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HISTORICAL RECORD OF MONETARY UNIONS: LESSONS FOR THE EUROPEAN ECONOMIC AND MONETARY UNION

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Abstract: *The aim of this paper is to make a record of previous monetary unions and derive some useful lessons for the European Economic and Monetary Union. Evaluating the political economy of the euro through the lens of history, with the help of comparative analysis, can contribute to better understanding the present stage of the EMU and its challenges. Even if the EU is a unique,* sui generis, *phenomenon, the analytical lessons learned from the historical cases could be applied to the contemporary situation of the euro.*

Key words: *European Economic and Monetary Union, Gold Standard, USA monetary union, monetary unification of Italy, German Zollverein, Latin Monetary Union, Scandinavian Monetary Union.*

1. Introduction

Even if euro still appears like a novelty in the process of European construction and as international currency, it was preceded by a few monetary unions on the continent and outside of it. While much of the European monetary project has indeed been of an ambition never seen in Europe before, the idea of bringing currencies together is far from new. The earlier examples offer fascinating echoes of today's experience in the euro area.

This paper tries to investigate the context of these previous arrangements, which did not have a central monetary authority, yet they functioned surprisingly well in the economies of that time. The aim is to extract the lessons that history teaches us and to reveal some pitfalls that should be avoided. The study is built on the main contributions of the literature in this field, such as Bordo and Jonung (1999), Bergman (1999), Foreman-Peck (2005), McNamara (2011) or de Vanssay (1999).

The paper is organized as follows. The next section is dedicated to the Gold Standard, then the other monetary unions are discussed: USA monetary union after the Civil War, monetary unification of Italy, the German Zollverein, the Latin Monetary Union and the Scandinavian Monetary Union. Each section contains comparisons and parallels with the present European Economic and Monetary Union. The last section provides the final concluding remarks.

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2. The Gold Standard

The classical gold standard, in which participating countries committed to fix the prices of their national currencies in terms of a specified amount of gold, lasted from 1880 till the World War I, when countries resorted to inflationary finance. The system was re-introduced for a short period of time, between 1925 and 1931 as the Gold Exchange Standard, when countries could hold gold or dollars or pounds as reserves, excepting the UK and USA, which held only gold reserves. In the face of huge gold and capital outflows, UK departed from gold in 1931; in USA the gold owned by private citizens was nationalized in 1933. There was a further modification of the gold standard under the Bretton Woods system (1946-1971), in which most countries maintained the exchange rate by tying it to the American dollar. The dollar took over the role that gold had played under the gold standard in the international financial system. However, a negative balance of payments in USA and growing public debt incurred by Vietnam War led president Nixon to announce in 1971 the abandonment of the dollar's gold convertibility, marking the final step of the gold standard.

In the gold standard era, countries' money supplies were linked to gold. The necessity of being able to convert fiat money into gold on demand strictly limited the quantity of fiat money in circulation to a multiple of the central banks' gold reserves. Most countries had legal minimum ratios of gold to notes or currency issued or other similar limits. As explained by World Gold Council (2013), international arrangement implied a self correcting mechanism: a country running a balance of payments deficit would experience an outflow of gold, a reduction in money supply, a decline in the domestic price level, a rise in competitiveness and, therefore, a correction in the balance of payments deficit. The reverse would be true for countries with a balance of payments surplus. This is the so-called "price-specie flow mechanism" set out by Scottish philosopher and economist David Hume (1752).

The great virtues of the gold standard were:

a) It assured long-term price stability, which results from comparing the average annual inflation rate of 0.1 percent between 1880 and 1914 with the average of 4.1 percent between 1946 and 2003 (Bordo, 2008).
b) It corresponds to a period of spectacular real economic growth and relatively free trade in goods, labor and capital.

Experts debate to what extent the gold standard enabled the above mentioned success and to what extent it flourished because of some favorable conditions. Most probably causality flowed in both directions but it could not be denied that the gold standard at least helped to facilitate the positive tendencies.

There were, of course, some disadvantages of the gold standard, the most important being that it did not allow policy makers to help the economy through a monetary stimulus. In addition, as national currencies were tied to gold, the money supply critically depends on the global stock of monetary gold, which is influenced by gold discoveries.

