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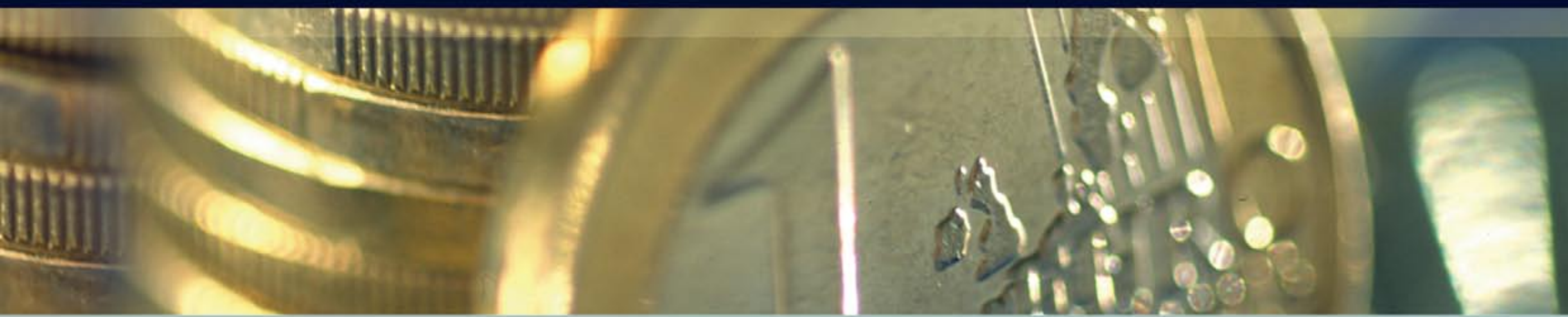

A long term perspective on the euro

Michael Bordo and Harold James

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In May 2008, it will be ten years since the final decision to move to the third and final stage of Economic and Monetary Union (EMU), and the decision on which countries would be the first to introduce the euro. To mark this anniversary, the Commission is undertaking a strategic review of EMU. This paper constitutes part of the research that was either conducted or financed by the Commission as source material for the review.

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A Long Term Perspective on the Euro

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Abstract

This essay will evaluate the experience of the first decade of EMU and the euro in historical perspective. It will ground the establishment of EMU and the euro in the context of the history of international monetary cooperation and of monetary unions. A discussion of the origins, key operating characteristics and problems encountered by earlier monetary arrangements will serve as a backdrop for an evaluation of the euro's performance and challenges in future decades. The essay will develop and expand upon the following three themes: 1. Lessons from the evolution of past monetary unions for EMU; 2. Fiscal policy arrangements for EMU in historical perspective; 3. Challenges facing EMU. The first two take an historical perspective. The third looks to the future.

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EMU and the euro, the single currency of its members, will be ten years old in 2009. Monetary Unions as currency arrangements have been implemented for a few centuries, but the European experiment of embarking on a monetary union without an accompanying full political union is bold and unprecedented. Monetary union has run ahead of the process of fiscal integration. EMU has helped to develop an integrated capital market, as well as providing many obvious consumer benefits in convenience and price transparency for an increasingly mobile European population. However, the novelty of the single currency while accompanied by divided sovereignty raises a number of problems and potential threats, some of which were anticipated at the time of the institutional preparations for monetary union, while others were not.

This essay will evaluate the experience of the first decade of EMU and the euro in historical perspective. It will ground the establishment of EMU and the euro in the context of the history of international monetary cooperation and of monetary unions. A discussion of the origins, key operating characteristics and problems encountered by earlier monetary arrangements will serve as a backdrop for an evaluation of the euro's performance and challenges in future decades. The essay will develop and expand upon the following three themes: 1. Lessons from the evolution of past monetary unions for EMU; 2. Fiscal policy arrangements for EMU in historical perspective; 3. Challenges facing EMU. The first two take an historical perspective. The third looks to the future.

1. Lessons from the evolution of past monetary unions for EMU.

A monetary union, defined as a common currency and set of monetary arrangements (including cooperation among central banks and a common central bank) for a group of member states is a form of international monetary cooperation. In the past international monetary regimes evolved to facilitate international commerce. The earliest regime, the international specie standard, in its most well known variety, the gold standard, emerged de facto because participating countries defined (pegged) their currencies in terms of a common precious metal. This led to a fixed exchange rate arrangement which in the late nineteenth century encouraged international trade and capital movements. The limitations on government fiscal and monetary action implied by the gold standard enhanced policy credibility, and consequently reduced the cost of borrowing for both governments and private actors (Bordo and Rockoff 1996). Central banks by following the rule of gold convertibility implicitly cooperated with each other. In some cases direct cooperation was arranged. In the twentieth century, more explicit forms of monetary cooperation evolved, first with the Gold Exchange Standard in the 1920s, then the Tripartite agreement in the 1930s and then with the Bretton Woods Articles of Agreement in 1944, which required all members to adhere to a set parity and to other rules.

Monetary unions of the past were set up under two circumstances: as international arrangements between countries using similar specie currencies, to harmonize interstate transactions and as part of the creation of a nation state from a number of smaller political units. In the latter case monetary unification was part of the process of nation building which was combined with the creation of a fiscal union. A common currency was seen as a way to avoid the costs of currency competition and currency instability among the member states.

International monetary unions of the past were successful as long as the international environment was stable. Large shocks such as wars led to their dissolution. National monetary unions were also successful as long as the nation was politically cohesive. It took the historical national MUs decades to establish the necessary integration of goods and factor markets and the creation of well functioning central banks. The greater success of some MUs over others reflected their patterns of economic development and evolution of sound financial institutions and sound monetary and fiscal policies.

1.1 The history of monetary unions[1]

A monetary union or a unified currency area is the extreme version of a fixed exchange rate regime. The essence of a monetary union is that all the member states adopt the same currency as a unit of account, medium of exchange and store of value.This implies that the monetary union has one exchange rate towards the rest of the world.

The history of monetary unions is best understood if we make a distinction between national and multinational monetary unions. By a national monetary union we mean that political and monetary sovereignty go hand in hand. Roughly speaking, the borders of the nation state are the borders of the monetary area. A national monetary union has as a rule one single monetary authority, commonly a central bank.

By a multinational monetary union we mean an international monetary arrangement between independent countries based on permanently fixed exchange rates between their currencies. Multinational monetary unions occur when independent nation states link their monies together through a perfectly fixed exchange rate so that one member's money is perfectly exchangeable for another member's at a fixed price. An extreme example of this would be that all member states use the same currency.

A second important distinction is between the monetary union per se and the type of monetary policy pursued within the union. Adoption of a common money by a number of states can be consistent with alternative sets of institutional arrangements governing monetary policy, ranging from complete laissez faire to monolithic central banking. As we demonstrate below monetary unions, once created, differed substantially depending on the evolution of monetary institutions. The currencies could be unified without specifying any particular rule for governing monetary policy as will be seen from the examples of the U.S., German and Italian monetary unions and two multinational monetary unions, the Latin Monetary Union(LMU) and the Scandanavian monetary union (SMU).

1.2 National Monetary Unions.

1.2.1 The United States

The U.S. monetary union was created with the signing of the constitution in 1789. The constitution gave the Congress the sole power to "coin money" and "regulate the

[1] See Bordo and Jonung 2003.

value thereof". Moreover, the Coinage Act of 1792 defined the U.S. dollar in terms of fixed weights of gold and silver coins, placing the country on a bimetallic standard. Finally, establishment of a national mint in Philadelphia in 1792 secured the foundations of an effective currency area.

In the preceding two centuries, the colonial experience was chequered with examples of excessive issue of paper money, "the bills of credit", leading to high inflation as well as competing seigniorage between the colonies. This experience was repeated after independence during the Confederation period 1793 to 1789. The Constitution of 1789 was designed expressly to avoid giving the states the power to issue paper money and to preserve the control of the currency for the Congress.

While the Congress was given the exclusive power to coin money, the States were allowed to charter commercial banks and to regulate their note issuing activity. All bank notes had to be convertible into specie. In the early decades of the 19th century, bank note issue varied considerably and various state bank notes circulated at a discount. Moreover there is evidence that the price level may have been higher in the west than the east.

The movement towards a complete currency union with a more uniform nationwide price level was aided by the practices of the First Bank of the United States (1791-1811) and the Second Bank of the United States (1816-1836). Neither bank was designed as a central bank but as a public bank. Both banks were sufficiently well capitalized to be able to provide the government with medium–term bridge loans to finance shortfalls in government tax receipts. Both were also intended to provide loans to the private sector to spur economic development. Finally, it was deemed imperative that they hold sufficient specie reserves to always maintain convertibility of their notes. One of the practices of both Banks was to enforce the convertibility of state bank note issues and to transfer specie between regions.

