrangements came into focus during the New Classical Revolution when economic theory started stressing their influence on macroeconomic outcomes. The role of central-bank design has been reaffirmed by the New Keynesian analysis of monetary policy.<sup>4</sup>

The theoretical bottom line can be summarized as follows. Policymakers tend to adopt a shortsighted perspective when using monetary tools and they often rely on money creation to smooth different

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<sup>&</sup>lt;sup>3</sup> 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 Klaassenn (2002), Mahlberg and Kronberger (2002), Mongelli (2002), EU Commission (2004), De Grauwe and Mongelli (2005), Dellas and Tavlas (2005), Andres et al. (2008), Buscher and Gabrish (2009) and Chukwuemeka (2011). On the effects of specific EMU membership cases, see Monga (2004), Rabanal (2009) and Baas (2014).

<sup>&</sup>lt;sup>4</sup> For excellent reviews, see Cukierman (1996), Eijffinger and de Haan (1996), Cukierman (2008) and Walsh (2008). The inefficient use of the inflation tax by the government seems to be a common feature of the different theoretical explanations of central bank independence (CBI) effectiveness. Eijffinger and de Haan (1996) discuss three strands of literature – the public-choice view, the fiscal view and the time-inconsistency view. While the first two focus on why governments may like accommodative monetary policies, the third 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.

kinds of macroeconomic shocks – real, fiscal, banking and external.<sup>5</sup> Unfortunately, money creation comes at a cost: printing money today implies a greater risk of monetary and/or financial instability tomorrow. Therefore, policymakers attempt to exploit the trade-off between present real gains and future instability risks.<sup>6</sup> In other words, the stabilization policies are implemented through the assumption of future instability costs. However, the more efficient markets are, the greater the risk that short-sighted monetary policies will only produce instability. In fact, rational private agents fully anticipate the political incentives to use a monetary tool and fully adjust the nominal variables, so that such tools have no real effect.<sup>7</sup> In this framework, the Friedman-Lucas proposition on monetary-policy neutrality holds: money creation does not produce any real gain, only nominal (monetary and/or financial) distortions.<sup>8</sup>

Furthermore, the political money-creation bias can dynamically generate greater uncertainty and negative externalities (such as moral-hazard risk). As a result, monetary policy is inefficiently used in a systematic way, such that it has the potential to become volatile and only produce macroeconomic distortions.

The inefficient use of monetary policy tools has been empirically examined using "optimal taxation theory", but this theory does not find any support in the data. Optimal taxation theory claims that the benevolent policymaker chooses the rate of taxation – including the rate of money-supply creation, which produces inflation – to minimize the present value of the social cost. Consequently, inflation and tax rates are positively related. However, if optimal taxation theory fails empirically, it is natural to conclude that the government is not benevolent and that it is affected by monetary-policy biases. 10

Given these considerations, banning the use of the monetary policy for short-term political purposes became the social goal. This institutional setting gained momentum in the economic literature and in the policy debate in the 1980s, and the relationship between the policymaker who designs the overall economic policy and the central bank that is responsible for setting monetary policy came to the fore as crucial for avoiding the inflation bias. Furthermore, the greater the consensus that markets were rational, the more the rules of the game between policymakers and central bankers gained momentum.

<sup>&</sup>lt;sup>5</sup> On the relationship between fiscal deficits and CBI, see Burdekin and Laney (2016). On the economics and empirics of inflationary bias in consolidated monetary and banking powers, see Lima et al. (2016). On the interconnections between banking and fiscal shocks, see Bordo and Meissner (2016).

<sup>&</sup>lt;sup>6</sup> See Bernanke (2013a) on the benefits of relying a long-sighted independent central banker instead of short-sighted politicians.

<sup>&</sup>lt;sup>7</sup> On ageing and CBI, see Farvaque et al. (2008). On social trust and CBI, see Berggren et al. (2015).

<sup>&</sup>lt;sup>8</sup> See Friedman (1968) and Lucas (1973).