An interesting parallel between the gold standard and the functioning of the European Monetary Union is offered by Baldwin and Wyplosz (2009). They provide rigorous exposition of David Hume's "price-specie flow mechanism", which implies an automatic change in the money stock to achieve balance of payments equilibrium. Under metallic money, Europe was actually a *de facto* monetary union. This is the reason why understanding how it worked helps understand how the present union operates.

The euro shares indeed the characteristic of permanently fixed exchange rates with the gold standard but there are also significant differences between the two regimes. The euro is a monetary union with the European Central Bank (ECB) at its apex which sets policy for the entire euro zone, whilst the gold standard had no such institution. It only linked sovereign states and was ultimately undermined by conflicts between them.

Some perturbing parallels between the gold standard and the euro are set out by *The Economist* (6 July, 2013), which averts that the gold standard holds worrying lessons for the single currency and emphasizes Bordo and James' new study (2013) about euro's fragility. These authors acknowledge some striking similarities between the pre-1914 gold standard and EMU at present. Both arrangements are based of fixed exchange rates, monetary and fiscal orthodoxy. Each regime gave easy access by financially underdeveloped peripheral countries to capital from the core countries. But the gold standard was a contingent rule – in the case of an emergency like a major war or a serious financial crisis – a country could temporarily devalue its currency. The EMU has no such safety valve. Capital flows in both regimes fueled asset price booms via the banking system ending in major crises in the peripheral countries. Bordo and James arrive at the conclusion that, not having the escape clause, present day Greece and other peripheral European countries have suffered much greater economic harm than did Argentina in the Baring Crisis of 1890.

3. USA monetary union after the Civil War

American monetary history is commonly used as a benchmark by economists when examining various issues of the process of European monetary unification (Bordo and Jonung, 1999, p. 27).

Multiple versions of the dollar circulated widely throughout the US before the Civil War of 1861-1865 and state-based banks issued banknotes functioning as paper money. There was no permanent national central bank and no federal mechanisms for controlling the monetary aspects. US of the nineteenth century can be viewed as a loose federal structure with central coordination limited to a few key areas.

Currency consolidation was motivated by two main factors. The first one was war itself, determining public officials' need to rationalize the monetary system and collect bigger federal revenues in order to finance the American Civil War. The second factor setting the stage for a single currency was the achievement of a single American market, spurred on by the federal courts, which created increasing societal pressures for regulation of the monetary regime.

As McNamara (2011) explains, single currencies have most commonly been created in times of war, as a way to consolidate the fiscal power of the state rather than as a purely monetary exercise. Currencies have generally been introduced by political actors who need to federalize the raising of revenues and payments necessary for war-fighting.

In antebellum USA, while the dollar was the standard unit of account, state dollars floated at different rates and the American states had independent fiscal policies with few interstate fiscal mechanisms to encourage political solidarity. It was even possible for the different states to borrow directly from foreign capital markets in pursuit of their own goals.

The Civil War split the political union and the monetary union in two parts. In the North, paper money circulated at a significant discount relative to gold coins. In the South, Confederate notes circulated until the end of the war in 1865. The national banking system, established in 1863, finally created a uniform national banknote system.

According to some estimates (such as Hepburn, 1924 and Timberlake, 1978), before the Civil War, about 7000 different banknotes were used in the USA and a good portion of them were counterfeit. For merchants there was a chaos to cope with, and they were forced to consult monthly banknote detectors informing them of the relative value of each note. Only with the onset of the Civil War a standardized American currency became a reality by a series of reforms which centralized the monetary system at the federal level and outlawed the local currencies. Large quantities of "Greenbacks' (US notes) were issued in 1861-1862 by the federal authority as fiat money, full "legal tender for all debts, public and private" (as written on the present US dollars). Between 1862-1864 the Congress authorized the issue of $450 million Greenbacks. The Greenback was the only currency with legal tender status, although it continued to coexist with several other forms of currency, namely newly standardized national banknotes, as well as silver and gold certificates (McNamara, 2011).