After the demise of the Second Bank of the United States in 1836, the United States did not have any form of a central bank until the establishment of the Federal Reserve System in 1914. However the U.S. Treasury served as a monetary authority and maintained specie convertibility. Although the 19th century was characterized by considerable banking instability, the currency union remained intact with the exception of the Civil War period when the Confederate States issued their own fiat currency. In the face of great difficulties in raising tax revenues and in selling debt both at home and abroad, the Confederate government expanded its money issues at an ever increasing rate. By the end of the Civil War a hyperinflation vastly reduced the value of Confederate notes. Upon Union victory in April 1865, Confederate notes were declared illegal in the United States. The National Banking system, established in 1865 , finally created a uniform national bank note system. Several different types of high powered money: gold coins, silver coins, gold and silver certificates, and U.S. notes (greenbacks) circulated at par for the next half century until the creation of the Federal Reserve system in 1914, which issued Federal Reserve notes. Although bank notes now circulated across the country at par, demand deposits did not, charges for check clearing varied depending on the distance from the East coast money centers. The Fed instituted par checking for the member banks, not nonmembers, eliminating the final hurdle to par acceptance of all forms of money.

The Federal Reserve System consisted of 12 regional Reserve Banks coordinated by the Board of Governors in Washington DC. As described by Eichengreen (1997a, 1997 b) and Wheelock (2000), the Reserve Banks initially had some monetary independence within their respective regions with the power to set discount rates. Regional conflicts over the conduct of monetary policy occurred throughout the 1920s and 1930s, and many scholars believe that those conflicts were an important part of the paralysis in decision making that helped create the Great Depression (Friedman and Schwartz 1963 and Meltzer 2004). It was only with the Banking Act of 1935 that full power to implement monetary policy was given to the Board of Governors. Thus monetary unification of the United States was not finalized until long after political unification.

1.2.2 The Italian Monetary Union

The main reason for the establishment of a currency union on the Appenine peninsula in the 1860s was political unification under the leadership of the Kingdom of Sardinia. The Kingdom of Italy was proclaimed in 1861, and completed in stages in 1866 and 1871. Prior to unification as many as 90 different metallic currencies were legal tender in the many small Italian states. In addition, major banks in the small states issued bank notes that served as legal tender. The variety of different currencies was commonly regarded as a barrier to trade. In order to achieve more than a *de jure* unified Italy, measures were taken to turn the country into a monetary union as well.

The issue of coins was quickly resolved. During a brief transition period, four currencies were accepted while all other old currencies were exchanged into these. Finally, in 1862, a new, unified coinage was introduced based on the lira of Sardinia. All pre-unification coins and paper monies were abolished and exchanged for coins denominated in the new lira, equal in value to the French franc. A bimetallic currency standard was preferred, primarily to conform to the monetary system of Italy's major trading partners and to accommodate the dominance of silver coins in southern Italy. The currency ratio between silver and gold was set at the French ratio of 15.5 to 1.

Although Italy had unified its coinage in 1862, it had considerable difficulty in remaining on the specie standard in which its currency was defined. In 1862, Italy adopted the bimetallic standard, although de facto the standard was gold. In 1865 Italy joined the Latin Monetary Union (see section 1.8.1 below). Fiscal improvidence and the war of unification against Austria in 1866, however ended convertibility (with a new regime known as the *Corso Forsozo*). Fiscal and monetary discipline was achieved by 1874, and exchange rate parity was restored. The government announced on March 1, 1883, that it would restore convertibility on April 12, 1884 but convertibility only took place in silver because it was overvalued at the mint. Public finances then deteriorated and unlawful bank note issues indicated an absence of monetary discipline. By 1894 Italy was back on a paper standard, and floating exchange rates. Inconvertibility lasted until 1927.

It took Italy 30 years to establish a central bank. No immediate action was taken to establish a single monetary authority. Several regional banks were issuing notes as well as performing central bank functions. The Banca Nazionale nel Regno d'Italia (BNR), which was formed by the previous national bank of Sardinia, absorbing some other state banks in the process, held a leading position among banks, however, partly by being the largest bank in operation and partly by being the bank of the state that led the political unification process.

In the following decades a number of competing banks of issue coexisted. By 1884 the number had declined to six. There has been considerable debate on whether the existence of multiple banks of issue was per se inflationary or whether the lack of fiscal difference and intermittent departures from specie were the causes of the inflationary episodes (Fratianni and Spinelli 1997). An enquiry into the state of the banking system led to a major restructuring in 1893. The Banca d'Italia was formed as an amalgamation between the BNR and the two remaining Tuscan banks. The three remaining note-issuing banks were put under direct state supervision. In sum, the formation of the Italian monetary union, as was the case with the U.S., took place after political unification and it was a time consuming process.

1.2.3 The German Monetary Union

The German monetary- as well as political-unification process proceeded stepwise. Prior to monetary unification, each principality and free town issued its own coins and in addition a multiplicity of issue banks gave out paper money. In addition, large numbers of foreign coins circulated. The diversity of coins was perceived as a great nuisance. Merchants and industrialists, often with a liberal orientation, became the main proponent of unified economic and monetary conditions to reduce transactions cost emanating from monetary disarray, while the governments of the principalities resisted, safeguarding their seigniorage gains.

In 1834, under the Zollverein, all internal customs barriers were removed. The 1838 Dresden Coinage Convention brought some simplification, with southern states adopting the Gulden and northern states the Thaler. Both the Thaler and the Gulden were explicitly linked to silver, with one Thaler being valued at 1.75 Gulden. The Vienna Coinage Treaty of 1857 constituted a further step towards monetary unification. The Treaty incorporated Austria into the Dresden arrangement by fixing the exchange rate of 1 Thaler to 1.5 Austrian Gulden and to 1.75 south German Gulden. In addition, the amount of petty coins that each state could issue was regulated. The circulation of gold coins, previously left to the discretion of each state, now became subject to stringent rules. No gold coins other than special *Vereinshandelsgoldmünze* designed for foreign trade were minted. The exchange of gold coins into silver at a fixed parity was forbidden as well, avoiding the risk of turning the currency standard into a bimetallic one. Secondly, the treaty dealt with paper money, the first international monetary arrangement to do so, by prohibiting the granting of legal tender status to inconvertible paper money.

The establishment of the new unified German empire following Germany's war of unification (the Franco-Prussian) war induced further steps. The coinage acts of 1871 and 1873 unified coinage throughout the empire and introduced the Mark as the unit of account, based on the decimal system. Individual states continued to have their own coinage, with images of their rulers on the heads of their now standardized coins. In order to link the German currency to the British pound, at the time the leading currency, the gold standard was adopted with silver being reduced to use in coins of small denominations with less metal content than their face value. In 1875 a new banking act created a new central bank, the Reichsbank, and forced most of the other issue banks to restrict themselves to ordinary banking business. The Reichsbank was to serve as the central bank for the new Germany.

From the 1870s to the outbreak of World War I, Germany was part of the international gold standard. German monetary conditions were determined by international ones. Political unification epitomized by the creation of the German Reich was followed by three major changes in the German monetary system: the conversion of the currency standard from silver to gold; the replacement of the Thaler with the Mark as the unit of account and the formation of a single central bank that in practice monopolized the issuing of paper money. These changes meant that Germany after a lengthy process was a full-fledged monetary union. Again monetary unification followed political unification, with concessions being made in the form of coinage design to people who still clung to the old states that made up the new federally organized empire (James 1997).

1.3 Multinational monetary unions

We consider two multinational monetary unions, the Latin and Scandinavian monetary unions. Both were based on a common coinage but where each member country retained its central bank.

1.3.1 The Latin Monetary Union

The Latin Monetary Union (LMU) was created in 1865 by France, Belgium, Switzerland and Italy. Prior to its establishment these countries had a history of recognizing each other's currencies as means of payment based on the French bimetallic system, in operation since 1803. The French system stipulated that the fineness of each coin, regardless of whether it was a gold or silver coin, was to be 90 percent and fixed the value between gold and silver to 15.5. (Redish 2000).

In the 1850s, a fall in the price of gold relative to silver made gold coins overvalued at the mint. Consequently it became profitable to melt silver coins and sell silver for gold at the market rate. As the price of gold continued to fall, even worn coins with low silver content started to disappear. The process left the countries virtually with a gold standard currency since gold was the only medium of exchange that remained in circulation. However the shortage of silver coins meant a lack of small denomination monies for use in minor transactions.