<sup>&</sup>lt;sup>9</sup> For a survey, see Delhy Nolivos and Vuletin (2014).

<sup>&</sup>lt;sup>10</sup> Delhy Nolivos and Vuletin (2014) reach a different conclusion. They endogenize optimal taxation using the degree of CBI 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 simultaneously define the optimal taxation and the degree of CBI).

<sup>&</sup>lt;sup>11</sup> See Strausz (2011) and de Figueredo and Stiglitz (2015), who treat CBI as a special case of the general relationship between agency delegation and democracy.

<sup>&</sup>lt;sup>12</sup> Barro and Gordon (1983), Backus and Driffill (1985), Rogoff (1985) and Lohmann (1997) explore 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 on fiscal policy.

Thus, the economic mainstream claimed that optimal central bank governance must essentially be a twosided medal.

On the one side, the central bank has to be independent. In other words, it must enjoy the ability to implement non-distortionary monetary policies without any external (political) short-sighted interference. As such, the central banker becomes a player who can veto distortive monetary policies. On the other hand, the central banker has to be conservative, where conservativeness refers to the importance that the central banker assigns to price stability with respect to other macroeconomic objectives. Conservativeness is necessary to ensure that the central banker himself/herself does not become a source of money-creation bias.

Independence and conservativeness are therefore conditions for the implementation of credible monetary policies.<sup>14</sup> Independence can be viewed as a device for implementing conservative monetary policies and, more generally, monetary policy rules.<sup>15</sup> However, private agents will 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, acts in a transparent way, and implements an effective communication policy.<sup>16</sup>

The relationship between central bank independence (CBI) and accountability lies at the core of the central bank governance literature.<sup>17</sup> Central bank governance has become the institutional setting for implementing day-to-day monetary policies: given the long-run goal of avoiding the risk of monetary instability, modern central bankers can smooth real business cycles using monetary policy rules.<sup>18</sup> Monetary policy then becomes the final outcome of the complex interactions among three main components: monetary institutions, central banker preferences and policy rules.

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<sup>&</sup>lt;sup>13</sup> On CBI and conservativeness, see Berlemann and Hielscher (2016).

<sup>&</sup>lt;sup>14</sup> On the relationship between CBI and central-bank conservativeness, see also Eijffinger and Hoeberichts (1998), McCallum (1995) and Fischer (1995). On monetary conservativeness and fiscal policy, see Niemann (2011).

<sup>&</sup>lt;sup>15</sup> Eijffinger and Hoeberichts (1998, 2008) shed light on the trade-off between conservativeness and independence: reducing central-bank independence can increase central bankers' conservativeness. The first article used the neoclassic framework while the second applied a new Keynesian model to obtain the same result. On the relationship between CBI and the Taylor rule, see Maslowska (2011b).

<sup>&</sup>lt;sup>16</sup> On transparency, see Eijffinger and Geraats (2006), and Hughes Hallett and Libich (2006). On communication, see Cukierman and Meltzer (1986), Goodfriend (1986), Issing (2005a) and Blinder et al. (2008).

<sup>&</sup>lt;sup>17</sup> Briault et al. (1996), Morris and Lybek (2004), Frisell et al. (2008), Crowe and Meade (2008), Hasan and Mester (2010).

<sup>&</sup>lt;sup>18</sup> See 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) and Svensson (1997). Recently, Taylor (2013) cast doubt on the role of CBI in generating rule-based monetary policies.

# 3. The Political Economy of European Monetary Integration

As insights into the economic pros and cons of being a member of a currency union emerged, the role of central-bank governance in shaping the monetary regime's success took centre stage. In this regard, the academic literature can be described as evolving in a two-step process.<sup>19</sup>

Initially, the scholars involved in the field worked on verifying the theoretical conjectures through comparative, institutional and empirical analyses. After constructing indices of CBI and proposing historical alternative models of independent and dependent monetary authorities, researchers attempted to determine whether the degree of independence was a driver of the most important macroeconomic phenomena, such as inflation, public debt, interest rates, income and growth.<sup>20</sup> The aim was to verify whether the existence of a monetary veto player reduced the intended and unintended effects of the misuse of the monetary policy tools and produced positive spillovers onto other macro variables. In the first wave of studies, CBI was essentially treated as an exogenous (independent) variable that might be useful for explaining macro trends.