In general lines, the major difference between the single European currency and the American monetary unification is that, while Europe wanted to integrate (inclusively in monetary terms) in order to avoid new wars on the continent, in USA the Civil War provided the immediate reason and means for federalizing monetary control and building fiscal capacity. Some pessimistic authors, like Feldstein (1997) considered instead that the euro might make Europe to fall again into conflict, creating even confrontations with the USA.

4. Monetary unification of Italy

The way for Italy's political unification was paved by the defeat of Austria by the French and Piedmontese armies in 1859. In the early 1860s, the Italian Peninsula became one of Europe's biggest sovereign states. This urged the creation of a monetary union and promoted market unification by investing in networking technology of that time: telegraph and railways.

In Italy there was little market convergence prior to the political unification. This is the reason why, in the first months of its existence, the new Parliament made a huge effort to create a customs and monetary union.

At the time of Italian political unification, approximately 270 types of legal-tender coins circulated in the Peninsula, all of different weight and metal content. The decimal system did not prevail; paper note circulation was limited. The tremendous array of exchange rates blurred the meaning of prices: high information costs discouraged arbitrage outside local commodity and financial markets (Toniolo, Conte and Vecchi, 2003).

In July 1861 the Piedmontese Lira, renamed Lira Italiana, was proclaimed the legal tender of the whole country, but this was only a temporary solution. In 1862 a Monetary Act made the gold Italian lira the kingdom's unique legal tender. This Act also established a parity of 1 to 1 of the new currency with the French Franc and set the official rates at which the old Italian coins would be converted into Lira at the mint. However, the Southern regions were allowed to go on using their pre-unification notes for local payments. This is obviously a sign of both the popular resistance to monetary unification and the obstacles met by the new state in exerting its authority. Actually, monetary unification took a long period of time, in contrast with the legal unification. Italy's *de facto* monetary union was accomplished only by the mid-1870s.

This process was not very successful mainly because of the economic development differences between Northern and Southern parts of the country. Interest rate shocks indicate close relations between states in northern Italy but negative correlations between the North and the South before unification, emphasizing some advantages of continued Southern monetary independence. As a result, the monetary policies appropriate for the North were less so for the South. Confronted with the agricultural shocks originating in the USA and in France, the South would have been advantaged from depreciating its exchange rate against the North or against the external trading partners. This aspect is important when thinking about the present European monetary union and the findings of Frankel and Rose (1998), who demonstrate that a monetary union create the conditions for its own success. It seems this was not the case with Italy in the nineteenth century.

5. The German Zollverein

Zollverein, the German customs union established in 1834 under Prussian leadership, is seen as an important step in German reunification, creating a free trade area in Germany. It was advocated by great economists such as Friedrich List and was gradually built in order to increasing trade and political unity between the fragmented states of the German Confederation. This was followed by a series of acts standardizing the separate systems of coinage, weights and measures used in the German states. Before the unification, a variety of coins were minted and used and only some were commonly recognized. At the same time, banknotes were not considered legal tender.

The North German thaler was fixed at 1.75 to the South German Gulden and, in 1856 (when Austria became informally associated with the Union), at 1.5 Austrian Florins. This last collaboration was a short lived affair because in 1866 Prussia and Austria declared war on each other.

In 1876 the Prussian Bank became the Reichsbank, with the role of controlling all coinage and banknotes. The Chancellor Bismark charged the Reichsbank with issuing the crisp new Reichsmark. He imposed the acceptance of the new money as the only legal tender throughout the first German Reich. Reichsmark – the now-unified German currency – was sufficiently stable to go on with the gold standard. From the 1870s till the outbreak of World War I Germany was indeed part of the international gold standard.

Germany's new single currency was in effect a monetary union, taking into account that it survived two world wars, a devastating hyperinflation in 1923 and the monetary meltdown after World War II.

Zollverein was also a highly efficient fiscal tool, but its structure became increasingly less suitable for developing a trade policy commensurate with the growing industrialization in Germany. The collapse of the German Monetary Union came with the World War I.

As expressed by *Financial Times* (July 1998): “There are not many historic parallels that measure up in significance to European economic and monetary union (EMU). The most obvious is the German Zollverein in 1834, the customs union of German states that gave rise first to a fixed exchange rate system between the gulden, the Southern German currency, and the thaler, the Northern German currency, which merged into the mark in 1873. Historians still disagree over whether customs union and monetary union gave rise to political union, but the parallels to current day Europe are evident”.