Switzerland was the first country to enact a feasible solution by reducing the silver content to 80 percent of all coins except the five franc coin, thus ensuring that it was no longer profitable to export the newly reduced value silver coins. Italy, upon unification, decided to lower the silver content of every coin smaller than one franc to 83.5 percent. The result of Italian and Swiss actions was that France and Belgium were flooded by debased silver coins from their neighbors creating seigniorage gains for the issuers. France reacted in 1864 by reducing the silver content in each silver coin, except the 5 franc coin, to Italy's 83.5 percent and by suspending the acceptance of Swiss coins by her customs offices (Einaudi 2001).

Thus there was an apparent need for coordination. The acute shortage of small denomination coins constituted a hindrance to trade both within and between countries and forced the countries into action to remedy the problem. The unilateral response by each country of creating token coins of varying fineness created an additional problem in the form of one country reaping seigniorage benefits at the expense of the others. To deal with this situation, Belgium proposed a joint monetary conference, held at the end of 1865 that created the LMU.

The main issues at the conference in 1865 were to secure and standardize the supply of subsidiary coinage for smaller transactions and the formal adoption of gold as the currency standard. The first issue was unanimously resolved by deciding that all silver coins less in value than the five franc coin were to be token coins with 83.5 percent silver fineness which the state treasuries had to accept as payment up to 100 francs regardless of the country of origin. Each state treasury was then obliged to exchange the other state treasury's holdings of its token coins into gold or silver five franc coins at par. The total value of token coins that each country was permitted to mint was restricted to six francs per capita. The adoption of a gold standard was rejected in favor of retaining the bimetallic standard.

The existing currencies continued to be in use virtually unchanged as parallel currencies. Each state treasury remained ultimately responsible for the redemption of its own coins. Apart from solving the problem of scarcity of small denomination coins, the purpose of the standardization of the dimension and metal content of the coins was to eliminate the possibility of seigniorage gains through the minting of debased coins. While aiming to restrict the amount of money in circulation, the conference failed to consider restrictions preventing the member countries from issuing other forms of money- a failure that was to be exploited by the issue of paper notes. Consequently the members still had considerable monetary independence.

Initially, the union achieved what it had set out to achieve. However two problems soon emerged. After the inauguration of the union, the price of gold started to rise again, and led to silver 5 franc coins returning to circulation and gold coins being exported or melted. At the same time, France and Italy began to issue inconvertible paper money. In the case of France, it was a temporary measure due to the Franco-Prussian war in 1870-71. Italy's chronic government deficit preserved inconvertibility of the lira until 1881 and then introduced it again in 1894. The increased money supply in Italy led to a depreciation of the lira. Consequently, Italian silver coins were exported to the other member countries where they were legal tender. Obviously, this enabled the Italian government to finance part of her deficits with seigniorage, the costs of which were shared between all four countries.

In response to the problems facing the union, a conference by the members in 1874 decided to maintain the bimetallic standard but restrict the minting of silver five franc coins. In 1878 the members agreed to cease issuing five franc silver coins although those still in circulation were to remain legal tender, and the silver coins remained as in effect token coinage. This arrangement established the "limping gold standard'.

As the relative price of gold continued to rise, the union in 1885 considered full adoption of the gold standard and thus withdrawing the 5 franc silver coins. The main problem was once again the cost of redeeming silver in circulation, since the intrinsic value of silver was now far below its face value. In the end , this proved too great an obstacle to overcome and a new agreement was signed stipulating that any party leaving the union would have to exchange the others' holdings of its silver coins into gold.

World War I led to the break-up of the LMU. The sharp increase in military expenditures left the members with no choice but to issue paper money. The large quantities of fiat issued during the war remained in circulation after hostilities ended. As paper money was not recognized as legal tender in any country other than the issuing one, the union was in effect put out of business. During the war, silver coins were melted or exported. The remaining coins constituted a small share of the total money supply. Belgium was the first country to act accordingly, declaring in 1925 that she would leave the union at the start of 1927. The other countries followed and the LMU was dissolved.

1.3.2 The Scandinavian Monetary Union

Prior to the formation of the Scandinavian Monetary Union (SMU) in 1873, the three Scandinavian countries had a long history of similar units of account and exchange of notes and coins between them (Bergman, Gerlach and Jonung 1993). They were all on the silver standard and they all used the riksdaler as the unit of account. One Norwegian specierigsdaler was roughly equal to two Danish rigsdaler which in turn was roughly equal to four Swedish riksdaler. In consequence, a considerable fraction of the coin circulation in either of the three countries consisted of coins minted in the other two. The difference in value separating these exchange rates from the exchange rates based on the currencies' values in silver was small enough in the case of the Danish and Norwegian currencies for any profits that could have arisen from arbitrage to be negligible. This was not the case for the Swedish currency whose value exceeded 0.5 Danish or 0.25 Norwegian riksdaler by an amount sufficiently large to produce an inflow of Danish and Norwegian coins into Sweden to be perceived as a nuisance.

In addition to this currency flow there were other reasons for aiming at a unified coinage. There was a lively debate across Scandinavia over which metal-gold or silver would be most suitable for the monetary standard. There also was discussion regarding the merits of basing the unit of account on the decimal system. The intellectual climate favored the decimal system on the grounds of rationality and adherence to the gold standard – the standard followed by the leading commercial nations Britain and Germany. In addition the nationalistic movement called Scandinavism fostered social and political willingness to bring the Nordic countries closer together. All of these factors contributed to the three countries creating a common currency in 1873. Norway did not formally sign the agreement until 1875, but in practice altered her monetary standard in 1873.

The formation of the SMU in 1873 replaced the old unit of account, the riksdaler, with a new one, the krona, which was specified in terms of gold and was to be equal in all three countries. Subsidiary coins were to be minted in silver and copper with a fineness of 80 percent and no restrictions were placed on the amount of subsidiary coins minted. All coins were given legal tender status throughout the union. The state treasuries accepted unlimited amounts of coins irrespective of their country of origin.

The only restrictions were a maximum amount stipulated for the settlement of private debts.

Notes were used widely in Sweden because of the larger denominations of the gold coins. Intercountry circulation consisted of notes and subsidiary coins. This caused some dissatisfaction since notes were not covered by the union agreement and thus did not always circulate at par.

In 1885 the three central banks decided to establish inter-country drawing rights. Transactions between the central banks were made free of interest and other charges. Then in 1894 Sweden and Norway further extended the scope of the union by accepting each others notes at par without restrictions. The Danish central bank joined the agreement in 1901.

The SMU worked smoothly in the years before World War I. The gold standard, by requiring convertibility into gold, ensured stability in the money supply. All three countries avoided issuing excessive amounts of subsidiary coins. The money supply in the member countries expanded in line with economic growth. Inflation rates and interest rates exhibited identical patterns in Scandinavia during the union.

Like the LMU, the SMU's collapse was induced by World War I. At the outbreak of the war, Scandinavian notes were declared inconvertible into gold. At the same time, in order to prevent an outflow of gold, the export of gold was prohibited. Money growth ceased to be tied to the supply of gold and the basis for the exchange of Scandinavian notes at par was eliminated. Monetary policy was more expansive in Denmark and Norway than in Sweden. In 1915, the official exchange rates changed accordingly with one Swedish krona buying more than one Danish or Norwegian krona.

Since the legal tender status of Scandinavian coins in all Scandinavian countries was still in force, Danish and Norwegian gold coins were exported to Sweden. The governments in Denmark and Norway often granted exemptions from the prohibition of export of gold coins. The Swedish central bank objected to the inflow of gold coins. Negotiations were opened in order to achieve the suspension of the legal tender arrangement. Neither Denmark nor Norway wished to terminate it however, and the outcome in 1917 was instead a strict enforcement of the prohibition of gold exports.

At the end of the war, the three Scandinavian currencies were no longer traded at par. Gold coins could not circulate across borders because of the ban on gold exports. In virtually all respects the SMU had been rendered ineffective by the war. The only remaining parts of the original agreement were the legal tender and equal value status and unrestricted minting and flow of subsidiary coins. Because the Swedish coins were more valuable than Danish and Norwegian coins, subsidiary coins flowed into Sweden. To come to terms with this situation, a supplementary agreement was put into force in 1924 which stated that, without regard to the coinage treaty of 1873, each country could only issue new subsidiary coins that was legal tender in the issuing country, thus phasing out the common subsidiary coins in circulation. The union was effectively terminated by the decision.