In the second step, researchers considered the degree of CBI as an endogenous (dependent) variable that could be explained by other elements.<sup>21</sup> Their focus in this regard was on the factors that might motivate a country's decision to maintain or reform its monetary regime, including the degree of CBI. They examined why and how policymakers may be forced to implement monetary reforms that reduce

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<sup>&</sup>lt;sup>19</sup> Vuletin and Zhu (2011) claimed that around 9,000 articles had been devoted to the role of CBI in inflation by 2011.

<sup>&</sup>lt;sup>20</sup> The seminal CBI indices proposed by Bade and Parkin (1982) and Grilli et al. (1991) were revised by Masciandaro and Spinelli (1994) and followed by the Cukierman (1992) indices. Since then, many different indicators have been proposed (see Berger et al., 2001, for a discussion). Cukierman (1992) was the first to distinguish legal and de facto indicators of independence. Updates of this index were proposed by Cukierman et al. (1992, 2002) and Jacome and Vazquez (2008). Updates for the Grilli, Masciandaro and Tabellini index (1991) were proposed by Arnone et al. (2009) and Arnone and Romelli (2013), while Romelli (2018) updated these two classical indices and proposed an extended index of CBI. Crowe and Meade (2008) developed measures of CBI and transparency. Vuletin and Zhu (2011) proposed a new de facto index of independence and identified two mechanisms embedded in the measure of the turnover rate of central bank governors. Lupusor (2012) showed empirically that legal independence cannot be considered a sufficient condition for avoiding 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 Federal Reserve, see Waller (2011), Bernanke (2013b), Gorton and Metrick (2013). On the Federal Reserve 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) and Jacome and Vazquez (2008). Klomp and de Haan (2010b) performed a meta-regression analysis of 59 studies to examine the relationship between inflation and CBI. They confirmed the existence of a negative and significant relation between inflation and CBI in OECD countries, although the results were sensitive to the indicator and the estimation period. Legal CBI has been considered a major determinant of macroeconomic performance - see Cukierman (2008), de Haan et al. (2008), Carlstrom and Fuerst (2009), Alpanda and Honig (2009), Alesina and Stella (2010) and Klomp and de Haan (2010a). More recently, the literature has re-examined the relationships between CBI and the conduct of monetary policy - see Down (2009), Maslowska (2011a), Alpanda and Honig (2009); between CBI and financial stability - see Cihak (2007) and Klompt and de Haan (2009); and between CBI and inflation - see Klompt and de Haan (2010b) and Arnone and Romelli (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).

<sup>&</sup>lt;sup>21</sup> See Masciandaro (1995) and Berger et al. (2001). Note the difference between institutional-setting endogeneity and inflationary-bias endogeneity. CBI endogeneity is systematically reviewed in Hayo and Hefeker (2001). Romelli (2018) considers the endogeneity of CBI in a large sample of countries, and shows that both the probability of reforming central-bank legislation and the level of CBI can be related to an array of macro- and politico-economic indicators.

their powers in terms of money creation. Various interpretative hypotheses have been advanced to explain the genesis of the political process that leads a monetary regime to assume given characteristics. The endogenizing of CBI and its effectiveness have been the subject of analyses in both economics and political science.<sup>22</sup>

Some scholars consider the possibility that the level of CBI depends on the degree to which constituencies are highly averse to the risks of monetary instability, which drives policymakers to bolster the status of the central bank (the *constituency view*).<sup>23</sup> Others stress that an aversion to monetary instability risks is structurally embedded in features of the overall legislative and/or political system, which then influence the policymakers' decisions regarding an independent central bank (the *institutional view*).<sup>24</sup> A third group emphasises the role of culture and a country's tradition of monetary stability in influencing the policymaker's choices (the *culture view*).<sup>25</sup> These three views shape the preferences of the citizens related to the degree of CBI. In the constituency view, present preferences of avoiding monetary instability are relevant, while past preferences influence the policymaker's decisions in the institutional and culture views. These three views can be intertwined by studying the economic, institutional and cultural conditions under which CBI reforms do or do not take place. Importantly, these studies acquire greater importance in

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<sup>&</sup>lt;sup>22</sup> Excellent reference books on how central banks' policies and their institutional settings have changed as well as the causes of these changes are Siklos (2002) and Siklos et al. (2010).

