Institutional Echoes: European Economic and Monetary Union in Comparative Context

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Abstract

Since its beginnings, scholars have been analyzing the historic precedent taken by the members of the European Union (EU) in creating an Economic and Monetary Union (EMU). However, EMU is not the first attempt at a monetary union in Europe. The classical gold standard created a fixed exchange rate between national currencies and gold (c. 1870-1914), and multinational monetary unions existed in Europe during the mid-to-late nineteenth century, including the Latin Monetary Union (1865-1920) and the Scandinavian Monetary Union (1873-1920). Yet, some scholarship argues that EMU has no historical equivalent and is, in fact, *sui generis*. This paper examines the question of whether the EMU is indeed *sui generis*, or if there are not only parallels to be drawn, but institutional echoes from previous monetary unions in Europe. I argue the scholarship on the EMU that assumes its "*sui generis*" character underestimates the institutional foundation previous monetary unions have provided, as well as the weaknesses that still persist in the EMU today. This paper explores the economic history of monetary unions since the mid-19th century in Europe, looking in particular at three former examples – the Latin Monetary Union, the classic gold standard, and the Scandinavian Monetary Union. The analysis focuses on the extent to which the three historical case studies can offer insight into EMU's legal mandate of financial stability, the creation of a centralized institution to coordinate monetary policy, and the persistence of institutional weaknesses including free-riding and moral hazard.

Keywords: monetary union, European Economic and Monetary Union, sui generis, institutions

Mark Twain said "History doesn't repeat itself, but it does rhyme" (as quoted in Fendel and Maurer 2015, 94). Since its beginnings, scholars have been analyzing the historic precedent taken by the members of the European Union (EU) in creating an Economic and Monetary Union (EMU).[1] However, EMU is not the first attempt at a monetary union in Europe. The classic gold standard created a fixed exchange rate between national currencies and gold (c. 1870-1914), and multinational monetary unions existed in Europe during the mid-to-late nineteenth century, including the Latin Monetary Union (1865-1920) and the Scandinavian Monetary Union (1873-1920). In addition, there are numerous monetary unions outside of Europe such as the CFA franc zone in western and central Africa and the Eastern Caribbean Currency Union; and examples of federal systems centralizing monetary policy during political union such as in the United States, Germany, and Italy. Yet, some scholars argue that EMU has no historical equivalent and is, in fact, *sui generis*. Barry Eichengreen (2008b, 1) states, "where history is useful is not in drawing parallels but in pinpointing differences. It is useful for highlighting what is distinctive about EMU and why, therefore, parallels mislead." This paper argues that the study of EMU is not progressed through highlighting uniqueness, but in understanding how the institutional arrangements evolved from and often 'echo' historic monetary unions, and as importantly, where the EMU has not "learned" and weaknesses persist.

Without a doubt, the European Economic and Monetary Union represents a significant step forward in the history of EU integration. However, just as scholarship has moved beyond discussing the nature of integration, and instead comparatively analyzes the system of government and institutional arrangements (Hooghe 2001, Fabbrini 2007, Kreppel 2011), the discussion of the EU economic institutions must also move beyond the unique "nature" of EMU. Instead, scholars should move to discussion of what can be learned by comparing the EMU's institutional arrangements to other monetary unions, both historical and contemporary.
This paper examines the question of whether the EMU is indeed *sui generis*, or if there are not only parallels to be drawn, but lessons to be learned from previous monetary unions in Europe. I argue that the scholarship on *sui generis* EMU underestimates the intellectual foundation previous monetary unions provided as well as the weaknesses that still persist in the EMU today. The paper explores the economic history of monetary unions since the mid-19th century in Europe, looking particularly at three former monetary unions – the Latin Monetary Union, the

[1] See James 2012, McNamara 1997, Padoa-Schioppa 2000, Dyson and Featherstone 1999

classic gold standard, and the Scandinavian Monetary Union. The analysis focuses on the extent to which the three historical case studies can offer insight into EMU's legal mandate of financial stability, the creation of a centralized institution to coordinate monetary policy, and the persistence of institutional weaknesses including free-riding and moral hazard.

The following section will explore the current literature on the nature of EMU. The second section will discuss the methodology. The third section will outline the three historical monetary unions and analyze comparisons to the institutional evolution of the European Economic and Monetary Union and the current institutional arrangement. I will conclude with a some final thoughts and avenues for future research.

The Nature of European Economic and Monetary Union

From the conception of the European Economic and Monetary Union (EMU), there has been ongoing debate in the literature on the *nature* of the project. Does EMU represent a *sui generis* institution that has no useful comparisons, or is EMU in concept and practice evolved from historical monetary institutions of the late 19th and 20th century? The answer likely lies somewhere between these extremes and it is therefore important to analyze the evolution of the scholarship on EMU and the reflection on the changing nature of EMU.

Among the main arguments for the *sui generis* nature of EMU, four areas of focus are distinguished. First, comparisons to other monetary unions fail to account for the vital role financial integration played in the creation of Economic and Monetary Union in Europe. As far back as the Single European Act, the EU removed barriers to cross-border branching by member state financial institutions, as well as barriers to mergers between member states financial institutions (Eichengreen 2008b, 18-19). In comparison, historical monetary institutional arrangements only pertain to monetary policy and do not incorporate institutions outside traditional central banking institutions.[2] Second, in comparison to historical multinational monetary unions, the EMU is set apart by the establishment of a central monetary institution –

[2] For instance, comparisons between EMU and 19th century US monetary consolidation fail to account for the bifurcated financial system. The United States Constitution gave Congress the exclusive competence to coin money, but in the nineteenth century private financial institutions were not prohibited from creating paper money and did so creating two monetary systems. The U.S. had "a unified system of coinage based on specie [federal system], and a fragmented paper system in which the notes issued by banks in different states traded at variable exchange rates against one another [private system]" (Eichengreen 2008b, 15). Financial integration, including settlement systems, stock markets, and cross-state banking, was not achieved until the late 1880s, well after monetary union was established.

the European Central Bank (ECB). When EMU was formally established in the Maastricht Treaty, discussion began on the creation of a supranational monetary institution to conduct and monitor the monetary policy of the euro area. In comparison, the Latin Monetary Union and the gold standard had no institutional arrangements in place to set monetary policy or monitor exchange rates. Among the functions provided by monetary institutions is maintenance of financial stability. Monetary institutions, including central banks, often provide lender of last resort functions, supervise and regulate financial institutions, and use monetary tools to maintain interest rate targets, all functionalities that sustain a stable financial system.

