European Monetary Integration

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Abstract

This chapter analyzes the process of monetary integration in Europe between 1945 and 1992, when the Treaty of Maastricht introduced the euro as the single currency of most member states of the European Union (EU). It introduces the main theories used in dealing with the monetary integration of Europe and provides the institutional and global context in which the discussions took place. It analyzes the different types of monetary integration that Europe used and debated, including the use of the unit of account, the debate over the introduction of a parallel currency, the exchange rate coordination, and the creation of a single currency. It finally presents the different phases of the creation of the euro.

Keywords

European Unit of Account (EUA) · Exchange Rate Mechanism (ERM) · European Monetary System (EMS) · European Currency Unit (ECU) · Parallel currency · Euro

Introduction

Europe's quest for the creation of a single currency is by all accounts an unprecedented one. Historically, currencies have been backed by a state, whether a small unitary state or a federation. The euro, created in 1999, is a currency without a state. The European single currency thus poses many challenges to the historian wishing to understand what peculiar forces drove the euro's unusual constitution.

As this is a handbook on the history of money, this chapter looks exclusively at the currency aspect of European monetary integration. The economic dimension will only occasionally be mentioned for a fuller account see (Mourlon-Druol 2018). The chapter first recounts the main theories that provide useful background to understand the debates about currency integration in Europe; then it sets out the institutional and global economic and financial contexts in which the debates took place, the four different types of monetary integration that were discussed in Europe, and finally the creation of the euro.

What does "European monetary integration" mean? What is "Europe" in the context of monetary integration? The expression traditionally covers Western European countries, thus excluding the USSR and Eastern European countries under Soviet influence. "Europe" focuses on the member states of the European Economic Community (EEC), founded in 1958 by the Treaty of Rome and transformed into the European Union (EU) in 1992 by the Treaty of Maastricht.

What is "monetary?" Money has three commonly accepted functions. Money is a means of exchange, a unit of account, and a store of value. A "unit of account" means that money is used as a common measure to indicate the value of goods and services in an economy. A "means of exchange" reflects the fact that the use of money solves the issue of the lack of coincidence of wishes. A "store of value" underlines the fact that money is a safe value. Monetary integration, in the European context of multiple nation-states, therefore includes important developments about the use of a single unit of account – but not yet single currency – across the EEC. The unit of account was a critical tool for the functioning of the EEC, with regard to the common budget and the running of specific common policies that required a financial instrument for the cross-comparison of prices.

Finally, what is "integration?" In this chapter, for the sake of simplicity, "integration" will be used as a catchword that encompasses the meanings often attributed to "cooperation" (Cooper 2006). "Integration," in a European context, involves sensu stricto, the transfer of competences into some sort of nonnational executive body. This process is also known as supranational integration. Because we know where the story of European monetary integration ended, we tend to use the word anachronistically and superimpose a number of preconceptions of the 1990s to much different contexts and ambitions. As a consequence, the use of the word "integration" tends to leave aside the many alternative options that were explored but did not materialize to achieve European monetary integration (see section "The Creation of the Euro").

Monetary Theories and European Integration

In thinking about European monetary integration, three sets of ideas regularly come back in the debates: the relationship between money and the state, the "economists" versus "monetarists" wrangle, and the theory of optimum currency areas (OCA). This section examines them in turn.

The Relationship Between Money and the State

Traditional thinking about money holds that the creation of currency is the domain of the state. The influential work *The State Theory of Money* of German economist Georg Friedrich Knapp established the chartalist school of monetary theory. This school of thought holds that government, rather than spontaneous relations of exchange, can issue money (Knapp 1924). In that sense, the monetary integration of the EEC represents a novel way of issuing money, through an independent and supranational central bank, the ECB, which is itself part of a highly complex institutional structure and judicial order, neither fully federal nor simply intergovernmental, the EEC/EU. As the then president of the ECB Wim Duisenberg put it in 2002, the euro "is not backed by the durability of the metal or by the authority of the state" (Duisenberg 2002).

Contemporary discussions have regularly taken up this debate. Paul de Grauwe, for instance, famously quipped that "the euro is a currency without a country. To make the euro sustainable a country will have to be created" (De Grauwe 2013, 25). But in the run up to the creation of the euro, the topic was less central. Some policymakers, often federalists, did envisage the creation of a single currency as part of the broader development of a full-fledged European federation. More often than not, however, monetary integration remained confined to technical discussions, in spite of its major political implications. This is partly due to the fact that monetary affairs were already politically very sensitive, and technically very difficult to agree upon, and policymakers preferred dealing with one issue at a time.

The Debate Between the “Economists” and the “Monetarists”

One long-standing theoretical opposition about the best way to achieve Economic and Monetary Union runs through the history of European monetary integration from the 1960s until the Treaty of Maastricht and under different guises even until the present day, namely, the opposition between the so-called economists and the so-called monetarists. Their opposition is related to the strategy to adopt to reach the goal of the creation of a single currency in the EEC/EU. According to the “economists,” monetary integration in Europe could only be achieved after the EEC member states’ economies would have converged. The economist approach was also dubbed the “coronation theory,” in that it was only after a long period of preparation that a king or a queen was eventually crowned. According to the “monetarists,” the introduction of a single currency in Europe would per se lead to the economic convergence of the member states taking part in the initiative. This brand of monetarism is not to be confused with Milton Friedman-inspired monetarist thinking. “Economists” were therefore reluctant to agree upon any advance in monetary integration and financial risk-sharing so long as EEC member states’ economies had not yet converged. “Monetarists,” on the opposite, argued that EEC member states’ economies would only converge once European monetary integration would have been fully achieved. The differences between economists and monetarists were often blurred, as both camps held valid points. To simplify, West Germany, Denmark, and the Netherlands tended to be described as economists, while France, Italy, and the European Commission tended to be presented as monetarists.