1.4 Lessons from the Historical Record.

The past monetary unions we have described were demarcated into the categories of national and multinational. The evolution of the former set of arrangements was tied up closely with the creation of nascent national states in the three countries we examined. The economic case for monetary unification in each of them was clear: to reduce transactions costs of multiple currencies and thereby facilitate commerce; to reduce exchange rate volatility; and to prevent wasteful competition for seigniorage. The multinational monetary unions were set up for basically similar economic reasons but there was no underlying political imperative to create a nation state. The two international unions we examined were part of a more general international monetary standard based on specie and although the members had central banks, the scope for following monetary policies inconsistent with the rules of the gold standard regime were limited. This made coordination between the monetary authorities relatively easy.

This key distinction between the two types of arrangements was reflected in their durability. The national monetary unions we describe have endured for two centuries reflecting the cohesion of their underlying nation states. The record was not without serious strains produced by political forces, witness the American Civil War and the postwar division between West and East Germany. There have been prominent dissolutions in the twentieth century of national monetary unions which reflected the breakup of their underlying polities, for instance Austria-Hungary, the USSR, Czechoslovakia and Yugoslavia. But the key element in the survival of these unions has always been political.

In the case of the international monetary unions we have covered, dissolution occurred when faced with the large exogenous shock of World War I. The exigencies of war put the various member states on divergent paths of monetary and fiscal rectitude. The underlying common nominal anchor, gold convertibility, became inconsistent with pressing national goals. Moreover both the LMU and SCU were part of a broader international monetary system which because of its common basis of adherence to specie also implicitly fostered monetary cooperation (although not as clearly demarcated as by the MUs). Like the two regional sub arrangements, it collapsed with the strains of the war. In the postwar the gold exchange standard and Bretton Woods were arrangements which combined the discipline of gold adherence with the flexibility of allowing domestic financial authorities to pursue domestic stability goals. In both cases the regimes ultimately collapsed because of the incompatibility between the two goals.

An additional lesson is the role of the monetary authority in the two types of arrangements. The national MUs all developed central banks as part of the process of monetary unification. It took a long time in each of the three examples for this process to reach fruition and for the central banks to provide monetary stability. The path was far from smooth as seen in the U.S. case in the destruction of the two Banks of the U.S. in the early nineteenth century and the Federal Reserve's massive failure in the 1930s; in Germany in hyperinflations after the two world wars; and in Italy in monetary instability for most of the Banca d'Italia's existence. The multinational MU's we examine kept separate monetary authorities. Cooperation between them was focused primarily on the limited goals of maintaining compatible coinages and in the case of the SCU the international clearing of bank notes .They did not engage in policy coordination in the modern sense in part because given the common adherence to the gold standard it was not necessary.

EMU is different from the earlier experiences with monetary unification that we have described. It has created a single currency, the euro and a common monetary authority, the ECB, like in the case of the national MUs, but the member states have kept a substantial part of their political sovereignty and, as will be discussed in section 2, their fiscal sovereignty. Also like the historic gold standard the EMU has a common nominal anchor, the commitment by the ECB to price stability, albeit in a fiat regime. A key potential problem as in the case of the earlier international monetary arrangements and the multinational MUs is conflict between national agendas for growth and full employment, a problem which is related to the incidence and severity of potential asymmetric shocks. Here political will in either driving towards greater political integration or in the creation of cooperative fiscal arrangements will be vital for the underlying durability of the EMU.

2. Fiscal policy arrangements for EMU in historical perspective

National MUs of the past, like Germany, Italy and the United States, which in some respects served as prototypes for the EMU also evolved as fiscal unions with either a centralized fiscal authority or fiscal federalism with revenue sharing. In this section we consider some theoretical and historical perspectives on fiscal unions.[2]

2.1 Theoretical perspectives: fiscal unions and fiscal federalism.

The concept of a fiscal union entails fiscal federalism or some other kind of cooperative arrangement between the members regarding the rules designed to allow the long run sustainability of fiscal positions. Fiscal federalism defines the roles of the different levels of government and the way in which they relate to one another through different instruments like grants and transfers.

The traditional theory of fiscal federalism contends that the central (federal) government should have the basic responsibility for macroeconomic stabilization and income distribution. It also provides national public goods. According to the theory, decentralized levels of government should provide goods and services whose consumption is linked to their own jurisdictions. The economic argument for providing public goods at the sub-national level is based on the Decentralization Theorem, namely that “the level of welfare will always be as high if Pareto-efficient levels of consumption are provided in each jurisdiction than if any single, uniform level of consumption is maintained across all jurisdictions.” (Oates 1972).

The most obvious cost of federalism is the loss of autonomy by the central government. In fact, the advantages of decentralization require that the central government’s authority be limited. As a result, in highly decentralized fiscal federations, central governments might find it difficult to implement coordinated policies and provide federation wide collective goods.

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2 See Bordo, Jonung and Markiewicz 2007.

That decentralized governments will provide the efficient level of public goods depends on three assumptions: a) households are freely mobile and generate competition between jurisdictions. If this is not the case, competition among local governments can lead to sub-optimal outcomes; b) the lack of interdependencies between jurisdictions. When interdependencies are significant, competition among local governments can generate spillovers; c) a federation should be properly structured and its actions disciplined.

Thus if there are strong interdependencies between sub-national jurisdictions, local officials may face incentives to increase their expenditure while externalizing the costs to others. This incentive is higher if the central government cannot fully commit to a no-bailout rule. And the central government's commitment becomes less credible if sub-central governments are heavily dependent on transfers from the central authority.

The interplay between several fiscal and one monetary authority can lead to free riding. Each individual fiscal authority sees itself as a small player who has little impact on monetary policy. In equilibrium each country free rides and the outcome is worse than in a cooperative equilibrium. An extensive literature has analyzed the existence of independent fiscal authorities with a single central bank (Dixit and Lambertini 2001, Chari and Kehoe 2004, Uhlig 2002). In line with the proposition by Rodden (2004 and 2006), these studies point out that a setup of a single monetary authority and numerous fiscal authorities requires effective fiscal policy constraints to avoid excessive deficits at the sub-central level.

2.2 Theoretical Perspectives: Optimum Currency Areas

The classical case for a fiscal union accompanying a monetary union is the theory of Optimum Currency Areas pioneered by Mundell (1961), Kenen (1969) and McKinnon (1963). The original OCA approach weighed the benefits of adopting a single currency against the costs of abandoning independent monetary policy. The benefits of adopting a single currency and a single monetary policy are the reduction of transactions costs of using multiple currencies. These benefits would be greater the more open and the more extensive the trade connections are for the economies involved. The costs occur in the face of shocks which hit the members asymmetrically. Adjustment to such shocks can be facilitated by flexible wages and prices and by labor mobility. If these mechanisms do not function well then this approach makes the case for a common fiscal authority or a formal fiscal arrangement (fiscal federalism) to transfer resources from the members facing positive shocks to those facing negative shocks.

Mundell (1973), referred to as Mundell II in distinction to his 1961 article (McKinnon 2004), argued that in the case of free capital mobility, the exchange rate becomes a target for speculative movements and a source of asymmetric shocks. Hence abandoning a flexible exchange rate is an additional benefit of a currency union. Therefore a country might be interested in joining a currency union even if other adjustment mechanisms are not well developed. More recently it has been argued that financial integration leads to the development of market based risk –

sharing arrangements which will offset the effects of asymmetric shocks and obviate the need for additional fiscal stabilizing instruments.

Two market based mechanisms can provide private agents insurance against negative idiosyncratic shocks and hence ameliorate the negative consequences of EMU: an internationally diversified portfolio can protect private individuals from a negative idiosyncratic shock to their domestic assets and borrowing and lending can smooth consumption.

Finally Frankel and Rose (2003) have argued that areas which do not qualify ex ante as OCAs may actually ex post become OCAs. They present evidence that ex post integration of goods and capital markets follows monetary unions. In rationalizing production across national boundaries, the asymmetry of real output movements between markets is reduced and hence there is less of a need either for fiscal transfers or for the preservation of independent monetary policies.

2.3 Empirical Evidence

An extensive empirical literature since the 1990s has ascertained the extent to which the euro area satisfied the various criteria for an OCA and whether there is a case for a fiscal union or fiscal federalism to supplement the MU.