<sup>&</sup>lt;sup>23</sup> See Maxfield (1997). Posen (1995), noting that the choices of monetary regimes have distributive consequences, stated that there is no reason to assume that the adoption of CBI is self-enforcing, that choice requires political support and that 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 among financial-sector preferences, low inflation and CBI, see Miller (1998), who provides an interest-group theory of CBI. Empirical analyses that address the CBI endogeneity question are supplied by Brumm (2006, 2011).

<sup>&</sup>lt;sup>24</sup> See Moser (1999). See also Cukierman (1994), although his predictions are tested and rejected by Cukierman and Webb (1995) and de Haan and van't Hag (1995). Vaubel (1997) suggests that central banks, even those that are formally independent, can be captured. Sieg (1997) proposes a formal model of a captured independent central bank. Bernhard (1998) claims that information asymmetries in the monetary policy process can create conflicts among government ministers, their backbench legislators and, in multiparty governments, their coalition partners. An independent central bank can help overcome these conflicts. Goodman (1991) argues that a conservative government that is expected to only be in power for a short period of time will adopt an independent central bank to limit the ability of the future government (see also Milesi-Ferretti, 1995). Lohmann (1997) argues that the federalist nature of a government and the use of coalitions in forming a government could increase the likelihood of CBI. On the relationship between government partisanship and central-bank structure, see Alesina (1989) and 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 CBI. However, they find no supporting evidence for this hypothesis. Moser (1999) analyses the relationship between CBI and the features - checks and balances - of the legislative systems. Banaian and Luksetich (2001) demonstrate 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) uses a historical perspective to discuss how CBI ultimately depends on the government's needs. Acemoglu et al. (2008) show the relationships among inflation, CBI and political institutions, where the effectiveness of CBI depends on political distortions. Bodea and Hicks (2015) discuss the relationships among inflation, CBI and democratic institutions. Bodea (2010) analyses the simultaneous choice of the level of CBI and the exchange-rate regime.

<sup>&</sup>lt;sup>25</sup> Berger (1997), Berger et al. (2001). Hayo (1998) claims that people's preferences with respect to price stability matter in explaining low inflation rate and that CBI is just one aspect of a stability regime with two competing interpretations of the role of institutional design: the preference-instrument interpretation and the historical-feedback interpretation. Franzese (1999) claims that the effectiveness of CBI depends on every variable in the broader political-economic environment. In Eggertsson and Le Borgne (2010), society – with all agents having homogeneous preferences – determines the CBI, thereby 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 regarding different policy dimensions, including the monetary policy dimension, are heterogeneous. See also Eijffinger and Stadhouders (2003), Acemoglu et al. (2008), Quintyn and Gollwitzer (2010), Hielscher and Markwardt (2012) and Berggren et al. (2014).

periods – such as the present one – characterized by a tendency to question the design of central-bank governance.<sup>26</sup>

In general, the extant literature on the evolution of CBI has focused on two crucial elements: the preferences of citizens, and the incentives and constraints that shape the behaviour of incumbent policymakers. The general conclusion on the debate surrounding the drivers of a country's attitude towards currency area membership is that the final outcome depends on the preferences of its players — citizens and incumbent policymakers.