Third, EMU is considered *sui generis* due to unique institutional arrangements. European monetary union does not have a legal clause allowing exit from the institutional arrangements and costs are such that exit is not tenable. The complex economic and legal institutions of EMU are such that a country would face severe economic (and political) repercussions if it opted to voluntarily leave the euro area. Earlier forms of monetary union did not include such developed institutions and infiltration into everyday life of citizens allowing for individual exit or even dissolution of the union as a whole (Eichengreen 2008b, 29). Finally, the EMU established a monetary union before a political union. Monetary integration and the creation of corresponding institutions has generally been assumed to be part of the state-building process, associated with the strengthening of the central or federal authority, capacity building, and identity formation (McNamara 2011; Helleiner 1998). Yet, the EU is not a fully-fledged political union; in particular, a corresponding fiscal union has not evolved alongside the monetary union.[3]

However, the literature is not united in conceiving the EMU as a *sui generis* project. While a single, clear equivalent cannot be found, parallels can be made between specific institutional arrangements in previous monetary unions. Scholars discuss the loose parallels in institutional arrangements, the lesson learned from previous monetary experiments, and the weaknesses that still remain in monetary unions that are incomplete or not optimal currency areas. Some scholars (Bazot et al. 2020; Flandreau et al. 1998) discuss parallels between the flexibility allowed in the gold standard to address asymmetric shocks and the current ECB 'unconventional' monetary policies. Issues of moral hazard and free-rider behavior (Fendel and

[3] Parallel to the meeting in the early 1990s on EMU, intergovernmental conferences (IGCs) were held on political union, however the IGC did not discuss fiscal union and French proposals for an economic governance structure were not included in the final Maastricht Treaty (Verdun 1999).

Maurer 2015, Flandreau et al 1998) and negative repercussions from asymmetric shocks (Bazot et al 2020, Ryan and Loughlin 2018) seen in historic monetary unions still exist in EMU today. Other recent scholarship argues that the EMU is not the first attempt to form a monetary union without complementary fiscal integration, and the economic impacts that risks (Contento de Oliverra and Wolf 2017; Ryan and Loughlin 2018).

This paper builds on the works above. Institutions have origins and can be seen as a process of continuity rather than frozen in time. Institutions adapt to the time and environment but are not born in a vacuum. Institutions may include fixed, sticky features, but can add new elements that can alter the trajectory of the institution. Likewise, institutions created under one set of conditions can evolve and be redirected to new ends even under substantially altered conditions (Thelen 2002). Incremental changes over time can cause institutions to amend, adapt, become reimagined, or reinterpreted. While EMU did not naturally evolve from any one historical institutional arrangement, the importance of the individual institutions underlying previous European monetary unions were converted and adapted to EMU today.

Methodology

To examine the degree to which the EMU is *sui generis* or an adaptation and conversion from previous monetary arrangements, I will examine three historic monetary institutions – the Latin Monetary Union (1865-1920), the classic gold standard (1870-1914), and the Scandinavian Monetary Union (1873-1920). The three case studies were selected because they represent three monetary institutions comprised of European countries[4] and are well documented. The case studies selected are among the most recognizable monetary arrangements before the advent of the European Economic and Monetary Union. Outside the Bretton Woods System, there are no other major international monetary unions established after World War I, which marks the end of all three nineteenth century case studies, that include European countries. Alternative arrangements could have been selected, such as a currency union of the major colonial empires,

[4] In the case of the gold standard, it was an international arrangement, but driven by Great Britain and core countries were exclusively European

but the colonial currency unions were largely one-sided and without explicit agreement by the colonies to adopt the empires currency.[5]

It is important to define what is considered a monetary union. Traditionally, a monetary union consists of two or more countries agreeing to be governed by a single monetary policy. Traditional conditions for monetary union include one effective currency – either a single currency or a multiple currencies convertible into one another at a fixed exchange rate. In addition, there is one exchange rate between the unions currency(ies) and foreign currencies, and there is a single monetary policy, including control of the money supply, intervention in foreign exchange markets, and exchange controls. The tools used to control the monetary policy can include changes to money growth, interest rates, or exchange rates (Graboyes 1990, 8). Monetary unions can be international (between multiple sovereign states) or be established as part of unification or federalization (such as in the nineteenth century United States), usually as a complement to or following on political union.

I have selected three characteristics to examine between the three historic case studies and the European Economic and Monetary Union. The characteristics are largely drawn from Barry Eichengreen's work on *sui generis* EMU (Eichengreen 2008a) and selected from the core differences outlined in the work. The characteristics are purposely broad. I expect that nuanced differences exist between the various historical monetary unions and EMU. The argument laid out here is not that all monetary unions are the same, but that EMU exhibits 'institutional echoes' from previous historical monetary arrangements, and similarities can be discerned between EMU and the historical monetary unions discussed below. The first characteristic to be observed is financial stability, in particular, institutions in place to create financial stability. At the core of a monetary union is the belief among participants that coordinating policy with other sovereign countries provides a greater benefit than independent monetary policy. To capture financial stability, I will analyze the legal institutions created in each monetary arrangement to ensure stability in the financial system. Legal institutions can include formal and informal institutions, including mandates, international agreements, and charters.