The economist vs monetarist wrangle was an important one in the debates about monetary integration in Europe, as any change was suspended to its resolution. As detailed in section “The Snake, 1972–1978” “economists” adjourned any reform of the EEC’s exchange rate system until EEC member states’ economies had converged further, while “monetarists” called for more immediate monetary integration. The economist vs monetarist wrangle survived until the present day, albeit under a different form (Mourlon-Druol 2014). Many Eurozone members still oppose greater financial burden-sharing in the Eurozone until political union has been achieved, while some other members would like burden-sharing to happen immediately for the European monetary union to be sustainable.

The Theory of Optimum Currency Areas (OCA)

Finally, European monetary debates often refer to the so-called OCA theory. OCA theory originates in an eponymous article written by Canadian economist Robert

Mundell in 1961 (Mundell 1961). Mundell identified two factors which he considered necessary for a "currency area," that is, a group of countries sharing the same currency, to be "optimal," that is, not to produce any loss of well-being. These two factors were the free movement of labor and capital. Subsequently, other economists revised and refined Mundell's framework and added new criteria to the list of elements that an OCA should fulfill. To name but a few, these criteria were the openness of the economy (McKinnon 1963), the diversification of production (Kenen 1969), the financial dimension (Ingram 1969), the convergence of inflation rates (Haberler 1970; Fleming 1971), and the homogeneity of preferences within the zone (Kindleberger 1986).

Few perfect OCAs exist at all in the world, and the influence of the OCA school of thought on European monetary discussions is unclear and often exaggerated. If it is true that some European policymakers read and took into consideration OCA-related discussions, it is difficult to find direct causal links between the development of the OCA theory and the thinking about EMU. The so-called OPTICA reports produced by a group of academic economists were one of these exceptions: OPTICA stood for OPTImum Currency Area (Optica 1976, 1977). But the OCA theory was and still is frequently used as an analytical framework to analyze the development, and travails, of the European single currency.

The Institutional and Global Context of European Economic and Financial Integration

Discussions about the monetary integration of Europe occurred in specific contexts: the institutional framework of the European Economic Community (EEC) and the evolution of the EEC in the wider framework of economic and financial globalization. Both aspects are analyzed in turn in this section.

European Monetary Integration in Europe at the End of the Second World War

Before moving to the institutional and global context in which European monetary integration developed, it is first necessary to recall the situation in the immediate postwar period. European monetary relations led to many debates about what institutional framework should govern them, well before the creation of the euro. Even before the creation of the European Economic Community in 1957, currency relations occupied a central place in European policy discussions.

The very basic question of currency convertibility – rather than any more ambitious plan for monetary integration – dominated the immediate postwar period in Western Europe (Eichengreen 1993, 1995). In 1945, European countries were constrained to trade with other countries through bilateral arrangements. Any deficit had to be offset by a surplus; trade was guided by outstanding debts, and based on US dollars, which European countries lacked. In July 1950, the Organisation for European Economic Cooperation (OEEC, inherited from the Marshall Plan) agreed to create the European Payments Union (EPU). The EPU created a multilateral system of payments replacing the bilateral payment agreements. Only a multilateral system would be able to relaunch the European economy. Each country accumulated its deficits and surpluses with all other countries into one central account with EPU, which was debited or credited by the combined net result of all intra-European transactions. This system allowed countries not to be concerned about a deficit with some countries, since this deficit could be offset by a surplus with some other countries into the overall EPU account on a monthly basis. EPU thus removed bilateral bargaining, reduced transaction costs, and restored multilateral trade in Europe. EPU functioned from July 1950 until December 1958. EPU was of course not about creating a single currency in Europe, but it was an unavoidable stepping stone toward reconstructing a functioning European financial system and gave birth to the first reflections about the monetary organization of Europe.

The Institutional Context: The European Economic Community and Monetary Integration

The Treaty of Rome did not foresee the introduction of a single currency in the EEC. The Treaty of Rome's provisions only indicated that individual member states should consider their exchange rate as a "matter of common concern" (Article 107) and that each member state should maintain "confidence in its currency" (Article 104). Appropriate monetary coordination among member states should prevent any problem arising. This was the only way in which monetary affairs were included in the Treaty of Rome. The silence of the EEC's founding treaty on monetary integration stemmed from the fact that monetary relations were not yet really a cause for concern, since there existed a functioning international monetary system. Some policymakers such as Robert Marjolin or Robert Triffin did think that creating a monetary union in the long term would be a logical move for the EEC, given the inherent weaknesses of the Bretton Woods system, and/or the need to protect the European common market (Dyson and Maes 2016). But this did not translate into the quasi-constitutional framework of the EEC treaty in 1958.

If the Treaty of Rome did not set out in detail a plan to introduce a single currency, the EEC's founding treaty included three institutions that would be central to European monetary cooperation: the Council of Ministers, the European Commission, and the Monetary Committee. The Council of Ministers of the EEC brings together the relevant ministers of each EEC member state according to the topic tackled. A specific meeting is devoted to economics and finance – hereafter, the Finance Council – which gathers roughly once a month. All issues relevant to these policy areas are discussed during a council meeting. The Council of Ministers is an intergovernmental institution in which each EEC member state has one vote (qualified majority voting has been progressively introduced in some policy areas in the EEC/EU).

Article 105 of the Treaty of Rome outlines the creation of a Monetary Committee. The Monetary Committee was the regular institution to discuss currency-related

Table 1 List of European commissioners in charge of "economic and financial affairs" (renamed "economic and monetary affairs" in 1999 and then "economic and monetary affairs and the euro" in 2011) since 1957

1958–1967	Robert Marjolin
1967–1973	Raymond Barre
1973–1977	Wilhelm Haferkamp
1977–1985	François-Xavier Ortoli
1985–1995	Henning Christophersen
1995–1999	Yves-Thibault de Silguy
1999–2004	Pedro Solbes
2004	Joaquin Almunia
2004	Siim Kallas
2004–2010	Joaquin Almunia
2010–2014	Olli Rehn
2014	Jyrki Katainen
2014–present	Pierre Moscovici

issues relevant to the functioning of the EEC. Two members of each EEC member state take part to the meetings (one representative of the central bank, usually the deputy head, and one representative of the finance ministry or equivalent), as well as two members chosen by the European Commission. The Monetary Committee thus allowed the representation of both economic and monetary policymakers.