2.3.1 Asymmetric shocks?

The literature assesses the extent to which the euro area is subject to idiosyncratic shocks defined as different economic disturbances that are either initially different or affect regions in different ways. Eichengreen (1997b) finds that asymmetric disturbances, measured by the real exchange rate, are more variable in Europe than in the U.S.. Other evidence by Bayoumi and Eichengreen (1993) and von Hagen and Neumann (1994) complement these results. According to Bayoumi and Eichengreen (1993) "These studies uniformly point to the conclusion that adjustment to region-specific shocks , whether by market or by policy, is faster in the USA than in Europe."

2.3.2 Labor Mobility

De Grauwe and Vanhaverbeke (1993) report very low migration within the European countries. Eichengreen (1993) finds that interregional mobility is much is much more sensitive to changes in wage differentials in the U.S. than in the UK and in Italy. Obstfeld and Peri(1998) find that there is little migration in response to asymmetric shocks within European countries, relative to the U.S.. The literature suggests that intraregional mobility in the euro area is low. International migration in the euro area will probably be even lower since language and culture add further barriers to labor mobility.

2.3.3 Wage and Price flexibility

The empirical evidence indicates that both wages and prices are sticky in the short run, indicating a costly adjustment to negative shocks, involving an increase in unemployment. One recent study by Dessy (2004) analyses wage dynamics using the

European Community Household Panel data for 12 countries 1994-96. She finds a high degree of nominal wage rigidity for all the countries. Thus wage/price flexibility in the euro area do not seem to be very helpful in accommodating idiosyncratic shocks.

2.3.4 Risk sharing mechanisms.

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The early OCA literature emphasized the role of government based risk sharing mechanisms consisting of transfers and other discretionary grants. Initial evidence by Sala-i-Martin and Sachs (1992) showed for the U.S. that a one dollar drop in state income could be compensated by an increase in net transfers by 60 cents, while Eichengreen (1997a, 1997b) calculated that fiscal transfers between the member states of the EU was only a fraction of the U.S. magnitudes. According to Hartland (1949), fiscal federal transfers served to offset much of the interregional losses following the collapse of the U.S. banking system in the 1930s. However recent work (Von Hagen 2000, Obstfeld and Peri 1998, Melitz and Zumer 2002, Balli and Sorensen 2007) has greatly diminished the size of the offsets estimated by Sala-i-Martin and Sachs and by Eichengreen to between 5% and 15%.

The recent evidence on risk sharing finds that for the U.S., the capital markets provide most of the insurance against idiosyncratic shocks (Asdrubali, Sorensen and Yosha 1996, Melitz 2004). Europe lags behind the U.S. in pooling risks through portfolio diversification (Melitz 2004) but the borrowing channel is almost as well developed in the EU as the U.S. (Bali and Sorensen 2007). Increasing financial integration in the EU although less than the U.S. suggests an even stronger contribution of financial markets to risk sharing. Finally recent evidence (Melitz 2004, Kalemli-Oczan et al 2004, Balli and Sorensen 2007) finds that financial and real integration in the EU has increased the symmetry of business cycles. This again may reduce the need for accomodation of idiosyncratic shocks through risk sharing mechanisms. This is in line with the hypothesis of endogeneity of currency unions advanced by Frankel and Rose (1998).

2.4 Monetary and Fiscal Unions: History and Current Practice

The argument by Eichengreen (1991) and others that fiscal federalism can offset the effects of asymmetric shocks and improve upon the operation of a monetary union depends on a number of assumptions which may not hold. To isolate the characteristics that make fiscal unions successful we describe the historical experience of several fiscal unions: the United States; Argentina and Germany. The first can be viewed as a successful fiscal union. Canada and Australia have had similar experiences. The second, Argentina can be viewed as a less successful MU. Brazil may fit into the same category. Germany is an intermediate case.

2.4.1 The United States

The history of U.S. fiscal federalism goes back to the constitution of 1789. After the Declaration of Independence in 1776, The Articles of Confederation created a league of sovereign states in which the Congress did not have the power of taxation, or the power to control trade or the currency. This arrangement was unsuccessful largely: because of spillover effects of each states independent monetary and fiscal policy;

because of the impediments to a free market; and the weakness of Congress. The Constitution of 1789 gave the Federal Government the power to collect taxes and tariffs and to issue currency and to provide the public goods of defense and international diplomacy. The tenth amendment declared that all powers not expressly delegated to the federal government by the Constitution were preserved for the states. This laid the foundation for the concept of states rights, limited national government and dual spheres of authority between the state and federal governments.

The period from 1789 to 1901 was the era of Dual Federalism, characterized by little collaboration between the federal and state governments. In the 1830s many states ran large fiscal deficits to finance infrastructure projects. In the face of a major international financial crisis and fiscal shock in the years 1837 to 1840, many states faced insolvency and demanded a bailout by the Congress. This was refused leading to widespread defaults in 1840. Thus the federal government sent a costly signal of the limits to its commitments to the states. As a result the states have approximate fiscal sovereignty.

Between 1901 and 1960 cooperation and collaboration between various levels of government increased. The defining moment in the U.S. fiscal federalism was the Great Depression (Bordo, Goldin and White 1998). In the face of the massive decline in real income, the states were unable to raise the revenue necessary to meet unavoidable expenditure. In 1933, as a major component of the New Deal, President Roosevelt greatly expanded the role of the federal government in the domestic economy. In the 1930s there was a massive shift in expenditure from the local to the state and federal levels. Before 1932 the relative shares of government expenditures were: 50% local, 20% state and 30% federal government. After 1940 the shares were: local 30%, state 24% and 46% federal (Oates and Wallis 1998). Most of the increase in government expenditure came in programs administered at the federal level in cooperation with state and local governments.

Creative federalism from 1960-68 further shifted the power relationship between government levels toward the federal government through the expansion of the grant in aid system and the increasing use of regulations. Since 1970 there has been some devolution of powers back to the states.

2.4.2 Argentina

Argentina is a federal republic with 24 provinces. It was born out of the union of colonial regions with differing economic and social characteristics. The establishment of a national government and a constitution took almost four decades accompanied by violent struggle. The Constitution gave the provinces priority over the nation.

The Great Depression, although milder in impact than in the U.S. also led to major changes in the role of government. The key events of the 1930s were the abandonment of a currency board linked to gold and the creation of a central bank (Della Paolera and Taylor 1999). The Depression led to the insolvency of many of the provinces. They were bailed out by transfers from the federal government financed by paper money issues by the central bank. The Depression also spawned an increase in both the federal and state government's shares in national income.

In subsequent decades the states kept running large fiscal deficits which were financed by transfers and loans from the federal government and by loans from the provincial banks. These loans were then discounted at the central bank. By the late 1980's Argentina had a hyperinflation. It was ended by the 1991 Convertibility Law which established a currency board arrangement ending inflationary central bank financing of public sector deficits at all levels.

By the mid 1990s many provinces again began running large deficits which were funded by national treasury bonds. In 2002, Argentina suffered a serious debt, banking and currency crisis which ended the Convertibility Law. Many commentators have attributed the 2002 crisis to irresponsible behavior by the provinces and the subsequent run up in the national debt to GDP ratio.

2.4.3 Germany

The Federal Republic of Germany consists of a federal government, 16 Länder (state) governments and numerous municipal governments. The national unification of Germany in 1871 was based on a strong tradition of regional governments. After unification of the German Reich total government spending increased from 10% of GDP in 1881 to 18% in 1913 with an increase in the central government's share from 3% to 6%.

The Weimar Republic was founded as a"decentralized unitary state" after the defeat of World War I, and experienced dramatic shocks in quick succession: the hyperinflation of 1922-23, the stabilization of 1923-4, and the Great Depression. The Nazi regime after 1933 created a unitary state with all power held by the central government while the states were relegated to administrative districts.

After World War II, a federal state was created based on Länder which were conceived as state units. They were given considerable power. The German system is less cooperative and more competitive than federations like the U.S., Canada and Switzerland. Although the central government officially follows the no bailout rule, the commitment is not fully credible and this can create an incentive by the Länder to borrow excessively. This was the case in the 1970s and 1980s when the Länder of Bremen and Saarland received special supplementary transfers from the federal government. Many have argued that the large debts of the Länder are largely responsible for Germany's breach in recent years of EU's Stability and Growth Pact.