[5] One clear example is France. The CFA Franc is a legacy of French colonial administration following WWII. The currency union exists today with 12 member states, mostly former French colonies, that was pegged to the franc and then the euro beginning in 1999 (see Gulde and Tsangarides 2008).

The second characteristic analyzed in each historical monetary union is the existence of a central institution to coordinate monetary policy. A core component of monetary union is centralized monetary policy, most often in the form of a central bank (Graboyes 1990). However, for the purposes of this study, we will consider any centralized authority, be that a single central bank or a dominate central bank that dictates policy for the remaining members of the monetary arrangement. The constant is a singular actor coordinating the policies of the members in the monetary union and a central authority to enforce regulation. Finally, the paper will examine the extent to which institutions inhibited or exacerbated instances of moral hazard or free-riding. I define moral hazard as risk-accepting behavior that people, governments, organizations, etc. engage in if they believe they will not face the full cost of such behavior. When the behavior is not checked, it is likely to be repeated. Free-riding is a specific form of moral hazard entailing reaping benefits of a good or service without contributing to the cost of the good or service.

The aim of this assessment is to determine where institutional arrangements still echo and persistent weaknesses remain in the EMU today from historic monetary institutions. To assess the reasons the three previous monetary institutions fell apart, I will rely on previous historical scholarship on the Latin Monetary Union, the gold standard, and the Scandinavian Monetary Union.

Latin Monetary Union (1865-1920)

The Latin Monetary Union (LMU) was established in 1865 between France, Italy, Belgium, and Switzerland. "The LMU possesses a special place in any study of monetary unions because of its importance in the history of European integration and as a source of inspiration for subsequent monetary unions" (Ryan and Loughlin 2018, 710). The initial treaty was signed for a fifteen-year duration, to be renewed for subsequent fifteen-year periods by agreement of the member states. The LMU was a bimetallic union, using both gold and silver as a standard unit of measurement. Other monetary units, such as bronze coins and bank notes were excluded from the LMU agreement. There was no standard unit of account, but rather an agreement of a one-to-one exchange rate between coins of the same metallic content. Individual citizens were not obliged to accept other member state coins, nor were the national banks forced to accept the coins of other member states (Einaudi 2000a; Fendel & Maurer 2015).

Increased international trade beginning in the nineteenth century encouraged uniformity in mediums of exchange. French coins already dominated in many parts of continental Europe and Italy, Belgium, and Switzerland had already begun harmonizing domestic monetary institutions to the French system. In addition, LMU offered access to capital. France in the nineteenth century was a financial capital, and bonds issued in francs were more appealing to creditors. Membership in the LMU also provided greater legitimacy to smaller countries and provided easier access to credit from lenders. In return, France extended its sphere of influence as the 'peace' established under the Concert of Europe[6] began to fray. While LMU represented the political aspirations of Napoleon III, it was also perceived as a step toward a uniform European monetary unit (Einaudi 2000a).[7]

Three factors led to the disintegration of the Latin Monetary Union. First, in the 1870s the price of silver fell drastically. As a bimetallic union, countries came to France, Belgium, Italy, and Switzerland to exchange silver for gold, leaving many countries with large stocks of low valued silver and an outflow of gold. Countries in the LMU became territorial over their gold reserves and many periodically would cease accepting member states coin, a foundational element of the LMU. Second, the increasing use of paper money destabilized the coinage-based LMU. Italy began issuing paper money within a decade of the LMU's creation to finance increased debt. Following WWI, the remaining countries in LMU likewise issued paper money to finance war debt. Between 1914-1919, France, Belgium, Italy, and Switzerland increased paper money circulation by 36%, 52%, 54%, and 24%, respectively (Fendel and Maurer 2015, 108). The fiat money (inconvertible money with no intrinsic value) inflated currencies, but since paper money was not included under the provisions of LMU it was not regulated by the legal institutions. Third, LMU did not have a centralized monetary policy. "The voluntariness of participation along with the absence of coercion created a liberty that was one of the most important stumbling blocks of the project of monetary unification" (Fendel and Maurer 2015, 110). The LMU continued in name until the 1920s. The members of LMU met in 1921 to discuss

[6] The Concert of Europe was comprised of Austria, France, Great Britain, Prussia, and Russia. Without a dominant power in Europe, the Concert was a mutual commitment among European powers to communication and peaceful resolution of disputes. It was agreed following the end of the Napoleonic Wars and lasted for around half a century.

[7] Interestingly, the architect behind LMU, French economist and Minister of the Council of State under Napoleon III, Félix Esquirou de Parieu wrote about a Western European Union. LMU would extend to include Great Britain and Germany, moving toward the 'pacific federations of the future" and outlined a federal framework for the Union, to include the monetary union (Einaudi 2000a, 285-86).

the dissolution of the monetary union and formally dissolved the union in 1926 after Switzerland left.

Financial Stability

The Latin Monetary Union attempted to establish a baseline set of rules to guarantee financial stability within the union. The treaty establishing the LMU included basic rules to guide the minting of silver and coins. While the regulations did not impede the amount of gold coins minted, it did require member states to communicate the quantity of coinage issued annually. To prevent member states from minting coins with a higher face value than the intrinsic metallic value, the treaty eventually provided upper limits on minting tied to the member states population, and limits of how much coinage could be used as legal tender in private transactions. However, the treaties did not provide any legal regulation on treatment of worn out coins (with less metallic value than newer coins with the same face value), cooperation between member state central banks, and the issuance of paper money – all of which led to significant instability within the LMU.

In addition, legal institutions in place to safeguard financial stability were not supported by structural institutions to enforce them. By design the regulation put in place provided "far too much scope for national power and independence in the issuing of coinage. This paved the way for the subsequent introduction of debased silver, which helped to bring the LMU to its end" (Ryan and Loughlin 2018, 711). While the member states of the monetary union anticipated fluctuations in the prices of silver and gold, there were no institutional mechanisms in place to address drastic changes in the price. Likewise, without institutional arrangements to safeguard financial stability issues of free-riding and moral hazard developed in the LMU.