There is however a major difference between the German monetary union and the EMU. If in Germany monetary unification followed political unification (epitomized by the creation of the German Reich), the EMU presents a peculiar case. As Bordo and Jonung (1999) comment, there is not any clear and unambiguous historical precedent to EMU, where a group of politically independent countries surrendered their national currencies to form a common monetary union based on a new unit of account under the leadership of a common monetary authority – while still retaining political independence. Or, as Goodhart (1995, p. 92) states just before the euro introduction, what is virtually unique about EMU and the euro is that it will be done without an accompanying federalization of government and fiscal functions. Usually, in the past, monetary unification has followed political unification, not the other way around (Bordo and Jonung, 1999).

6. The Latin Monetary Union

In 1865 France, Belgium, Italy and Switzerland, joined by Greece in 1867, agreed to regulate their national currencies on a uniform basis, thus making it freely interchangeable. Several other countries informally aligned to the new monetary union. In 1867 the members established a bimetallic standard (silver and gold). The precious metal standard reflected a commitment to fiscal conservatism and small balanced budgets.

The Latin Monetary Union, which ran alongside Germany’s monetary union, was actually dreamt up by France, obsessed by its declining geopolitical fortunes and monetary prowess. After Napoleon, the French needed a strategy to support their influence in Europe and they tried it through monetary alliances. This monetary experiment was a natural extension of the franc zone. It can be considered an official subset of an unofficial franc area, similar to the use of the USA dollar or the euro in many countries at present. Eighteen countries adopted the Gold franc as their legal tender. The founding members (France, Belgium, Italy and Switzerland) agreed on a gold to silver conversion rate (15 to 1) and they limited their money supply by forbidding the printing of more than 6 franc coins per capita.

Comparing the situation with the present European monetary union, it must be noticed that the Latin Monetary Union had no single currency akin to the euro. The national currencies of the member states were at parity with each other, the cost of conversions being limited to an exchange commission of 1.25%. Also, except the per capita coinage restriction, the Latin Monetary Union had no uniform money supply policies (the amount of money in circulation being determined by the markets) and it lacked a common central bank. All these deficiencies, along with the fact that member states were cheating on the gold and silver content of their coins, contributed to the official dismantling of the union in 1926 (but it expired long before that). The *coup de grace* was given by the World War I, with its huge financing pressures.

The lesson offered by the temporary Latin Monetary Union is that monetary unions of large sovereign states which do not have political union eventually disintegrate.

This is of great importance for the European monetary unification, even if politics has been the driving force behind EMU. More than a century ago, Europe was also dominated by the goal of currency stability and the experience of those times suggests that the success of the EMU is not guaranteed.

7. The Scandinavian Monetary Union

The Scandinavian Monetary Union (1873-1921) was formed by the Northern states of Denmark, Norway and Sweden (that share a geographic proximity and some linguistic similarity), just the moment when these countries adopted the gold standard. The union was thus contemporary with the Latin and German monetary unions. Actually, it was inspired by the Latin Monetary Union established in 1866. But in contrast to the German monetary union, the Scandinavian one was neither part of a great political project to unite these three countries, nor was it a part of a great plan for an economic union.

There were provided fixed exchange rates and stability in monetary terms, but the member countries continued to issue their separate currencies. Although not initially anticipated, the perceived security led to a situation in which the formally separate currencies were accepted on a basis of "as good as" the legal tender virtually throughout the whole monetary zone. By the end of the nineteenth century, the Scandinavian Monetary Union was very successful – gold coins, banknotes and subsidiary coins circulated in the member states and were accepted at par.

The dissolution of political union between Sweden and Norway in 1905 did not affect the basis for cooperation in the Scandinavian Monetary Union. The end was brought instead by the outbreak of World War I in 1914. The Scandinavian Monetary Union is a perfect example of a monetary union with multiple national central banks. It collapsed when these independent central banks tried to follow their own monetary policy.