Table 2: Currency Area Membership: Relevant Players and Their Preferences

<u>CITIZENS</u>	<u>POLITICIANS</u>
1) Monetary stability	1) Political gains from pleasing citizens
2) A central bank that is free of political biases	2) Political costs from fewer national economic
	policy tools to address short-term macroeconomic
	imbalances

If we apply the general principles to the EMU case and assume that monetary instability risks are proxied by inflation-rate dynamics, then the monetary stability gains should be higher the more the country's *j* inflation is higher or more volatile than the EMU's average inflation. Therefore, the EMU gains are positively correlated with the relative degree of inflation-rate instability in country *j*. This implies that both monetary transaction gains and monetary stability benefits can motivate a country to join the EMU.

At the same time, however, EMU membership might be associated with certain risks, especially those related to losing the ability to use exchange-rate and monetary policies to address macroeconomic shocks. In other words, country *j* may face monetary stabilization losses resulting from its membership in the single currency area. Overall, these losses might reduce the citizens' interest in joining the currency union. The size of the monetary stabilization losses depends on the same drivers that influence monetary gains (i.e., mobility and efficiency in the markets for inputs and outputs). Lower levels of integration and efficiency call for supranational stabilization policies that differ from the monetary policies. When such policies are missing, the monetary stabilization losses will be higher.

Furthermore, recent literature on optimal currency areas points out that both gains and losses can be endogenous, rather than exogenous, given that they depend on how the currency area is designed and implemented.<sup>27</sup> The shape of the transaction costs; the level of integration in the markets for goods,

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<sup>&</sup>lt;sup>26</sup> See Nier (2009), BIS (2011) and Khan (2016) for an overview of the evolution of central-bank governance after the crisis.

<sup>&</sup>lt;sup>27</sup> Frankel and Rose (1997 and, 1999), Glick and Rose (2002).

services and human capital; political biases; and the shocks and their absorbers can be dynamically influenced by the evolution of the currency area's establishment and implementation. Such endogenous transaction costs can be either decreasing or increasing. Consequently, the integration process can become deeper or weaker over time, and it can differ across countries.

Almost twenty years after the adoption of the European single currency, it is possible to claim that some of the expected pros of adopting the euro have been realized. For example, monetary stability has produced less inflation and more trade, leading to more growth. These benefits have been even more evident in the countries in which national policymakers have implemented policies that increase productivity, such as Germany, Austria, Belgium, Finland, Luxembourg and the Netherlands. <sup>28</sup> At the same time, certain national imbalances still need to be addressed, including financial instability risks, debt and deficit risks, and the divergence in wages and productivity paths that leads to trade imbalances, as in the case of the peripheral euro area countries (i.e., Greece, Ireland, Italy, Portugal and Spain).<sup>29</sup>

Thus far, our analysis of the economic pros and cons of EMU membership has not provided a final answer on which of the two prevailed. What is arguably needed is a dynamic framework that can shed light on the evolution of the expected gains and losses – both economic and political – of joining or remaining in a currency union. "One size does not fit all" has to be the methodological motto, as every currency union is a unique story. The historical tales should not be treated as benchmarks but rather as useful food for thought.<sup>30</sup> This observation is strengthened by looking at the degree of financial integration and at the design of banking regulations, which are substantially more prominent today than in the 1990s and early 2000s.<sup>31</sup>

The endogeneity of EMU membership is even more evident if the analysis of the pros and cons of having a supranational central bank as the monetary authority is framed in the discussion of the desirability of maintaining an independent central bank. In this context, the possible consequences for CBI of the increasing phenomenon of populism are of particular interest. The rise of populism can dent the consensus that surrounded the support for CBI from the late 1980s until the start of the 2007-2008 financial crisis.<sup>32</sup> After a first wave of populism that was mostly concentrated in Latin America, a second wave of populism gained ground among both left-wing and right-wing movements in the majority of European countries and the United States.<sup>33</sup> Such movements directly or indirectly influence the design and implementation of various types of economic policies.<sup>34</sup> The populist movements seem to share a demand for short-term protection as well as three main properties: a claim that they are on the side of the people against the

<sup>28</sup> Dustmann et al. (2014).

<sup>&</sup>lt;sup>29</sup> Thimann (2015).