Centralized Monetary Policy Coordination

The LMU did not have a centralized monetary institution to coordinate monetary policy. Indeed, it was the lack of such a coordinating body that led to much of the instability in the monetary union. However, France did provide a hegemonic power within the LMU to guide policy decisions taken among member states. It was not always the Bank of France that provided the coordination. The French Ministry of Foreign Affairs provided much of the initial impetus for the creation of LMU in the 1860s, seeing the monetary union as an expansion of French political and financial influence. The Bank of France rejected monetary union, however, fearing the implications of unsound monetary policies in other member states on the financial stability in France. Nevertheless, the Bank of France did play the role of "unofficial central bank of the LMU, accepting the largest flows of coins from the whole monetary union" (Einaudi 2000a, 294). "The unresolved matter of the function of national banks, which refused to be considered as central banks but were progressively acquiring a role, bears considerable responsibility for the failure of monetary unification in the 1860s" (Einaudi 2000, 294).

Despite reluctance, it was in part the actions of the Bank of France that staved off early financial crises and free-riding tendencies in the LMU. The bank refused to accept coins of member states issued in "excessive amounts" to cover debt. The Bank of France threatened foreign governments that excess coinage would be re-imported, effectively returning the inflationary pressure to the originator. Stability returned to the system and minting of silver coins was limited and eventually regulations added to the LMU treaty. The circumstances of loose regulations without a (willing) centralized monetary institution worked while the economy was stable, however, economic challenges and asymmetric shocks in the late 1800s could not be withstood without a coordinating central bank (Fendel and Maurer 2015). "The Latin Union can be said to have decreed a common monetary policy but left each national central bank to police its own compliance" (Graboyes 1990, 9).

Free-Riding and Moral Hazard

Without a central authority to provide oversight issues of free-riding and moral hazard plagued the LMU. For example, in the 1860s, after war with Austria increased the government debt in Italy, the country unilaterally began to print paper money not regulated by the LMU. The lira coins were subsequently devalued. "Italian silver coins were exported to the other member countries where they were legal tender…this enabled the Italian government to finance part of her deficits with seigniorage[8], the cost of which was shared by all four countries, that is, Italy, France, Belgium, and Switzerland" (Bordo and Jonung 1999, 16). In addition, when Greece joined the LMU in 1870, as a condition of its membership, all Greek coins were minted in Paris and shipped directly to Athens. While France was keen to enlarge the LMU, other member states

[8] Seigniorage is the profit made by a government by issuing currency; the difference between the cost to produce the currency and the face value (https://www.npr.org/sections/money/2009/01/what_is_seigniorage_1.html)

did not trust the Greek government to abide by coinage limits and feared massive issuance of small Greek silver coins. After agreeing to the conditions, Greek coins minted in Greece circulated in LMU member states (provided by private banker rather than the government) (Einaudi 2014).[9]

While free riding was commonplace since there was no central authority to ensure member states pursued collective interests, high exit costs were instituted to dissuade the collapse of the union. As has been noted, the market values of silver dropped compared to gold and most silver coins circulating in the LMU were worth less than face value. As such, member states agreed that any member wishing to leave the LMU would have to exchange the remaining member states' holdings of its silver coins into gold. The high exit cost was in large part what held the LMU together into the twentieth century (Fendel and Maurer 2015, 111).

Classic Gold Standard (1870-1914)

In many ways, the classic gold standard centered in Great Britain, and the bimetallic Latin Monetary Union centered in France can be seen as rival international monetary systems vying for clout and predominance – however as is seen below, by the late 1870s most countries in the LMU were de facto operating on the gold standard, rather than a bimetallic standard after the fall of silver prices.

In 1870, Great Britain was the only country using the gold standard, followed shortly thereafter by Germany. Great Britain was the leading economic power and countries wanting to trade or access British capital markets were inclined to join the gold standard. After Germany, the second largest industrial power in Europe joined in 1871, countries swiftly began to adapt to the gold standard. The transition to the gold standard was a domino effect. Within forty years, more than forty countries adopted the gold standard, abandoning silver, bimetallic, and fiat money systems. Between 1870 and 1912, fourteen European countries participated in the gold standard from Portugal to Russia and from Italy to Norway (Eichengreen 2008a).

[9] The Papal State applied for admission to the LMU, and France granted temporary authorization to mint silver coins and exchange them within the monetary union. However, the Papal State minted ten times more silver coins than allowed under LMU regulations. The excess coins were used to purchase French goods and pay French troops stationed in Rome. The Papal State was kicked out of the temporary arrangement and denied membership (Einaudi 2014; Ryan and Loughlin 2018).

There were no formal requirements or even 'entry' into the gold standard. A country joined the monetary regime by defining a gold ratio for its currency. By fixing national currency prices to gold, countries de facto fixed their currencies against each other (Meissner 2005; Flandreau et al. 1998). In addition to an established gold parity, participants in the gold standard followed three informal institutional arrangements: (1) currencies remained freely convertible to gold at the set price, (2) barriers were removed to allow for free flow of capital and gold between participating countries, and (3) countries maintained sufficient gold reserves to convert its currency back into gold upon request (Persson and Sharp 2015).

The British Gold standard was suspended after World War I when the geopolitical cooperation necessary to maintain the system collapsed. In addition, WWI left many economies unable to balance both the fiscal discipline necessary to support the gold standard and increased demands for political and social rights after the war. Attempts were made to restore the gold standard in the 1920s, however, Great Britain was unable to fulfill a stabilizing role in the system after the war and the only other country able to, the United States, was unwilling to bear responsibility for stabilizing a renewed gold standard, the relaunch was unsuccessful and disintegrated during the Great Depression.