2.5 Some Lessons from History.

The brief historical comparison of three fiscal unions has some relevance for the case for a fiscal union for the EU. First, we observe that all of the fiscal unions were preceded by political unions. In each case independent regions decided to found a union because of military insecurity and a consequent need for common defense or the desire to be independent of foreign powers. Second, institutional development in these federations was driven by exceptional events, often economic disasters. The best example is the Great Depression which affected the institutions at all levels of government. In all cases it lent to an increase in government power and its centralization. Third, institutional evolution worked through an "institutional learning by doing" process. Not all the federations learned from their negative experiences of the past. In the presence of moral hazard the Federal Government has to give a signal of commitment and often a lesson to the sub-national authorities, otherwise they do not learn. Thus the U.S. Federal government taught the right lesson to the states in 1840 that there would be no bailout of their debt. This was not the case in Argentina or Germany. In the case of Argentina (and Brazil) there is still no credible mechanism to impose fiscal discipline.

3 Future Challenges facing EMU

Institutions may be conceived of as continually evolving systems of rules, that depend for their legitimacy on a relatively widely shared consensus that they are not actively dysfunctional. They are not usually transformed without a major crisis. This paper tries to evolve a few lessons that can be learnt about transformative crises in the histories of national currencies and national central banks. In the past, central banks, and the currencies they managed, have been discredited or put under severe strain as a result of

- severe or endemic fiscal problems creating pressures for the monetization of public debt
- low economic growth may produce demands for central banks to pursue more expansionary policies
- regional strains producing a demand for different monetary policies to adjust to particular regional pressures (such conflicts have played an important part in the near or actual break up of federations)
- severe crises of the financial system (which discredited the central banks of the interwar era)
- tensions between the international and the domestic role of a leading currency produced conflicts about British monetary policy in the 1920s and about U.S. policy in the 1960s and 1970s.

How far do there exist analogies between the circumstances that produced these historical problems and the likely development of the euro?

3.1 The fiscal dilemma

The extreme fiscal strains that destroyed monetary regimes such as that of the French revolutionary regime, or of Russia and the central European states in the first decades of the twentieth century, were the result of prolonged and intense military conflict of a type that is no longer conceivable in contemporary Europe. But in the second half of the twentieth century all industrialized states, including especially those of western Europe, experienced a sustained rise in government expenditure that was historically unique in that it was not an accompaniment of war. While it is often argued that the increase in such expenditure has made the states concerned more socially stable and also more resilient to economic shocks, there is also a limit to that expansion of public sector activity. At some stage, a society reaches the limit of the impositions it can bear.

In a globalized world, there is increasing pressure to reduce rates of taxation, especially corporate taxation. The accession to the EU of new member countries with a low tax regime (notably the flat tax regimes of Estonia and Slovakia) has produced additional tax competition within the EU. On the other hand, the political pressures that result in rising demand for public services are continually increasing. The ageing of the population, and the increased technical availability of expensive medical treatments, add to those pressures.

One way of solving the fiscal dilemma in the past was inflation. In the 1970s and 1980s Europe, and the world, had generally high levels of inflation. But it was also increasingly recognized that such inflation imposed a cost because it distorted incentives; and at higher levels, it provoked considerable political unease. One way of seeing the evolution of an increasingly hard European Monetary System, and then the European Monetary Union, is as a mechanism for the imposition of external discipline. The European framework made it easier for governments to press on with reforms to limit expenditure, that could be presented to hostile parliaments and pressure groups as an unavoidable part of an exercise in integration that promised substantial long run benefits. Within the EMS, however, some countries still experienced considerable fiscal pressure; and fiscal stimuli translated into increased demand, increased prices and a real exchange rate appreciation that threatened competitiveness. These countries could still in the EMS resort to an exchange rate realignment (as in 1992, where pressure in Italy set off a general realignment).

The monetary union obviously prevents such adjustment measures being undertaken by national policy-makers. The only (partially effective) substitute left is fiscal measures to compensate firms for real exchange rate appreciation. But such measures have a fiscal cost.

The most obvious threat to the single currency is usually held to arise out of the imperfect control and coordination of national fiscal policies. Some commentators argue as a result that monetary unions produce an inexorable dynamic in the direction of fiscal unions.

The stability criteria in the Maastricht Treaty were the subject of immensely protracted and complicated negotiation, and were intended to address this problem. In the aftermath of the recession of 2000-1, and of Europe's weak growth performance, substantial pressure from the large states led to some loosening of the criteria. When most of the large member states broke the rules, the then President of the Commission, Romano Prodi, referred to the pact as absurd, and a 2005 summit formally modified the rule so as to make it more flexible in the face of cyclical downturns.

A formalized system of fiscal federalism would however not necessarily deal with the problems of fiscal indiscipline on the part of member states. Indeed, the expectation of institutionalized transfers or bailouts following fiscal problems might well be expected to increase the incentives for bad behavior. Stricter observance of the existing system and its rules, on the other hand, might lead to pressure to reform. Fiscal reforms would in the longer run be expected to raise the rate of growth.

3.2 Growth rates

The growth rate of the economy is a central determinant of the likely long run success of the euro. For reasons that will be discussed below, low growth, or very different rates of growth in different parts of the Euro area, would be likely to raise political questions and produce political tensions around the setting of the common or single monetary policy. Both the ability to comply with the Maastricht criteria, and the political tolerance of an autonomous central bank, are highly dependent on the overall rate of economic growth. The revival of growth in Europe since 2005 has brought a reduction in the deficits, but they will reappear should there be a renewed faltering. In the longer term (as in other rich industrial countries), the additional costs imposed by increased life expectancy, an ageing population structure, and rising health costs are likely to impose a heavy strain. Forecasting long-run developments involves many uncertainties, but almost every contemporary prognosis sees Europe as growing significantly slower than other parts of the world. Robert Fogel in a recent overview suggested a rate of real GDP growth for the period 2000-2040 of 1.2 percent for the industrialized EU-15, a slightly higher figure than the 1.1 percent for Japan, but much lower than the 3.8 percent for the United states or 7.1 percent for India or 8.4 percent for China (Fogel 2007).

The relatively poor growth performance is conventionally explained by inflexible labor markets and by more limited capital markets that make venture capital harder and scarcer. In both areas, the introduction of the single currency has brought greater flexibility, but one other brake on European growth remains widely recognized but poorly counter-acted in policy terms. The Lisbon Agenda included an opening up of services, yet this is the area where the most restrictions still apply, and where national governments are powerfully pressed to resist attempts on an EU-wide basis to introduce greater elements of competition. The services directive was effectively so watered down in 2007 by national politics that little remains of the reform initiative. There is in short, especially at a national level, a critical resistance to important elements of the liberalizing agenda. The blockage is historically disappointing, in that in the early stages of European integration in the 1950s and 1960s, the European authorities enforced a highly competitive market in the dynamic sectors of the time, in manufacturing, while offering compensation to the less dynamic agricultural sector. This highly successful strategy would, if translated into today's circumstances, involve enforcing a high level of competition in the dynamic areas of today, mostly services, while providing safety nets to those affected by the relative decline of Europe's competitive advantage in some areas of manufacturing. But the vision of the European Union as providing enhanced competition has not been universal or pervasive, and the consequences has been sub-optimal growth.

There is a political economy reason to worry about the effects of low growth on the euro, and to see it as politically vulnerable to backlashes against globalization. In many parts of Europe, globalization is widely seen as a major threat to the social order; and the resentments are used by politicians eager to establish a higher political profile. Workers, especially in manufacturing, are faced with a threat of job losses or radical reductions in income as a consequence of low wage competition from Asia or from eastern Europe. Workers in manufacturing and in services are worried about the effects of immigration on income levels. Politically, the backlash against globalization is associated with the extremes of left and right, which often take their themes and rhetorical engagement from each other. But since the conventional right and the conventional left compete against each other, and need to mobilize as many votes as possible, they are also likely to take up some of the anti-globalization language in order to maximize their support and prevent a slippage of voters to the extremes. Sometimes they will also experience pressure to transform this rhetoric into policy.

The anti-globalization movement however finds it hard to identify concrete targets against which to direct the widespread malaise. Protests directed against American fast food restaurants do not really seem adequately to confront the issues raised by globalization. In consequence, the single currency has already become a popular whipping boy for anti-globalization sentiment. It is blamed for price increases of some consumer items: in Germany, popular newspapers launched campaigns detailing the effects of the "Teuro" (expensive Euro; teuer = expensive). In Italy, some very prominent consumer items became very much more expensive (coffee by 30 percent and pizza by 16 percent).[3]

The immediate wave of dissatisfaction surrounding the introduction of the euro quickly ebbed. But it holds an instructive lesson: the episode was used by governments, and governments took at least some part in the mobilization of critical opinion. The German Finance Minister Hans Eichel endorsed the view that the euro had led to price increases, and the Consumer Affairs Minister Renate Künast created an office to marshal complaints from customers. The Greek Socialist government under Costas Simitis encouraged a one day boycott of shops.