The European Commission, set up by the Treaty of Rome, is one of the central institutions of the EEC. The commission is administratively divided into several "Directorate Generals" – their number evolved in the history of the Commission – with DG II always being devoted to "economic and financial affairs" (and housed the secretary of the Monetary Committee). One of the commissioners is specifically in charge of economic and financial affairs (Table 1).

Although not envisaged in the Treaty of Rome, two further institutions played a central role in European monetary integration: the Committee of Central Bank Governors, created in 1964, and the European Council, created in 1974.

In April 1964, a decision of the Council of Ministers created the Committee of Governors of the central banks of the EEC – hereafter Committee of Governors (James 2012). The governor of each central bank, as well as one or two alternates, took part in the meetings. The Committee of Governors included all EEC member states, regardless of their belonging to an EEC exchange rate system. The Bank for International Settlements (BIS), in Basel, provided for the Committee of Governors' secretariat, as well as its regular meeting place.

In December 1974, EEC heads of state and government decided to create the European Council, that is, the regular meeting of EEC leaders, three times a year and whenever necessary, to discuss current problems (Mourlon-Druol 2010, 2016). Confronted with international problems that required a coordination at European level – such as the oil crisis, recession, international monetary instability – EEC leaders realized that there existed no EEC institutional mechanism allowing them to meet on a regular basis. The creation of the European Council aimed to fill that institutional vacuum. The European Council played an often critical role in the evolution of European cooperation and integration broadly speaking. Since the European Council gathered the most powerful administrative level of the EEC's member states, it was able to provide new political impulses necessary for the development of new projects, such as the creation of the EMS, and the euro. The European Council also reflected the disagreements among EEC member states and their inability to reach satisfactory and comprehensive policy agreements, as the Eurozone crisis made plain.

Further to this, the European Monetary Cooperation Fund (EMCF) was created in April 1973 as part of the implementation of the Werner plan. The ambitions of the EMCF were not really high, and it merely limited itself to help in the administration of the European exchange rate system. But the main political and technical discussions remained in the remit of heads of government, finance ministers, and central bankers. When the EMS was created, a European Monetary Fund was also envisaged (and would have replaced the EMCF) but was never established. Discussions about the creation of an EMF have continued until the present day.

The Economic and Financial Context: Europe in a Globalizing World

European monetary integration did not develop in a policy vacuum. Two aspects critically influenced the monetary unification of Europe: the evolution of the international monetary system, and the development of the EEC common, and then single market.

The Evolution of the International Monetary System

Until the late 1960s, the Bretton Woods system provided an international monetary cocoon in which European currency relations were largely protected from global turbulence. Once the first cracks and eventual breakdown of the Bretton Woods system occurred, the question of intra-European currency stability came out in the open. For many European policymakers, one of the appeals of European monetary unification was to contribute to the reform of the international monetary system, challenge the domination of the dollar, and thereby remedy the negative effects of the US currency's domination. Throughout the 1960s, 1970s, and 1980s, the fluctuations of the dollar have thus served as a catalyst to debate European monetary integration (Grygowski 2009).

Delegates from 44 Allied nations met in the Mount Washington hotel in Bretton Woods, New Hampshire, from 1 to 22 July 1944. The interwar international system was generally perceived as a failure: the Great Depression contributed to increase international tensions that escalated into war. The delegates of the Allied nations meeting in Bretton Woods thus sought to establish a new international system that drew on the lessons from the interwar period and would support postwar reconstruction, international cooperation, and international trade. The delegates agreed to set up a new fixed but adjustable exchange rate system in which all currencies would be pegged to the US dollar – with a 1% fluctuation margin, but countries could ask authorization to the IMF for a 10% devaluation – and only the US dollar would be convertible into gold at a fixed price of 35 dollars per ounce. Two new international institutions were created. The International Monetary Fund (IMF), established in 1945, in order to monitor the functioning of the exchange rate system and more generally to encourage international monetary cooperation and guarantee international financial stability. Also established in 1945 was the International Bank for Reconstruction and Development (IBRD), now part of the World Bank Group, in charge of supporting lending for postwar reconstruction and to less developed countries. The exchange rate system effectively entered into function in 1958, when currencies became fully convertible. Before that date, many countries maintained exchange controls, which made that the free convertibility of one currency into another set out in the Bretton Woods agreement was not implemented.

The ups and downs of the dollar and more broadly the problems in the international monetary system importantly influenced European monetary discussions. In the late 1960s, when the first problems in the Bretton Woods system became obvious, European monetary integration became more urgent (see section "The Snake, 1972–1978"). In the late 1970s, when the dollar depreciated, EEC members – and the German government in particular – feared that this would lead to import inflation to Europe. This fear motivated German chancellor Helmut Schmidt to take the lead in proposing a European response to US policy, which later materialized in the creation of the EMS. In the mid-1980s, the appreciation of the dollar conversely raised concerns in Europe and highlighted again the need to coordinate a response. This time, global discussions about establishing a system of target zones were first privileged with the Louvre accord in 1987. But soon thereafter discussions were oriented toward Europe with the appointment of the Delors committee (see section "The Delors Report"). European monetary integration thus often came to represent a regional European solution to a global problem.

European Monetary Integration and the Single Market

The development of a barrierless internal market in the EEC fed another strand of reflection for the evolution of intra-European currency relations. The Treaty of Rome set out to create a common European market with no tariffs. Initial market integration focused on the free circulation of goods, and the first step accordingly focused on the removal of tariffs imposed by EEC member states. The abolition of those tariffs however made progressively plain that there existed other types of barriers to trade, called non-tariff barriers (NTBs). NTBs became the focus of policy attention from the late 1970s and most importantly with the single market program of the 1980s up until the present day. NTBs relate to any type of qualitative barrier such as an excessive administrative burden, or a regulation, and that discriminates between goods produced nationally and imported goods (with a view to advantage national production).