<u>Financial Stability</u>

The gold standard provided a level of financial stability for many years in large part because participating countries committed to monitoring deviations from the original gold parity so anomalies in parity would not last long. Countries agreed to follow the informal institutions underpinning the gold standard, and entry, even though informal, required a certain level of financial stability already in place, so most countries only entered once sound fiscal policy had been implemented and the banking system stable (Meissner 2005). In addition, markets and actors had confidence in the system of fixed exchange rates and therefore in countries' interest to maintain it, and symmetry among participating countries inhibited any one country from unduly influencing or effecting the price level (Persson and Sharp 2015).

Like the European Economic and Monetary Union (EMU), the classic gold standard also faced the “impossible trinity.”[10] And, like the EMU, to ensure financial stability, the participants of the gold standard prioritized fixed exchanges rates (currencies pegged to gold) and capital mobility and ceded absolute control over monetary policy. However, unlike in the EMU, monetary policy was not centrally coordinated. Instead, expectations were that shared financial risk and cooperation on fiscal policy provided the flexibility needed to adapt to any financial issues. Some scholars argue that in practice, participants in the gold standard likewise had flexibility, limited as it may be, to adapt to adverse changes in the monetary system (Bazot et al. 2020). In addition, because membership was not tied to a treaty or international agreement, countries could exit without approval of the other participating states. This allowed the flexibility for countries to leave the gold standard or suspend convertibility in times of crisis. Suspension or leaving the monetary regime provided the maneuverability to adjust exchange rates as necessary. Often times countries suspended convertibility or dropped from the gold standard completely when the money supply exceeded gold reserves and capital inflow was low. “The official gold parity represented a floor for exchange rate appreciation, because the central bank that could not sell gold against notes could still sell notes against gold” (Flandreau et al. 1998, 122).

Centralized Monetary Policy Coordination

Like the Latin Monetary Union, the classic gold standard consisted of legal institutions without centralized structural institutions. However, between 1870 and 1914 the gold standard was effectively the British gold standard regime. “The faculty of issuing the main currency of the international monetary system assured England greater flexibility than other countries during those periods characterized by high instability” (Contento de Oliveira and Wolf 2017, 149). The Bank of England exerted influence by manipulating tools within its monetary policy kit and attracted gold or purchased securities to increase the supply of gold. Policy measures taken by the Bank of England influenced other members’ central banks to mirror the actions taken. John Maynard Keynes stated the Bank of England was “the conductor of the international orchestra” (as quoted in Eichengreen 2008a, 31). Other central banks, in particular those in periphery

[10] In economics the ‘impossible trinity’ requires a country to choose between (1) free capital mobility, (2) exchange-rate management, and (3) autonomous monetary policy. At any given time only two policy choices are possible (The Economist 2016).

countries, benefitted from the gold standard and the access to using the British sterling as a reserve asset. In return, in addition to establishing a hegemonic influence over the international monetary system, Great Britain and the Bank of England benefited from seigniorage on foreign holdings of sterling, economic gains to domestic financial institutions and access to capital during crises (Bordo 1993).

In practice, maintenance of the gold standard required coordination and cooperation between participating central banks. Countries would often coordinate policy towards increasing reserves in countries experiencing economic distress to ensure credibility and prevent exit from the gold standard regime (Contento de Oliveira and Wolf 2017).

Free-Riding and Moral Hazard

Much of the success of the classic gold standard relies on a "gold standard orthodoxy" that countries adhered to the rules of the game. "As an international standard, the key rule was maintenance of gold convertibility at the established par. Maintenance of a fixed price of gold by its adherents in turn ensured fixed exchange rates" (Bordo 1993, 21). Instances of free riding and moral hazard were rare because all parties had a vested interest in the success of the gold standard. As mentioned above, this is not to say that monetary flexibility was not present, but that major devaluation and deviation from the standard were not present. The minor deviations did not threaten the convertibility of gold. The credibility of the system allowed central banks to depart from the core commitment to convertibility in the short term but the long term view of the gold standard shows a relatively consistent movement of domestic and foreign assets (Eichengreen 2008a).

While the experience of interdependence may have prevented free-riding, it also created almost a reverse moral hazard. European economies benefitting from the strength of the gold standard were unlikely to notice or take extensive measures to prop up economies in the periphery[11] if and when they encountered issues. Many of the countries in the periphery did not have a central bank to coordinate policies. "Banking systems at the periphery were fragile and vulnerable to disturbances that could bring a country's foreign as well as domestic financial arrangements crashing down" (Eichengreen 2008a, 38). Likewise, the countries in periphery had

[11] Gold standard periphery countries generally include countries outside the north-central Europe region, including southern and eastern Europe, Asia, and Latin America.

significantly different social and political environments than those in north-central Europe (the core countries of the gold standard). For instance, countries in western Europe doubted the United States commitment to the gold standard, yet, the political landscape in the US in the late nineteenth century was significantly different. Recent granting of universal male suffrage in the United States increased the influence of small farmers who lobbied against the devaluation of the dollar under the gold standard and were not appeased by tariffs (as was the case in some European countries). Similarly, "Latin" countries of southern Europe and South America faced similar tension between interests supportive of monetary discipline and the gold standard, and interests that welcomed the ability to depreciate currency to enhance exports. These social and political conflicts led many countries in southern Europe and South America to repeatedly suspend or drop from the gold standard when reserves could not be guaranteed (Eichengreen 2008a).

Scandinavian Monetary Union (1873 – 1920)

The Scandinavian Monetary Union (SMU) has been called the "the most successful of all European currency unions" (Marcello de Cecco as quoted in Ryan and Loughlin 2018, 712). The monetary union was established in 1873 between Sweden and Denmark followed by Norway in 1875. The impetus for the union stems from the Latin Monetary Union, which had been formed nearly a decade before. Sweden considered joining the existing bimetallic union, however, after the Franco-Prussian War in 1870-71, opted to create its own regional monetary arrangement. The three countries of the SMU had similar silver coinage before the monetary union was established and geography and trade had led to the circulation of their coins. An agreement on monetary union institutionalized arrangements already in place and standardized exchange rates to the benefit of all three countries (Jonung 2007). The SMU adopted a gold-backed system and created the krona as a common unit of account. The value of the new currency was specified by weight of gold and was standard across all three countries. While limits were placed on how many krona could be minted, subsidiary coins in silver and copper were also allowed and no limit was placed on these metallic coins.[12] All national treasuries agreed to accept member states' coins regardless of origin (Bergman et al. 1993 and Bordo and Jonung 1999).