A major feature in anti-globalization sentiment is the belief that some protection against the forces of the world economy is needed. According to this view, the primary obligation of the political system is to steer or cushion the process of globalization: to stop takeovers by predatory investment groups (in German referred to as locusts or *Heuschrecken*); to protect local jobs; and to provide credit to lack business. An obvious corollary to this argumentation sees a national currency as a better carapace than a Europeanized currency. The necessity of a common monetary policy requires interest rates that are "too high" in some countries and areas (higher that the rate that would be desirable if a local central bank were setting rates).

Consequently, interests that demand a monetary policy more focused on growth are usually critical of the ECB; and in some cases (such as the Italian Liga Nord) see a return to national money as an appropriate solution. In the 2007 French presidential election, Nicolas Sarkozy derived considerable mileage from criticism of the ECB, and then repeated the criticism after the election. The inclusion of the ECB as an institution of the European Union in the slimmed down and revised constitutional treaty raises the possibility that a formal mechanism will evolve for putting pressure on the ECB to make growth as well as price stability an objective of policy.

At present, the signs of such a use of the euro as a focus of globalization fears are relatively weak. Indeed, the euro is generally quite popular – more so than at its launch as a circulating currency in 2002. Since the Maastricht Treaty, and even more dramatically since the introduction of the euro, public opinion surveys conducted by Eurobarometer have shown increasing degrees of support for the single currency

[3] BBC January 3, 2002: Italy rows over rising euro prices; see for an academic treatment: Gaiotti, Eugenio and Lippi, Francesco, "Pricing Behavior and the Introduction of the Euro: Evidence from a Panel of Restaurants" (February 2005). CEPR Discussion Paper No. 4893. Available at SSRN: http://ssrn.com/abstract=730525

(2000: 53 percent; 2004: 62 percent; 2005: 65 percent).[4] But these figures also reflect a general increase in satisfaction that accompanies better economic performance, and they are likely to reverse at the onset of economic difficulties or even a slowdown of growth.

3.3 Regional pressures

Regions with different growth patterns or different political economies are likely to press for different monetary policies, and in a democratic setting the result might be extreme polarization and conflict. Such polarization occurred in many gold standard countries in the late nineteenth century, when farming regions believed that they would benefit from the abandonment of a deflationary gold regime and the adoption of a bimetallic standard. In the United States, the agrarian mid-West and the South were pitted against the North-east; in Germany there was a similar divide between a grain-producing East and the industrial areas of western Germany. Until a general price rise occurred after the discovery of gold in Alaska, Australia and South Africa in the last years of the century, monetary policy was highly politicized. In more extreme settings, federations can even break up. In the last years of the Yugoslav Federation, as democratization began, a gap opened up between the industrially stagnant Serb areas and more dynamic regions in the north, and fuelled an ethnic conflict that had not been a prominent part of most of the experience of postwar Yugoslavia. For the non-Serbs, the realization that Serbians were imposing an inflation (and using the fiscal proceeds of inflation to finance their own goals) made a breakup of the Federation an urgent political demand for Slovenes, Croats and tragically also for Bosnians. Similarly, in post-1918 Germany, the idea that Berlin was promoting an inflationary policy to its own advantage prompted Rhineland, Saxon and Bavarian separatism and a “Los von Berlin” movement.

These may appear to be extreme and problematic precedents. But very different economic experiences undoubtedly promote feelings of regional and sometimes even of ethnic difference. Given Europe’s highly troubled twentieth century history, many responsible policy-makers are worried about a resurgence of historical divides.

We should distinguish between shorter term and longer term problems. One potential source of difficulty in the shorter term horizon lies in the expansion of the euro area. Introducing the euro (in the recent EU accession countries) or pegging to the euro in other countries (or even adopting the euro as a currency as has already been undertaken in Montenegro and Kosovo) is likely to be an increasingly attractive option. Countries see the euro as an external anchor that can give a powerful anti-inflationary credibility.

The extension of the euro to new accession countries (which is a requirement of the accession treaties, rather than being a political option) in itself will create new challenges. This issue has already been widely debated in regard to the adoption of the euro by the Baltic states. The new member countries are powerfully growing emerging market economies, which experience and will continue to experience rising inflation as prices for services rise, corresponding to the increased incomes producers of tradables derive from selling to global markets (Belassa effect). Correspondingly,

[4] http://www.gesis.org/en/data_service/eurobarometer/standard_eb_trend/trend/currency.htm

the mature markets of the west are likely to experience periodic bouts of anxiety about deflation (and anxiety about excessively tight ECB policy), as competition on markets for tradable goods and services drives down prices.

The EU requirement that these two types of countries (emerging central European markets on the one hand, and the mature economies of western Europe on the other) have a single currency or a permanent fix is likely to produce serious problems in one or both. The mature markets should have monetary policies that are less restricted than they were in the past by fears of deflation. They will experience substantial pressure for a more growth-oriented monetary policy. On the other hand, the emerging markets should be free to conduct tighter policies to minimize the possibilities of destabilizing surges in asset prices.

Monetary policy in the mature market economies is likely to come under populist pressure to respond to weak economic growth. Yet without continued immigration, which is also likely to produce populist backlashes, the chances of overcoming the demographic deficits are substantially reduced.

In the longer run, there is a different sort of question about growth in the European setting. Will there be unequal growth across the European Union, with faster growth in the catch-up economies of central and eastern Europe? At present, the disparity in growth is very apparent, and is causing significant problems for the formulation of an appropriate monetary policy (see below); but in the longer run, these disparities may disappear. The major channel here is migration flows: the inflow of central Europeans to Britain, Ireland and Sweden (the three EU countries with no control on movements from the new member countries) since 2005 has significantly raised growth rates in those recipient economies.

Conversely, the outflow from eastern and central Europe of the most skilled and active sectors of the labor force is likely to reduce the growth potential in the long run, and create the fiscal problems associated with ageing and with demographic imbalances elsewhere in the EU. By 2025 a fifth to a quarter of the East European population is estimated to be 65 or older. The World Bank takes this argument to forecast a sharp reduction in growth in eastern Europe, which it terms "from red to gray" (World Bank 2007). Low growth rates are likely to become a common European destiny.

3.4 Financial Stability

In the past, financial sector shocks have played a decisive role in the undermining of monetary regimes and the discrediting of the central banks responsible for their operation. The most dramatic of such episodes occurred in the interwar Great Depression, where banking panics in central Europe and the United States exacerbated the problems of the real economy. Unstable banks withdrew credits from borrowers, forcing firms that would otherwise have been solvent to liquidate stock at depressed prices. The major industrial countries that had significant banking problems fared significantly worse than those economies with no or only limited banking collapses. In particular the United States, with waves of banking panics after the fall of 1930, and Germany, with a meltdown of the banking system in June and July 1931, were very badly hit by the real consequences of the financial storm.

The weakness of the American and German banks in the interwar era was at least in some measure the consequence of political federalism. Federalism
1. encouraged the development of a banking system that was regional in character. In particular in the United States, state banks suffered because their risk was concentrated in particular sectors.
2. made for inefficiencies in regulating banks. In Germany, a major source of difficulty was the parallel system of Savings Banks (Sparkassen) which were controlled by local authorities, and which responded to local political pressures to lend.
3. produced a dispute about the appropriate monetary response of the central banking institutions. This may be an especially acute problem in the early life of the federation or the central bank. With regard to the United States, Eichengreen (1992) and Wheelock (2000) showed how the Federal Reserve found it difficult to resolve regional conflicts in the early 1920s. Friedman and Schwartz famously presented a major cause of the immobilization of the Federal Reserve System after 1930 as lying in tensions between the New York and Chicago Banks.

Europe is an integrated capital market with national bank regulators that respond in different ways to incipient problems. Since the 1980s, and especially since the introduction of the single currency, the Euro-zone capital market has become partially integrated, but there are still in some countries substantial impediments to cross-national financial ownership. Nevertheless, financial institutions operate in this single capital market across national boundaries. Big mergers, such as those between Santander and Abbey National in 2004 and Unicredito and Hypervereinsbank (which had previously acquired a dominant share in the Austrian banking industry) in 2005, have started to create Europe-wide superbanks.

The problem of a bank getting into difficulties because of engagements in a different country is a widely recognized problem, in theoretical discussions. But a unification of banking regulation is still a long way from being realized.