Currency relations fit into these policy discussions insofar as monetary fluctuations could be considered as a potential barrier to trade. For instance, a devalued currency in one country can discourage from buying goods in a country with a higher currency value as these goods will become comparatively more expensive. In that sense, if the states belonging to the single market were sharing a single currency, an additional NTB would be removed. In the late 1950s and 1960s, European policymakers did not mention NTBs yet (this came later in the 1970s), but some of them already pointed at the fact that the common market could, and perhaps should, logically be transformed into an EMU to function properly. Another, related line of argument was that the sharing of a single currency, with the macro- and microeconomic benefits it implied, would increase trade among participating countries (Rose 1999; Commission 1990). In the 1980s, Tommaso Padoa-Schioppa famously set out his "inconsistent quartet" (Padoa-Schioppa 1994). The Italian economist argued that among the following four policy options, free trade, full capital mobility, fixed or managed exchange rates, and monetary policy autonomy, one had to give, since not all could coexist at the same time.

Dealing with Surpluses and Deficits

In the context of the EEC common/single market and intra-EEC currency relations, the current account deficits and surpluses of individual member states could easily create difficulties. In the absence of free capital flows, deficit countries were faced with either the implementation of deflationary policies and tax rises to correct the balance – which was obviously unpalatable to the electorate – or the hope that surplus countries (chiefly Germany) would start expansionary policies, which was also unpalatable to an electorate that feared inflation. Monetary union could offer a way out of this political dilemma. Difficulties linked to the evolution of current accounts were important in the reflections about the reform of the snake (see section "The Snake, 1972–1978" below). Harold James has shown that moments of tension in intra-EEC currency relations since the 1950s closely corresponded to persistent German current account surpluses and that moments of "relaxation" corresponded to German current account deficits (James 2012). Discussions on the evolution of European monetary integration thus occurred against the backdrop question of how to deal with the persistent surpluses or deficits of some EEC member states.

A Typology of Monetary Integration in Europe

In presenting European monetary integration, very different forms of monetary cooperation, such as exchange rate coordination and Economic and Monetary Union, are often referred to as if they were interchangeable. Exchange rate coordination and EMU however entail different realities. Exchange rate coordination is concerned with the fluctuation of the value of currencies internationally, while EMU is concerned with the creation of a single currency to be shared among different member states. Similarly, a traditional confusion is made between a common currency and a single currency. Both are often used interchangeably in writing about EMU. One substantial difference exists between the two, however. If both are shared between different countries, a single currency is the only one in circulation, while a common currency may exist alongside other currencies.

This section distinguishes between four different types of monetary integration that were discussed in the EEC/Western Europe since 1945 and sometimes overlapped. It starts with the most basic one, namely, the European Unit of Account (EUA). It then looks into the question of the creation of a parallel currency – sometimes via the EUA – as an alternative strategy to the mainstream discussions about EMU that was eventually not followed but regained a degree of prominence in public debates after the creation of the euro. Third, it moves to the attempts at coordinating exchange rates in Europe, that is, the snake, and the EMS. Finally, it scrutinizes the two different plans that were advanced for the creation of the European single currency, namely, the Werner report (1970) and the Delors report (1989).

The European Unit of Account

The creation and evolution of European units of accounts a technical but critical aspect of European monetary integration. Some policymakers, whether from EEC institutions or at the national level, viewed the development of European units of account as a way to promote a European monetary identity. According to that view, a monetary unit would allow to materialize European integration.

The unit of account was not actually coined but only used for bookkeeping/accounting purposes. The European Payments Union created a European Unit of Account (EUA) in July 1950. The value of this EUA corresponded to the dollar's worth of gold under the original agreement of the Bretton Woods system, that is, 35 dollars per ounce of gold. With the establishment of the common agricultural policy, the EEC decided to use the unit of account to fix guaranteed prices. The end of the Bretton Woods system rendered this meaningless as gold lost its role in the international monetary system. The EEC's unit of account was thus reformed in 1975, and a new EUA was introduced, based on a basket of EEC currencies (Table 2). The EUA was first used for EEC budgets in 1978.

Several proposals were made in the 1970s to give a greater role to the European unit of account in the functioning of the EEC's exchange rate system (Mourlon-Druol

Table 2 Composition of the EUA in April 1975. (Source: Council Decision 75/250/EEC of 21 April 1975)

Currency	Amount of currency	Weight of currency (%)
Belgian franc	3.66	9.1
British pound sterling	0.0885	13.6
Dutch guilder	0.286	10.5
Danish krone	0.217	3
French franc	1.15	19.8
German mark	0.828	33
Irish pound	0.00759	1.1
Italian lira	109	9.5
Luxembourg franc	0.14	0.4

2012). Overall, these proposals aimed at rendering the European exchange rate more "symmetric," by spreading out more evenly the burden of adjustment between surplus and deficit countries. The idea was that the reference point would no longer be bilateral rates but would instead be to the EUA itself. This was meant to be a better indicator since the EUA was a multicurrency basket. The idea of a greater use of the EUA in the EEC exchange rate system never managed to reach a consensus among EEC members. At first sight, the introduction of the ECU in the EMS looked like a materialization of this line of thinking, but in practice the role of the ECU was limited.

The Debate Over the Creation of a Parallel Currency

Currency integration through the narrowing of exchange rates was the most famous strategy discussed among European policymakers and economists, but not the only one. The opportunity of introducing a "parallel" currency was also frequently debated, although primarily within financial and academic circles. The question of the parallel currency earned real fame in the 1980s when the UK government devised its alternative proposal to EMU based along these lines. But proposals for a parallel currency as a strategy for monetary integration in Europe had been advanced several times as early as in the 1970s.