 $<sup>^{30}</sup>$  As stated by Kirkegaard and Posen (2018).

<sup>&</sup>lt;sup>31</sup> Aizenman (2016). See also Handler (2013).

<sup>32</sup> Buiter (2016), de Haan and Eijffinger (2017), Goodhart and Lastra (2017), Rajan (2017), Rodrik (2018).

<sup>&</sup>lt;sup>33</sup> Dornbush and Edwards (1991), Acemoglu et al. (2013).

<sup>&</sup>lt;sup>34</sup> Dovis et al. (2016), Aggeborn and Persson (2017), Rodrik (2017).

elites, certain demand conditions and a disregard for future consequences.<sup>35</sup> The core of this idea is that populist policies present solutions that are welfare enhancing in the short run for a majority of the population but costly in the long run for the overall population, which seems to be a constant in the literature analysing the economic content of populism.<sup>36</sup> Notably, "with their PhDs, exclusive jargon, and secretive meetings in far-flung places like Basel and Jackson Hole, central bankers are the quintessential rootless global elite that populist nationalist love to hate".<sup>37</sup> In other words, if the narratives of central bankers seem to sketch them as an natural target for populist policies, then the question that naturally arises is under which condition can a populist reform dispute the degree of CBI, which is the pillar of central banks' power.

As we stressed above, until the start of the 2007-2008 financial crisis, the independence of central banks was the benchmark for evaluating the effectiveness of monetary policy institutions around the world. A broad consensus supported that institutional design.<sup>38</sup> CBI has again become a relevant subject in academia (Figure 1), as well as in politics and the media. However, critical voices now seem to dominate.<sup>39</sup> This is mainly due to the fact that the economic and political importance of central banks in the advanced economies has grown since the beginning of the crisis.<sup>40</sup> Supervisory and regulatory functions have been piled on the central banks, thereby increasing the relationships among banking, fiscal and monetary policies.<sup>41</sup> The lines between the central bank's role as liquidity manager and the government's solvency support for banking and financial institutions have been blurred, inevitably triggering a debate over the shape of central bank settings and, in particular, the features of CBI<sup>42</sup>.

Figure 1: Articles with "central bank independence" in the title (1991-2015)

<sup>35</sup> Guiso et al. (2017).

<sup>&</sup>lt;sup>36</sup> Sachs (1989), Dornbush and Edwards (1991), Acemoglu et al. (2013), Chersterley and Roberti (2016).

<sup>&</sup>lt;sup>37</sup> Rajan (2017).

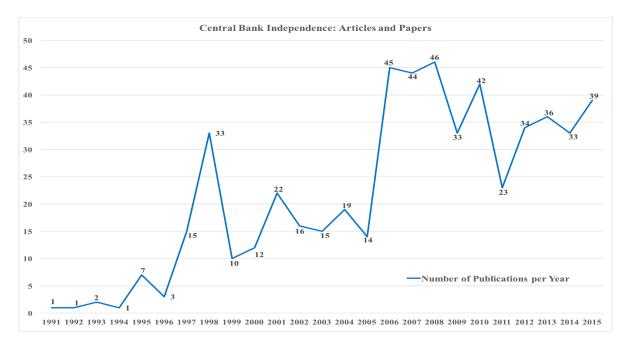
<sup>&</sup>lt;sup>38</sup> Aklin and Kern (2016), Cecchetti (2013), Bayoumi et al. (2014), Fischer (2015), Goodhart and Lastra (2017), Issing (2018), Williams (2015).

<sup>&</sup>lt;sup>39</sup> See Alesina and Stella (2010), Cecchetti (2013), Bayoumi et al. (2014) and Issing (2018). See also Stiglitz (2013), Ball et al. (2016) and Rodrik (2018).

<sup>&</sup>lt;sup>40</sup> Buiter (2014).

<sup>&</sup>lt;sup>41</sup> Bayoumi et al. (2014), de Haan and Eijffinger (2017), Masciandaro and Romelli (2018a, 2018b).