[12] While member states could mint as many 'token' (non-gold) coins desired, the coins had to be redeemable in gold, which placed a limit on excessive minting and circulation (Bartel 1974).

In the mid-1880s, the SMU expanded beyond the scale of other contemporary monetary unions when the three central banks agreed to extend drawing rights to members of the SMU. In essence, transactions between the Swedish, Norwegian, and Danish central banks would be made without interest or other transaction fees. The decision removed any seigniorage a central bank could gain from inter-bank transactions. In addition, "this effectively eliminated the gold points [gold standard exchange rate] between the countries tying them together closer than the gold standard per se" (Bergman et al. 1993, 508). Following on the agreement on drawing rights, Norway and Sweden (and eventually Denmark) agreed to expand the union to include paper notes, accepting each other's notes at par (Bordo and Jonung 1999).

The SMU began weakening in 1905 when Norway voted to leave the political union with Sweden. Following the vote, the Bank of Sweden cancelled the 1885 agreement establishing interest-free drawing rights. While a new agreement was ratified shortly after allowing bank fees for drawing rights, the system remained largely unchanged and the new allowance unused until 1910 (Jonung 2007). However, it did weaken trust between parties. When WWI broke out in 1914, the members of the Scandinavian Monetary Union suspended gold convertibility and shortly thereafter the countries placed an embargo on gold. Following the end of the war, the three countries in the union began experiencing sharply different rates of growth in the money supply and prices. As a result, the central banks began limiting the coins and notes under the fixed exchange rate until the point when gold coins and notes were no longer fixed and no longer mutually accepted as legal tender in all member states. By 1921, under pressure from Sweden, the SMU was formally dissolved (Bergman et al. 1993).[13]

Financial Stability

SMU exhibited a high degree of economic and financial stability throughout the nineteenth century and through to WWI. Unlike LMU and the classic gold standard, all three countries in the monetary union had similar economies, including comparable industries and trade balances. The countries in the union remained committed to legal institutions limiting the minting of coins and maintaining a stable money supply (Bordo and Jonung 1999). Likewise, the SMU benefitted from informal institutions such as high levels of public trust in the system,

[13] Interestingly, all member states retained the krona as their national currency – Danish krone, Swedish krona, and Norwegian krone.

which was reflected in a stable financial environment. As the currency was gold-backed, rather than a 'pure' gold system, only central banks and other financial institutions that issued bank notes held gold as reserves. Public trust in the institutions allowed the system to operate without challenges from bank runs or panics (Jonung 2007).[14]

Another remarkable feature about the stability of SMU is the perseverance of the SMU after the disintegration of political union between Sweden and Norway. This is not to say the move by Sweden to end the 1885 agreement on drawing rights did not create a fissure in institutional trust. However, before (and since) it is incredibly rare to witness a monetary union continuing after the breakup of political union, especially among countries of equal size. The stability and perceived benefit from the monetary union served, at least in part, as a rationale for maintaining the SMU (Jonung 2007)

Centralized Monetary Policy Coordination

The agreement outlining the Scandinavian Monetary Union did not include any language on a coordinated central authority. Rather the three central banks were allowed to run independent monetary policy. While communication was expected and encouraged between the institutions, in the initial years of the monetary union, the banks communicated little (Jonung 2007). In effect, the SMU can be categorized as a decentralized monetary union. "It is apparent in this history of the Scandinavian Union that in times of stress, there was not an overall coordinating and managing authority capable of acting and resolving more effectively some of the international monetary problems…after the outbreak of war" (Bartel 1974, 703). Without a coordinating authority, countries pursued independent and self-interested policies during WWI that led to differentiated levels of economic growth and money supply.

Free-Riding and Moral Hazard

By removing interest rates and transaction costs in intra-bank drawing rights, the countries in the SMU signaled an inherent trust in the institutional arrangements. Member states

[14] It should be noted that some authors attribute the success of financial stability in the SMU, at least in part, to participation in the classic gold standard. Or at least, it is difficult to differentiate where success in the gold standard ends and success in the gold standard as part of a single currency begins. Some scholars suggest the monetary restrictions imposed by the classic gold standard were strong enough that the addition of a single currency only marginally impact macroeconomic performance (see Bergman 1999 and Ryan and Loughlin 2018).

believed the currency flows between member states would not create any permanent disadvantages or create issues of free-riding (Bordon and Jonung 1999).

However, while countries respected the high level of financial integration, little effort was made to integrate other aspects of the economy creating a level of systemic hazard. In the Scandinavian Monetary Union, no discussions were held or attempts made to integrate the Scandinavian countries beyond the monetary arrangements. “No customs union was agreed and external trade policies diverged progressively so that the share of intra-Scandinavian trade actually declined from 22 per cent of total exports in 1872 to 10 per cent in 1910” (Einaudi 2000b, 98). Lack of customs union or free trade agreements led to asymmetric shocks and economic divergence between 1873 and 1913. Currency unions need common structural institutions to guide transfer payments to balance asymmetric shocks. “Despite the features they held in common, monetary union proved difficult because, in practice, nationalist sentiment was also high with rivalries between the three countries” (Ryan and Loughlin 2018, 28).

European Economic and Monetary Union (1993 -)[15]

European Economic and Monetary Union (EMU) was not explicitly included in the founding treaties of the European Coal and Steel Community or the European Economic Community. However, as the EU moved towards further integration it became clear an economic and monetary union would be required to achieve a single market.