Private banks and international institutions, rather than individual governments, have been precursors in advancing proposals for the creation of multicurrency units in Europe. Such units of account came into being against the backdrop of the international currency instability of the end of the Bretton Woods system. These units were developed as a way to hedge against increasingly volatile exchange rates, particularly within Europe, and in a transatlantic context. The EIB issued a bond in European Composite Unit, Eurco, in 1973 (Table 3). Before that, Sigmund Warburg was the first to lead such a financial innovation with the issuing of the first Eurobonds (Ferguson 2009).

1975 was the year when different initiatives supporting the introduction of a parallel currency in the EEC came out into the open (Mourlon-Druol 2012, 87–90). The most famous was the so-called All Saints' Day Manifesto signed by nine

Table 3 Composition of the Eurco in 1973

Currency	Amount of currency
German mark	0.9
French franc	1.2
British pound sterling	0.075
Italian lira	80
Dutch guilder	0.35
Belgian franc	4.5
Danish krone	0.2
Irish pound	0.005
Luxembourg franc	0.05

economists and published in *The Economist* on 1 November 1975 (The Economist 1975). Shortly after, another source of support for the idea of a parallel currency came from the series of OPTICA reports published in 1976 and 1977 (The Optica Report 1975, 1976). Both reports also advocated the introduction of a parallel currency and indeed partly involved the same academic economists.

The parallel currency approach was based on an entirely different set of assumptions than other approaches to European monetary integration. Advocates of the introduction of a parallel currency took for granted the failure of the Werner-style monetary integration strategy. They considered that monetary integration in Europe could only happen through market forces, rather than the narrowing of exchange rate fluctuations. The parallel currency, conceived as a basket of currencies with constant purchasing power, would gradually become more attractive than national monies and thus force the latter out of the market.

Much later, at the time of the Treaty of Maastricht negotiations, the UK government put forward a proposal for the introduction of a parallel currency in the EEC (Dyson and Featherstone 613–615). This was a counterproposal to the dominant option to create a single currency. But the British proposal arrived late, in the autumn of 1989, at a time when the Delors committee had already ruled out alternatives to the option of a single currency, and established momentum for EMU.

The option of introducing a parallel currency has resurfaced more recently in the context of the crisis of the euro area. The idea seems to have the same features as in the past: intellectually attractive, but practically impossible to implement (Cohen-Setton 2015).

European Exchange Rate Systems: Snake and EMS

Two types of exchange rate systems, very close to each other in their functioning, were in operation among most EEC member states and some non-EEC states from the early 1970s until the creation of the euro.

The Snake: 1972–1978

In August 1971, US President Richard M. Nixon unilaterally decided to suspend the convertibility of the US dollar into gold. Nixon declared that the USA would let the dollar freely float and announced that it was also imposing a 10% import surcharge in order to protect US-based products. The so-called closing of the gold window put a de facto end to the Bretton Woods system. After Nixon's decision to "close the gold window," the Group of Ten – that is, the group of countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the UK, and the USA) that agreed to participate in the IMF's General Agreements to Borrow (GAB) – adopted the Smithsonian Agreement in December 1971. The Smithsonian Agreement created bands of fluctuation of 2.25% related to each currency's central rate against the US dollar. This system created a "tunnel" in which European currencies could fluctuate. Further discussions took place among the Group of Ten in the following years, until the Jamaica Agreements signed in January 1976 eventually approved the end of the Bretton Woods system and allowed generalized floating. The transition to the post-Bretton Woods system between 1971 and 1976 represented an important moment for EEC currency cooperation as it forced the EEC to revise the basis on which its monetary relations were organized until then. The breakdown of the Bretton Woods system indeed put an end to the international monetary cocoon in which European currency relations had been so far developing.

Paradoxically, the end of the Bretton Woods system rendered regional monetary cooperation in Europe more urgent and more difficult (Ungerer 1997). European monetary cooperation became more urgent as the disappearance of the international monetary cocoon left Europeans with no functioning currency system. But European monetary cooperation became more difficult because the disappearance of the international monetary cocoon revived the disagreements about how to organize currency relations in a European setting. It is true that the Werner plan was still being implemented, but the Werner plan's implementation had been envisaged within the framework of a functioning international monetary system. As part of the implementation of the Werner plan, and as the first step on the way to the gradual narrowing of exchange rates in the EEC, the so-called European currency snake was adopted on 21 March 1972. The Council of Ministers agreed that fluctuation margins between EEC currencies should be limited to 2.25%.

But it became quickly clear that the snake was not an exchange rate system adapted to all EEC member states. Over some periods (see Table 4), the snake barely counted five EEC participants only: Germany, the Netherlands, Luxembourg, Belgium, and Denmark. The irony was also that many non-EEC members participated in what was meant to be an EEC exchange rate system (Norway, Sweden, Switzerland considered association). The majority of the biggest EEC member states, including two founding members, were out of the snake: Italy, France, and the UK. If the UK (in June 1972) and Italy (February 1973) were quickly forced out of the snake and never managed to get back in, the French government kept trying to rejoin the snake after it was forced out (in January 1974, rejoined in July 1975) but had to leave again (in March 1976). As an EEC-wide exchange rate mechanism, the snake thus did not appear well adapted to the different economic realities of each EEC member states.

Vivid discussions about this state of affairs ensued until the creation of the EMS and often revolved around the lines of the economist versus monetarist divide (see section "The Debate Between the 'Economists' and the 'Monetarists'"). Was it the snake that was ill-adapted to the economic reality of some EEC member states? Or was it some EEC member states that did not take the necessary steps to align their national economic policymaking with the constraints of the snake? The non-snake members argued the latter, while the snake members argued the former. Part of the explanation comes from the fact that the adjustment mechanism of the snake automatically fell on weaker currency countries. This is why weaker currency countries often advocated, as mentioned in sections "The European Unit of Account" and "The Debate Over the Creation of a Parallel Currency," the use of a composite currency unit – the EUA – as the reference point of the exchange rate system, so as to spread the burden more evenly among participants.