The Scandinavian Monetary Union can provide useful lessons for the European economic and monetary union. The most important is that cooperation between central banks and the economic similarity between countries may be necessary conditions for a successful and lasting monetary union. But they not seem to be sufficient conditions. When the World War I appeared, the lack of a supra-national regulatory institution for monetary policy led each country to try its own non-cooperative path. As Vanssay (1999) remarks, this is a classic case of the Prisoner's Dilemma, where cooperation is the optimal solution only if every player perceives that there will be more games of the same nature over time. In any other circumstance, non-cooperative behavior is the dominant strategy. However, the creation of a supra-national central bank in order to solve this problem depends on its ability to resist calls for distinctive national macroeconomic policies.

Some studies (for example, Bergman, 1999) proved that the three Scandinavian countries did not form an optimum currency area during the period 1873-1913. The same study, applying a frequently used indicator of the desirability of monetary unions and analyzing the symmetry of country-specific structural shocks in these countries, finds that country-specific shocks are not highly symmetric.

8. Concluding remarks

The history of monetary unions provides some lessons to be taken into consideration.

Under metallic money in the gold standard epoch, Europe was actually a *de facto* monetary union. The euro shares the characteristic of permanently fixed exchange rates with the gold standard, but differs in the existence of ECB at its apex. Lacking such an institution, the gold standard only linked sovereign states and was ultimately undermined by conflict between them.

When comparing the euro with the American monetary unification, the major difference is that, while Europe wanted to integrate (inclusively in monetary terms) in order to avoid new wars on the continent, in USA the Civil War provided the immediate reason and means for federalizing monetary control.

The monetary unification of Italy does not check the findings of Frankel and Rose (1998), who demonstrate at the European level that a monetary union create the conditions for its own success. The reason stays in the major distances of economic development between Northern and Southern parts of the country.

The German Zollverein draws attention to the fact that, in the past, monetary unification has followed political unification, not the other way around, which is the main distinction between the German case and the EMU.

The lesson offered by the Latin Monetary Union is that monetary unions of large sovereign states which do not have political union eventually disintegrate.

The case of the Scandinavian Monetary Union averts that non-cooperative behavior can be solved with the creation of a supra-national central bank, but this institution should be able to resist calls for distinctive national macroeconomic policies.

The general implication of all these preceding experiences is that the political factors play indeed a great role in maintaining the currency unions. If the political union is not yet possible in the EU, at least cooperation and political unity should prevail within the EMU, otherwise the economic shortcomings are difficult to be overcome.

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Notes

1] Economic and Monetary Union
2] The period 1914-1946 was excluded because it was neither a period of the classical gold standard nor a period during which governments understood

how to manage monetary policy.

3] In the interval 1871-1913 economic growth measured a booming 4.1 percent the whole 42-year while (according to Christina Romer's dataset, 2003).

4] As a result of Californian and Australian gold discoveries of the late 1840s and the 1850s, there was rapid growth in mine production which was first leveled off and then fell back in the 1870s and 1880s before surging again with the South African and Klondike discoveries of the 1890s.

5] The Baring Crisis or the Panic of 1890 is the nineteenth century's most famous sovereign debt crisis. It was precipitated by the near insolvency of Barings Bank in London. Barings, led by Edward Baring, faced bankruptcy in November 1890 due mainly to excessive risk-taking on poor investments in Argentina.

6] Meaning money not redeemable for a specific amount of gold or other valuable commodity.

7] The Italian economies before unification were: the Two Sicilies, Piedmont + Liguria, Sardinia, Lombardy, Veneto, Parma-Modena, Papal states and Tuscany.

8] See Foreman-Peck, J. (2005).

9] In their influential article "The Endogeneity of the Optimum Currency Area (OCA) Criteria", Frankel and Rose showed that the EMU will result in more synchronized business cycles across the participating countries, even if it may look like a bad idea before it happens. EMU will work after it takes place and because it takes place. These authors present econometric evidence suggesting strongly that as trade links between countries strengthen, their national incomes become more highly correlated. Using a panel of 30 years of data from 20 industrialized states, they find a strong positive relationship between the degree of bilateral trade intensity nand the cross-country correlation of business cycle activity. This has important implications for the OCA criteria, that is a country is more likely to satisfy the criteria for entry into a currency union ex post than ex ante.

10] In German: "Customs Union".

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