<sup>&</sup>lt;sup>42</sup> Nier (2009), Bean (2011), Cecchetti et al. (2011), Ingves (2011), Reis (2013), Cukierman (2008, 2013), Cecchetti (2013), Taylor (2013), Buiter (2014), Sims (2016), Blinder et al. (2017), Bordo and Siklos (2017).



Note: Figure 1 presents the evolution in the number of academic papers published with a title containing the phrase "central bank independence" between 1991 and 2015. Data obtained from SSRN and JSTOR. Source: Masciandaro and Romelli (2018b)

In this context, an important question is whether the policy-blurring effect has made the pendulum swing towards concrete reforms that reduce CBI. Thus far, comparative analyses have not provided homogenous results.<sup>43</sup> Overall, the general debate on the optimal degree of CBI and the need for an independent, supranational central bank in the EU — the institutional pillar of European monetary integration — is once again vivid and intense. Consequently, citizens' and politicians' perceptions of the pros and cons of being a member of the EMU are likely to be subjected to closer scrutiny, thereby confirming the endogenous and dynamic nature of such an inquiry.

## 4. Conclusion

Triggered by the 2007-2008 financial crisis, crucial questions about the macroeconomic costs and benefits of the EMU have come into focus. It is well known that in the run-up to the single currency, there was intense debate as to whether the European currency union, which was characterized by an independent, supranational central bank, imperfect and fragmented markets for inputs and outputs, and national, non-monetary policies with incomplete and partial coordination, could progressively reap the net benefits of an OCA via a gradual convergence of policies and performance. However, following the establishment of the euro area, the idea that the economic benefits in various countries were

<sup>&</sup>lt;sup>43</sup> Bodea and Hicks (2015), Masciandaro and Romelli (2015), de Haan et al. (2018).

endogenously associated with the EMU's progress dominated, while the possibility of adverse macroeconomic dilemmas remained relatively hidden or country contingent.

The main lesson of the financial crisis is that significant financial shocks intertwined with sensible real and fiscal heterogeneities among member countries can pose a relevant threat to the sustainability of the EMU. A country that does not have exchange-rate flexibility or discretionary monetary policies at its disposal may find that the interaction between deep differential growth and financial imbalances, including fiscal imbalances, calls for viable, effective European institutions and policies that can safely and soundly maintain membership in the currency union. In the absence of supranational institutional devices, adverse shocks might magnify the existing real and financial asymmetries, thereby destabilizing the EMU, especially given that political attitudes toward currency-union membership are dynamic and contingent on economic and political drivers.

The question is this: How can the pros and cons of membership in the single currency union be captured in a simple and systematic way? This chapter has offered a general framework for discussing the economics and political economy of the European monetary integration process. The bottom line is that the net benefits of a single currency are calculated by national policymakers, who are elected politicians — career-concerned players who try to maximize consensus by pleasing voters and/or lobbies. In so doing, they influence the country's evaluation of the medium- to long-term benefits of fixing the exchange rate and establishing an independent, supranational central bank, and the costs associated with losing the monetary flexibility needed to smooth short-term macroeconomic unbalances and/or implementing potentially unpopular fiscal and structural policies. The role of the political willingness to be a more or less active player in the EMU process can trigger centripetal or centrifugal forces that can either reinforce or weaken the robustness of the EMU's institutional setting. In other words, the direction and speed of the EMU process depends on two different yet intertwined endogeneity phenomena: endogeneity in the evolution of the pros and cons of EMU membership, and endogeneity in the political weights assigned to its costs and benefits.

All in all, for each country, the attitude toward the EMU is an endogenous, dynamic variable that is characterized by booms and busts depending on the political evaluation of the economic costs and benefits of membership in the currency union. In turn, the cycles of national attitudes towards the EMU are likely to accelerate or decelerate its evolution, including the safe and sound functioning of its currency – the euro – and the credibility of its monetary actor, the ECB. The ways in which individual political decisions in each member country can affect the common path of the economic supranational institution is a particularly interesting issue that deserves further analysis.

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