Table 4 Entries and exits from the snake and then ERM, 1972–1999

April 1972	Snake enters into force
May 1972	Denmark, Ireland, and the UK join the snake
	Norway associated with the snake
June 1972	Ireland and the UK, and then Denmark, leave the snake
October 1972	Denmark rejoins the snake
February 1973	Italy leaves the snake
March 1973	End of the tunnel. Sweden associated with the snake
January 1974	France leaves the snake
July 1975	France rejoins the snake
March 1976	France leaves the snake. End of the narrower margins among Benelux currencies
August 1977	Sweden leaves the snake
December 1978	Norway leaves the snake
March 1979	EMS enters into force
June 1989	Spain joins the ERM
October 1990	The UK joins the ERM
April 1992	Portugal joins the ERM
September 1992	Italy and the UK leave the ERM
August 1993	Agreement to widen the ERM band of fluctuation to 15%
January 1995	Austria joins the ERM
October 1996	Finland joins the ERM
November 1996	Italy rejoins the ERM

The European Monetary System: 1979–1992

After several months of negotiation, the EEC heads of state and government agreed on the EMS at the Brussels European Council in December 1978 (Mourlon-Druol 2012). The UK government had made plain that it did not intend to participate in the Exchange Rate Mechanism (ERM) but that it would formally belong to the EMS. The Irish and Italian governments reserved their decision, as they were not sure to be able to participate without further economic support. After additional negotiations involving bilateral loans and the setting of preferential interest rates for European Investment Bank's (EIB) loans, both governments agreed to participate in the ERM. The EMS entered into force in March 1979.

The EMS negotiations essentially centered on the role to be given to the ECU in the exchange rate system. As mentioned above, weaker currency countries wished that the EUA should be given a greater role of anchor of the system, while stronger currency countries (snake members) did not. The view of the latter prevailed, but the EUA was formally given centrality in the system. Part of this centrality came from a rechristening of the unit of account into European Currency Unit, which pleased the French government in particular as the acronym was reminiscent of the name of an old French currency and provided more visibility to the unit of account.

It must however be noted that the ECU acronym has been in use since the early 1970s, both among European institutions and private companies. In a 1974 speech, President of the European Commission François-Xavier Ortoli was the first official to draw the conscious parallel between the acronym and the old French currency. Second, the ECU was used to devise a bilateral grid of parities (so the ECU was not used as direct reference point as the weaker currency countries hoped). Third, the EMS introduced a so-called divergence indicator, in order to spread the burden of adjustment more fairly between weak and strong currency countries. The aim of that indicator was to identify the currency that was actually diverging from the ECU, whether upward and downward. The divergence indicator remained however toothless. Indeed, the new ability to pinpoint at the diverging currency was not accompanied by any automatic measure of adjustment. Only consultations among central banks were anticipated. Finally, after 1979, the use of the ECU in private markets developed and supported the discussions about the possibility of transforming it into a parallel currency.

In sum, the EMS was not very different from the snake. The value of the ECU introduced in 1979 was the same as that of the EUA in 1975 (see Table 2). The marginal modifications mentioned above, as well as an increase in the support facilities available, made it look like a new mechanism. What made a real difference was the new economic policy consensus that was sustaining the EMS, especially between the French and German government that now both aimed at fighting inflation and follow stability-oriented economic policies (McNamara 1998).

In spite of the lack of important novelty in the EMS, the first years of functioning of the new EEC exchange rate system appeared successful, in the sense that no major realignment occurred. The new expansionary economic policy that the French government implemented after the election of François Mitterrand in 1981 soon threatened the functioning of the EMS, as the French franc's participation was uncertain. But when the French government decided to reverse the course of its economic policy in March 1983, the EMS was eventually reinforced (Duchaussoy 2011). Faced with a choice between continued participation in the EMS, and its expansionary economic policy, the French government chose the former, which de facto reinforced the EMS as a tool for European monetary integration.

This reinforcement of the credibility of the EMS did not remove the inherent problems of the European exchange rate system. In the first years of functioning of the EMS, European policymakers and central bankers in particular discussed the possible improvements that could be brought to the ERM. The so-called Basle-Nyborg agreement concluded on 12 September 1987 materialized progress on a long-term debate about the use of intramarginal interventions in the EMS (James 2012). Such interventions were aimed at anticipating that a currency reached its fluctuation limit but were not included in the EMS agreement. The Basle-Nyborg agreement formalized that the Monetary Committee and the Committee of Governors would monitor policy inconsistencies among EMS members using a set of indicators and projections (surveillance), as well as officialized the possible use of intramarginal interventions.

Plans for the Creation of a Single Currency in Europe

Two famous reports set out in detail a plan to introduce a single currency in Europe: the Werner plan in 1970 and the Delors report in 1989 (James 2012; Marsh 2009). Both reports are often compared with each other, since Jacques Delors himself claimed that his report was consciously inspired from the earlier Werner plan.

The Werner Report

The EEC heads of government meeting at The Hague Summit in 1969 decided to prioritize the creation of an EMU and tasked the Luxembourg prime minister Pierre Werner to chair a group that would devise a roadmap to achieve this goal (Danescu and Muñoz 2015). The so-called Werner committee (Table 5), composed of the presidents of the relevant EEC committees, met 14 times between March and October 1970 and released its final report on 8 October 1970. The work of the Werner committee epitomized the opposition between the "economist" and "monetarist" schools of thought (see section "The Debate Between the 'Economists' and the 'Monetarists'"), and the final report reflected a compromise between them (also called the "parallelist approach"). The Werner report set out three stages for the completion of EMU, but only the first stage was described in detail. The report did not set out how the political-institutional dimension should be implemented.