Following global monetary turbulence in the early 1970s, the EU Council of Ministers was asked to create a plan of action for the creation of an economic and monetary union. The outcome, the Werner Report, outlined stages to be taken over the next decade to create a formal economic and monetary union. The first stage of the Werner Plan included the establishment of a system for the progressive narrowing of the fluctuation margins of members’ currencies (Scheller 2004). Known as the “snake in the tunnel” system, member states agreed to allow their currencies to fluctuate by no more than to ±2.25 percent against the dollar (tunnel) and no more than ±2.25 percent against one another’s currencies (snake). When the Bretton Woods System

[15] The following discussion of EMU history, financial stability guarantees, centralized monetary policy coordination, and moral hazard risks are meant to be an overview. For more comprehensive discussion of history see James 2012, Wyplocz 2006, Scheller 2004, McNamara 1998; financial stability see Prati and Schinasi 1999, Bordo and Jonung 1999; policy coordination see Hartmann and Smets 2018, Alesina and Grilli 1991; moral hazard see Beetsma and Giuliodori 2010, Wyplocz 2006.

was abandoned in 1973, EC countries abandoned the fluctuation margins against the dollar (snake without the tunnel).

In 1978 a new initiative was proposed with the aim of establishing a European Monetary System (EMS), "however, despite an enormous amount of political energy expended on the project, not very much changed" (James 2012, 146). Indeed, the components of the "snake in the tunnel" remained largely in place. The result was a lackluster beginning to the EMS. After a decade marked by little institutional progress, rising unemployment, and high inflation, the EC adopted the Single European Act (SEA) in 1987. The SEA moved to complete the single market and remove barriers, and enshrined the 'four freedoms' – free movement of capital, goods, services, and people. "In the process, all restriction to capital movement were eliminated. This last innocuous-seeming step made a move to monetary union unavoidable" (Wyplosz 1997). EMS had created a de facto fixed exchange rate and SEA called for full capital mobility. Therefore, autonomous monetary policy came to an end.[16]

In 1988, the European Council charged Jacques Delors, President of the European Commission, to create an outline for economic and monetary union. The Delors Committee outlined three stages to complete EMU – complete the single market, create the structure and institutions of EMU, and lock exchange rates and transfer monetary authority to the new European Central Bank (ECB) (Scheller 2004, 21). EMU was formally established by the Treaty on European Union (Maastricht Treaty) in 1993.

Financial Stability

Like the LMU, SMU, and the gold standard before, EMU aimed to provide financial stability for member states. However, the EU member states created formalized legal institutions to 'guarantee' financial stability. First, Article 105(1) in the Maastricht Treaty created a mandate for the ECB to maintain price stability within the monetary union. The Lisbon Treaty outlined additional priorities "without prejudice to the primary objective of price stability" including, sustainable development of economic activities, high employment, equality between men and women, sustainable growth, economic competitiveness, and convergence of economic performance (Lenihan 2008). Second, the Maastricht Treaty outlined a convergence criteria to measure member states' preparedness to join the EMU. Measurements assessed a country's price

[16] See footnote 10

stability, public finances, long-term interest rates, and exchange-rate stability. Finally, the ECB's price stability mandate was paired with supranational rules to guide national fiscal policies. In particular, the Stability and Growth Pact (SGP) institutionalized the excessive debt procedure outlined in the Maastricht Treaty and defined thresholds for national debt and budgetary deficit.

From the outset there was debate over the effectiveness of financial stability safeguards in the EMU. Similar to the gold standard, EMU attempted to mitigate risks to financial stability through the convergence criteria. If countries met strict rules to join and exhibited sound national fiscal and monetary policies, the supranational monetary union could expect collective financial stability. Without a doubt, EMU had in place a more stringent, formalized criteria to join than in the gold standard, and the convergence criteria was underscored by the ECB price stability mandate. However, it echoes a reliance on member states to maintain sound fiscal policies. While EMU may have formalized institutions to promote financial stability, institutions are as good as the enforcement behind them, and enforcement of the SGP was mixed (Wyplocz 2006) and convergence criteria only required to join, but not to remain in EMU.

As has been widely discussed (Bordo and Jonung 1999; Wyplocz 2006; Hall 2012), EMU financial stability protections also lacked mechanisms to address asymmetrical shocks. Like LMU, which created formal and informal institutions to address minor deviations in the price of silver and gold but not drastic changes, EMU was not designed as a crisis management institution. "The framers of EMU did not envision a centralized mechanism for dealing with European financial and banking problems and did not foresee the need for a centralized crisis-management mechanism" (Prati and Schinasi 1999, 18-19). In addition, the Maastricht Treaty did not explicitly provide the ECB with a lender of last resort (LOLR) function. LOLR responsibility remained with the national central banks, and it was not until the global financial crisis and sovereign debt crisis that the ECB stepped up as a LOLR for the eurozone member states. As the EU moves toward banking union with the establishment of the Single Supervisory Mechanism it is increasingly likely to take on LOLR for individual financial institutions.

Centralized Monetary Policy Coordination

Shortly after the adoption of the Maastricht Treaty, the European Council established the European Monetary Institute (EMI) as a transitional institution to prepare the way for EMU and coordinate monetary policy transfer to the newly formed European Central Bank. The ECB assumed formal responsibility of euro area monetary policy in 1999 with the launch of the euro as an electronic currency (Scheller 2004).

Unlike the three historic monetary unions, EMU did formalize centralized monetary policy under the European Central Bank (ECB). Policy decisions within the ECB are taken by the Governing Council comprised of the governors of the eurosystem central banks and the members of the ECB Executive Board.[17] The Executive Board in turn executes the policy decision of the Governing Council and oversees the day-to-day operation of the central bank. National central banks in the eurosystem do not conduct independent monetary policies, and instead implement the decisions made by the Governing Council and Executive Board. In theory, governors relinquish their national interests and instead act as economic agents of the EMU.