At the same time as finance has become internationalized, each country preserves its own idiosyncratic system of financial supervision and regulation. Though there has been an extensive discussion of the possibility of shifting supervision to the European level (Prati and Schinasi 1999;), there are practical obstacles to making such a shift (apart from inbuilt bureaucratic resistance from existing regulators). In particular, regulation is often linked to implicit or explicit lender of last resort functions. But such activity has a significant fiscal cost, which at present cannot be assumed at a European level but would remain an issue for national governments and national parliaments. Much of the previous literature has concentrated in consequence on the issue of how bailouts and rescues should be paid for after a financial crisis, as a consequence of the reluctance of national authorities (and their tax payers) to bear the financial burden of bailing out depositors or creditors in other states (Goodhart and Schoenmaker 2006). The current institutional framework unambiguously limits socially beneficial post-crisis workouts. But it may also limit the capacity to provide efficient preventative or pre-crisis prudential supervision. The consequent limits on the extent to which national regulators were aware of bank problems became highlighted in the credit crunch of the summer of 2007. The ECB supplied general liquidity to the market, and may have been able to avoid some financial distress. But it does not have a responsibility to regulate and thus may not be aware of banking problems until a late stage.

Additionally, in the event of financial sector difficulty, the monetary policy response would be highly contested. Conventionally, bailout or reorganization is seen as the answer to solvency problems, while liquidity provision is an answer for solvent but temporarily illiquid institutions. In crisis situations, and where information about credit risk is faulty or incomplete, as in the summer of 2007, such a judgment between solvency and liquidity problems is impossible to undertake. In the absence of an ability to deal specifically with the threat posed by individual institutions and to make choices about crisis support or closing the institution, there will be more pressure on the ECB to simply deal with the situation by extending large amounts of liquidity rather than to address the solvency issues which may be concealed.

The difficulty of an effective Europe-wide response to financial sector problems thus reflects a more general problem with respect to the making of monetary policy: there may be a different political economy of money in regions of the Euro-zone and EU member countries, leading to contradictory pressures on policy.

3.5 The Euro as an international currency

Another set of contradictory pressures on policy arises out of the increasingly important international role of the euro. The euro quickly became the second largest reserve currency of the world: the IMF's figures show for December 2006 the euro accounting for 25.8 percent of world declared reserves, with the dollar at 64.7 percent (these figures however only cover around half the world's total reserves, with another quarter held in undeclared currencies, and a further quarter in also generally hidden sovereign wealth funds outside the control of central banks) (ECB 2007). The euro has also become the second largest currency for the issuance of securities. For short-term international debt issue, in the last quarter of 2006, it had a share of 34 percent (with the U.S. at 40 percent).

The euro is attractive to some countries and governments because it is not the dollar. While the international role of the dollar is deeply associated with the political preeminence of the United States, the euro is not the currency of a superpower or even of a conventional state. For general political strategy reasons it looks more attractive. Russia in particular has made an explicitly political point in progressively raising the weight of the euro in its operational currency basket (from 35 to 40 percent in December 2005 and then again to 45 percent in February 2007).

But there is also an economic rationale in terms of diversification. The euro is not as precariously dependent on continued capital inflows as is the dollar. It may also appear better on more technical policy grounds. As a consequence of the complicated institutional structure guaranteeing the independence of the European Central Bank, it appears to be less vulnerable to political pressure. On the other hand, especially in the response to the dollar depreciation of 2007 and the French presidential elections, there have been unmistakable attempts at influence.

Considerations such as greater independence and a healthier Euro-zone current account may make the euro desirable as an international currency: as a reserve currency, as a store of value, as a benchmark for the pricing of internationally traded commodities. But a potential development of the euro as *the* major international currency poses policy problems analogous to those faced by Britain and the Bank of England in the nineteenth century and by the United States and the Federal Reserve System in the second half of the twentieth century. What are the ECB's global obligations as to the creation of liquidity in the case of emerging market crises? How should the ECB support the U.S. dollar in order to forestall a dollar collapse which would be harmful for Europe in particular as well as the world at large? Would political pressure be stronger or even irresistible in these circumstances?

For both the Bank of England and the Federal Reserve System, there were moments when international considerations seemed to outweigh considerations connected with domestic stability. In the most dramatic of such crises in 1931, the Bank of England was largely discredited, and the response to the crisis ended in 1945 with the nationalization of the Bank. One widely accepted interpretation of the collapse of the Bretton Woods fixed exchange rate regime between 1968 and 1973 is that at crisis moments, the United States was unwilling to sacrifice domestic priorities (particularly maintaining fast economic growth) for the sake of maintaining an international regime that was in any case widely criticized.

By contrast with Britain and the United States, Japan and West Germany took a very different stance. They did not see themselves as political hegemons, and saw a widespread use of their currencies as reserves as inherently dangerous, because it would make the export economy more vulnerable to unpredictable exchange rate swings. In consequence, the two fast growing big industrial economies of the second half of the twentieth century, sought as much as possible to avoid an international role for their currencies (as did Switzerland, whose currency also seemed attractive as a stable measure of value).

The euro is in a quite different position to the yen or the Deutschemark. It has inevitably become the world's second reserve currency. One of the causes of the appreciation of the euro is often supposed to lie in the triangular relation between Asia, the United States and Europe. If for trade reasons many Asian economies notably China try to hold their dollar exchange rate stable (in the so-called Bretton Woods II regime), exchange rate movements arising out of large U.S. deficits mean the appreciation of the Euro. Even in the largely favorable environment of 2002-2007, many European exporters have complained about the appreciation of their currency, especially in countries such as Italy which compete quite extensively with the textiles, clothing and leather goods production of Asian economies. In these circumstances, the political debate about the euro can be a reflection of much larger concerns with globalization, and of Europe's perceived vulnerability in the face of the challenges that global markets in goods and services will pose.

It is – projecting into the future – quite conceivable that there will be moments at which massive political pressure, built up by underlying anti-globalization concerns and focused on the technical necessities of dealing with major international crises, leads to a serious onslaught against the ECB and against the euro.

4. Conclusions

The past experience is of monetary unions developing as part of a process of political and consequently fiscal integration. By contrast, EMU is neither purely a national nor purely an international monetary union, but has characteristics of both types, because the transfer of sovereignty is incomplete. This may mean that objections that it is not an OCA are misplaced, because the workings of an integration process are likely also to induce moves toward a closer approximation to an OCA. The incomplete transfer of sovereignty on the other hand means that there are substantial political pressures that build up in national areas that are no longer also the area of a single currency that can be adjusted against external currencies. There may be a momentum toward further fiscal integration, and that will be an indication of success in that the MU is working as similar unions did in the past, especially in the case of the U.S. and Germany, and fiscal centralization gradually emerged over a rather lengthy period of time. Analogies with the monetary unions of Germany, Italy and the U.S. suggest that the process of evolving a fiscal union takes a long time. The EMU has the additional problem that its area will change more dramatically because of the addition of new members, and because of the governance issues raised by the non-coincidence of EMU and the EU.

On that long road to more fiscal integration, however, there may be many bumpy areas. Some of these bumps cannot easily be measured or mapped in advance. In particular, unpleasant fiscal arithmetic for member countries may produce strain in the area as a whole. Such arithmetic is most likely to arise as a consequence of continually depressed rates of growth. One of the benefits that the move to the single currency brought was a reduction of interest rates that might lead to better fiscal performance but also better growth performance. But supposing that this stimulus is not adequate, and the euro area continues to face sluggish growth? In order to reap the benefits of a better growth performance, competitive stimuli as well as a low interest environment are needed, but EU countries have been slow in opening up the potentially fast growing services sector to competition.

Low growth will also produce direct challenges to the management of the currency, and a demand for a more politically controlled and for a more expansive monetary policy. Such demands might arise in some parts or regions or countries of the euro area, but not in others. They would lead to a politically highly difficult discussion of monetary governance. This discussion will be more difficult if there is a widespread perception that the international role of the euro is at odds with domestic political demands that the currency should be supportive or sustaining of growth. Financial sector instability, with a potential need for bank bailouts, could also be a source of difficulty. Finally, in addition to all these threats, domestic responses to the challenge of globalization in markets for goods and services may also be displaced into a discussion of the euro, with the single currency and the central bank that manages it taking the position of fall guy for radicalized and generalized discontent. On the other hand, if all these bumps are overcome, and a process of gradual transfer of fiscal responsibility toward greater centralization occurs, there is the possibility that the euro zone with match the achievement of other late achievers of monetary unification, such as the United States or Germany.

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