By adopting a resolution on "the achievement by stages of EMU" based on the Werner report, the Council of Ministers officially set in motion the process (Council 1971). As mentioned above, this processed famously materialized in the creation of the European currency snake in March 1972 and in the creation of the EMCF in April 1973. But the difficulties linked to the end of the Bretton Woods system revived tensions about how to reach EMU and eventually led to the unofficial abandonment of the implementation of the Werner plan in early 1974.

Table 5 Members of the Werner committee

Name	Capacity
Hubert Ansiaux	Chairman of the Committee of Governors and Governor of the National Bank of Belgium
Gerard Brouwers	Chairman of the Conjunctural Policy Committee and State Secretary in the Dutch Ministry of the Economy
Bernard Clappier	Chairman of the Monetary Committee and Deputy Governor of the Banque de France
Georges Morelli	Coordinator of the Group's secretariat and Commission official
Ugo Mosca	Director-General for Economic Affairs, DG II, European Commission
Johann Baptist Schollhorn	Chairman of the Medium-Term Economic Policy Committee and State Secretary in the Federal Ministry of the Economy
Gaetano Stammati	Chairman of the Budgetary Committee and Treasurer-General in the Italian Ministry of the Treasury
Pierre Werner	Chairman of the Group. Prime minister and finance minister of Luxembourg

The Delors Report

Meeting in Hanover in 27–28 June 1988, the EEC heads of government decided to revive the debate about creating an EMU. The European Council tasked the commission's president Jacques Delors with the preparation of a roadmap to achieve EMU (James 2012). Unlike the Werner committee, the so-called Delors committee (Table 6) was composed of all EEC central bankers, plus a small number of additional economic experts. Delors drew what he perceived as the lesson of the Werner plan's failure: the noninvolvement from the start of those officials – the central bankers – who were less keen to advance monetary integration. Further to this, Delors was careful to involve the central bankers in their personal capacity, not as representatives of their institution. Finally, the group's work was based on consensus, confidentiality, and mutual trust, which allowed the final report to propose the creation of an EMU, in spite of the presence of central bankers who could originally be assumed to be staunch opponents to it (in particular governor of the Bank of England Robert Leigh-Pemberton and president of the Bundesbank Karl-Otto Pöhl).

The final report, released in April 1989, bore some resemblance with the Werner report, in that it recommended the creation of an EMU in three stages. But the Delors report was different in substance, at least in two respects. First, the report did not set out a clear timetable for Stages 2 and 3. Too strict a timetable for completion was interpreted as one of the reasons for the failure of the Werner plan, and the committee wished to avoid falling into that trap. Second, the report attributed less space to the economic dimension of EMU and in particular the social aspects. The members of

Table 6 Members of the Delors committee

Name	Capacity
Frans Andriessen	Commissioner in charge of agriculture
Miguel Boyer	Independent expert, former Spanish finance minister
Demetrios J. Chalikias	Governor of the Bank of Greece
Carlo Azeglio Ciampi	Governor of the Bank of Italy
Maurice F. Doyle	Governor of the Central Bank of Ireland
Willem F. Duisenberg	President of the Central Bank of the Netherlands
Jean Godeaux	Governor of the National Bank of Belgium
Erik Hoffmeyer	Governor of the Central Bank of Denmark
Pierre Jaans	Governor of the Monetary Institute of Luxembourg
Alexandre Lamfalussy	General manager of the Bank for International Settlements
Jacques de Larosière	Governor of the Bank of France
Robert Leigh-Pemberton	Governor of the Bank of England
Karl Otto Pöhl	President of the Bundesbank
Mariano Rubio	Governor of the Central Bank of Spain
José Alberto Tavares Moreira	Governor of the Central Bank of Portugal
Niels Thygesen	Danish economics professor
Gunter Baer	Rapporteur
Tommaso Padoa-Schioppa	Rapporteur

the committee tackled some of these broader issues but considered that they were not belonging to their competence remit.

The Creation of the Euro

If the Delors report set out in detail how a European single currency would be created, a political decision still needed to be agreed upon so that the single currency could eventually be adopted. This section first looks at the making of the Treaty of Maastricht, including the Intergovernmental Conference (IGC), the convergence criteria, the stages for the creation of the euro, and the German reunification and then moves on to the crises of the EMS in 1992–1993 that threatened the EMU process.

The Intergovernmental Conference, the Treaty of Maastricht, and German Reunification

The EEC heads of government endorsed the Delors report, but the creation of an EMU required a change in the treaties and thus the convening of an intergovernmental conference (IGC). The Strasbourg European Council of December 1989 agreed to convene the IGC, which began its works in December 1990 (Dyson and Featherstone 1999; James 2012). The Treaty of Maastricht was signed in February 1992 and entered into force on 1 January 1993.

The Treaty of Maastricht set out four convergence criteria to join the euro, related to price stability, government finances, exchange rate stability, and convergence of interest rates (Protocol No.13 2010). "Price stability" meant that for a period of 1 year before the examination of the situation of the candidate country, the inflation rate should not exceed 1.5% above that of the three best performing member countries. "Government finances" is the most famous part of the criteria and entails the provisions that deficits should not exceed 3% of GDP and debt 60% of GDP. "Exchange rate stability" refers to the respect of the ERM's fluctuation margins for the past 2 years prior to the examination of the candidate country (with no devaluation). Finally, "convergence of interest rates" means that "observed over a period of 1 year before the examination, a member state has had an average nominal long-term interest rate that does not exceed by more than two percentage points that of, at most, the three best performing member states in terms of price stability."

Building on the conclusions of the Delors report, the Treaty of Maastricht envisaged three stages for the creation of EMU. *Stage 1* (from 1 July 1990 to 31 December 1993) was mostly preparatory and included the improvement of economic convergence, the increase of cooperation among central banks, the completion of the freedom of movement of capital, and the free use of the ECU. *Stage 2* (from 1 January 1994 to December 1998) involved more concrete institutional steps, including the creation of the European Monetary Institute and the granting of independence to national central banks. *Stage 3* (from 1 January 1999) represented the final steps toward the creation of the single currency and included the creation of the European System of Central Banks and the European Central Bank to conduct a single monetary policy, the irrevocable fixing of exchange rates, the entry into force of the Stability and Growth Pact, and of course the introduction of the euro banknotes and coins.