The LMU and the gold standard both required high levels of coordination among participating central banks even if it was done ad hoc rather than through an institutional structure. Only SMU operated a decentralized monetary union with limited coordination among central bank. However, while LMU and the gold standard did not have formalized monetary policy coordination, they were de facto led by a single central bank, the Bank of France and Bank of England, respectively. This aspect, a hegemonic influence, is echoed in the coordination of the EMU. In the year's leading up to Maastricht, "by the late 1980s it had become obvious that the Bundesbank…was setting monetary policy for Europe as a whole" (Wyplocz 1997, 5). The German central bank led policy in the EMS due to its size and reputation, and the mandate of the ECB was largely shaped by the mandate of the Bundesbank. Many authors discuss the overlap of both formal policy mandates and informal norms and practices within the banks operations as reflections of the Bundesbank and its influence in EMU (Wyplocz 1997; Buiter 1999; Debrun 2001; Fatum 2006). The influence of the Bundesbank is, arguably, less pervasive since the euro crisis. The EMU has adopted more accommodative monetary policies, often counter to Bundesbank preference. The sunk costs and negative consequences of exit by a euro member state lessen the bargaining power of the German central bank (Steinberg and Vermeiren 2016).

[17] The Executive Board is comprised of six-members, including the President of the ECB, Vice President, and four board members. The Board is appointed for non-renewable 8-year terms to safeguard monetary independence from political pressures, and the terms are stagged to ensure continuity of decision making and institutional knowledge.

Moral Hazard and Free-Riding

Discussion of moral hazard in the EMU center around early concerns that monetary policy could be used to prop-up profligate countries. No bail out clauses and prevention of government debt financing were written into the treaties establishing EMU. Yet EMU still faced similar issues of moral hazard and free-riding as in LMU, gold standard, and SMU. Incomplete integration left gaps in oversight and regulation. The monetary policy backstops against crises at the supranational level were only as good as the individual member states willingness and ability to also commit to sound fiscal policies. This "new impossible trinity"[18] of centralized monetary policy, no bail out clauses, and national fiscal policy contributed to the sovereign debt crisis that spilled over from one country to another before the ECB stepped in with emergency liquidity assistance and Outright Monetary Transactions. This trilemma is not new and echoes issues in both the LMU and SMU. While the Latin Monetary Union faced issues of compliance with monetary policy decisions, in particular minting of coins and use of paper money, that eventually destabilized the union during times of crises, the Scandinavian Monetary Union faced similar issues of monetary integration without corresponding economic integration. Even among the Scandinavian states that had a higher degree of homogeneity than other historic monetary unions or EMU, failure to complete parallel economic structures led to divergent economic growth and eventual collapse.

EMU, like the gold standard, also faces moral hazards arising from divides between core and periphery countries. Countries benefitting from the monetary union are unlikely to take extensive measures to support countries facing economic crisis often due to the incomplete nature of the monetary union. Divides occurred in the gold standard between north-central European countries benefiting from the strength of the gold standard and southern European as well as Latin American and Asian participants that experienced social and political conflicts forcing some countries to temporarily leave the gold standard when no assistance was provided. Economic tensions likewise came to the forefront in EMU during the eurocrisis with deepening divides between member states in the south and those in the north. The incomplete nature of EMU left some countries more vulnerable to shocks than others with only tepid support for helping countries in crisis until national crises became systemic crises threatening the monetary union as a whole.

[18] For more discussion on the "new impossible trinity" see Pisani-Ferry 2012; Beck and Prinz 2012.

Conclusion

My intention is not to argue that EMU is a replicate of any of the case studies reviewed. However, limiting discussion because of perceived unique characteristics makes it more difficult for the scholarship to grow and inhibits potential informative comparisons. Analyzing historic monetary unions allows the development of theories on why even incomplete monetary unions can create financial stability (even if only for a time), or how to address pervasive issues of free-riding with or without a central regulatory authority.

This paper has sought to identify institutional 'echoes' between the nineteenth century monetary unions and the European Economic and Monetary Union. Three characteristics in particular were identified – financial stability as legal institutions, centralized monetary authority, and institutional weaknesses that result in free riding and the creation of moral hazard. EMU established more comprehensive legal institutions to guarantee financial stability than the three historic monetary unions. Yet despite having comprehensive legal institutions, EMU still faced similar challenges arising from the incomplete nature of the economic and monetary union. As LMU, SMU, and the gold standard previously, without corresponding fiscal union asymmetries still developed, and political hesitancies over lender of last resort function limited the ECB's capacity to act quickly at the outset of crisis. Unlike the three historic case studies, EMU centralized monetary policy within a single institution, the European Central Bank. The ECB has a high degree of independence and can enforce monetary policy decisions. However, the initial design of the ECB echoes previous monetary unions that relied on the hegemonic control of a member state central bank, such as the Bank of France in the LMU and the Bank of England in the gold standard. The ECB mirrors the Bundesbank in both formal mandate and informal norms. While independent at least the early years of EMU reflect the influence of Germany and the Bundesbank. Finally, moral hazard concerns present in the three historic cases remain in EMU today. As seen in LMU and SMU, without the corresponding fiscal union, risk-accepting behavior continues and is brought to the fore during crises.

My research aims to contribute to the existing scholarship that looks to draw lessons and comparisons between EMU and other historic and contemporary monetary unions. In particular, my research highlights where institutional weaknesses still echo in EMU today and lessons can still be learned. I also believe it leads to new avenues for research. What are the implications of developing a strong monetary union like EMU in a political system before a fiscal union? How does it impact the autonomy and capacity of the structural monetary institutions, such as the ECB and now the Single Supervisory Mechanism? This paper has focused on institutional similarities between EMU and three historic monetary unions, but further discussion is warranted on the political and economic environment that led each group of countries to decide to form a monetary union and choose particular institutional arrangements.

Barry Eichengreen (2008b, 36) concludes his article on *sui generis* EMU with a quote by Paul Valéry, “History is the science of what never happens twice.” Indeed, history may not repeat itself, but it can echo and provide lessons to learn.

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