The fall of the Berlin wall and the German reunification process encouraged the French government to seek a firmer timetable for the creation of EMU (Dyson and Featherstone 1999). It certainly did not initiate, however, the debate about the advantages and disadvantages of creating a single currency in the EEC. In the autumn of 1989, the process was already well in motion, and the issue was on the agenda for many years, if not decades. Convening the IGC and agreeing on a clear timetable for EMU however allowed to bind a reunified Germany to the EEC.

The Crisis of the ERM: 1992–1993

Just as EMU seemed on track, two severe currency crises hit the EMS in 1992 and 1993 (James 2012). Both originated in currency speculation and threatened the very existence of the European exchange rate system. They also laid bare the power of increased financial flows in a Europe where capital movements were now fully liberalized.

Currency speculation arose on fertile ground. No currency realignment occurred in the EMS between 1987 and 1992, while at the same time, a number of competitiveness indicators had begun to diverge significantly (Feiertag 2016). What served as a trigger for the speculative attacks was the difficult ratification process of the Treaty of Maastricht introducing the European single currency. In June 1992, the Danish electorate voted against the ratification of the Treaty of Maastricht. The result of the French referendum, to be held in September, was uncertain. Speculation mounted over the summer, in particular, against the British pound sterling and the Italian lira. On 16 September 1992, retrospectively called "Black Wednesday," speculators attacked the pound sterling. The level at which the pound joined the ERM in October 1990 had given birth to much debate. Given the volumes of financial transactions involved, the Bank of England could not counter the attacks, and the pound left the ERM.

Inauspicious economic figures in France in July 1993 gave birth to renewed currency speculation, this time against the French franc, and also the Belgian franc, the Spanish peseta, the Portuguese escudo, and the German mark. Faced with the inability to maintain the regular EMS parities due to the pressure of speculation, the Monetary Committee agreed to widen the margins of fluctuation of the ERM from +/−2.25% (or 6% for some members) to +/− 15%. These new bands allowed to render speculation ineffective as they were too large to be targeted but also showed that the EMS was effectively abandoned. As Karl-Otto Pöhl indeed anticipated in the discussions of the Delors committee, the EMS crises highlighted that in a European and global context of free capital flows, the EEC faced a binary choice: either opt for full floating or adopt a single currency. In the end, the EMS crises of the early 1990s thus reinforced European policymakers' determination to implement the latter.

Conclusions: European Monetary Integration After Maastricht

The monetary integration of Europe did not stop at Maastricht. If the Treaty signed in 1992 set out how the single currency would be created, the following three decades actually witnessed its inception in practice and revealed the strengths and weaknesses of the Maastricht construct.

The first 10 years of the euro proved successful on many counts. The introduction of a new single currency among eleven countries occurred smoothly, which was no small technical feat. On the whole, economic indicators tended to be positive, and even if this could not automatically be attributed to the euro, it contributed to create a sense that the single currency was a success and that the pessimistic forecasts that some economists had made before its creation were wrong.

Behind these positive economic indicators, some underlying weaknesses were being confirmed or emerging. The introduction of the euro was associated with an immediate adjustment of prices that gave birth to a lasting memory of sudden inflation caused by European monetary unification. The introduction of the euro supported a movement of capital from Northern European countries to Southern European countries. This movement could have allowed an economic adjustment between North and South. Instead, it proved to be nurturing some bubbles and did not lead Southern European countries to undertake some needed, and promised, structural economic reforms.

The outbreak of the so-called Eurozone crisis in 2008 and 2009 made plain the original weaknesses of the euro area (Mourlon-Druol 2014). The so-called Eurozone crisis started against the backdrop of the global financial crisis that severely troubled the international financial system. The crisis started in late 2009, when the new Greek government led by George Papandreou announced substantially revised figures for its deficit, from an estimation of 6–8% to 15.7%. Set aside the question of the failure to provide accurate figures, this revision casted doubt on the Greek government's ability to finance its deficit. This launched a series of bailout negotiations and spread fear about the ability of other countries – Portugal, Spain, Italy, and Ireland – to service their debt and deficit (Sandbu 2015).

The Eurozone crisis confirmed that the process of European monetary integration did not stop with the Treaty of Maastricht. In terms of monetary policymaking, significant policy changes have been put in place since the outbreak of the Eurozone crisis (Claeys 2017). The ECB developed new monetary policy operations, including the Securities Market Programme (SMP) in 2010 in order to buy sovereign bonds on secondary markets, the Long-Term Refinancing Operations in 2011 to support bank lending and liquidity, the Outright Monetary Transactions (OMT) in 2012 which was similar to SMP but with no ex ante quantitative limit, and the Public Sector Purchase Programme (PSPP), better known as "quantitative easing," in 2015. The ECB also developed a new role as supranational banking supervisor within the framework of the European banking union.

Finally, since 1999, the euro has enlarged several times (Table 7). Due to the Eurozone crisis, most attention and debate focused on the possibility of a Eurozone member departing the euro area. But in reality no single Eurozone member has left

Table 7 Enlargements of the Eurozone

1999	Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain
2001	Greece
2007	Slovenia
2008	Cyprus, Malta
2009	Slovakia
2011	Estonia
2014	Latvia
2015	Lithuania

yet, at least at the time of writing, and instead eight have joined. This certainly is one of the paradoxes of European monetary integration: it is heavily commented, challenged, and criticized; but it retains a strong power of attraction.

Cross-References

- ► International Monetary Regimes: The Bretton Woods System
- ► The Evolution of Monetary Policy (Goals and Targets) in Western Europe
- ► The Historical Evolution of Central Banking

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