Monetary Unions and the Future of the Euro

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I. Introduction

- The Euro has been in place for close to seven years. In some respects EMU has been a great success. In other respects it is lacking.
- Today there is some sense of worry, even crisis, over the future of the EMU following the two negative referendum outcomes last spring.
- Also in Italy concern over the loss of competitiveness in key export markets has led to talk about jettisoning the Euro and restoring the Lira.
- This lecture examines the future prospects for EMU and the Euro from an historical perspective.

- I raise a number of questions:

1. What can we learn from history about the path to a successful monetary union?
2. What about the breakups of monetary unions? What does history teach us about the conditions leading to dissolution?
3. How is EMU doing relative to the successful MUs of the past e.g. the U.S.?
4. What are the critical issues that need to be addressed to make the EMU more successful and reduce the likelihood of a breakup?

- More specifically I focus on two of the most salient issues:

a. Reducing institutional rigidities, especially in the labor market.

b. Creating a more functional fiscal environment.

II. EMU in Historical Perspective: Lessons from past monetary unions

- Bordo and Jonung (2003) consider the historical record, first by examining the process of creation and maintenance of monetary unions, second by studying the process of their dissolution.

The History of Monetary Unions (See Table 1)

- History has witnessed the creation of a number of monetary unions within which the same currency serves as a unit of recent, medium of exchange and store of value.

\- An MU has one exchange rate with the rest of the world

- We distinguish between national and multinational monetary unions

Table 1. The creation of some monetary unions in the 19th century.

Monetary area	Time of creation
National monetary unions:	
The United States	1789-92
Italy	1861
Germany	1875
Multinational monetary unions:	
The Latin monetary union	1865
The Scandinavian monetary union	1873-75

Source: Bordo and Jonung (1997) and Vanthoor (1996).

-In a national monetary union political and monetary sovereignty go hand in hand

- The borders of the nation state are the borders of the monetary area
-As a rule a national MU has one single monetary authority

- By an international MU we mean an international monetary cooperation between a number of independent countries based on permanently fixed exchange rates between their currencies.

 - As a rule there is no common monetary authority in a multinational MU.

● Distinction between national and multinational MU important because survival prospects of EMU depends on whether it is organized as a national or multinational union

National Monetary Unions

● We focus on three well known national MU's: the U.S., Italy and Germany

The United States Monetary Union

● American revolutionary war largely financed by issue of fiat money by the Congress (the Continentals) and the States (bills of credit).

● Inflation ended with currency reform in 1780.

●After the war the States continued to issue bills of credit during the Confederation period (1783 to 1789). Different rates of issue implied volatile exchange rates with exchange rate risk and high transaction costs, competitive seigniorage.

● U.S. MU created with Constitution of 1789 giving Congress sole power to "coin money and regulate value thereof." Also Coinage Act of 1792 put U.S. on a bimetallic standard.

● States had power to charter commercial banks and regulate note issuing activity.
- Bank notes had to be convertible into specie
- Problem of varying discounts

● First and Second Banks of the U.S. established as public banks
- Had task of creating uniform national currency, did so by forcing convertibility of state banks.

● After demise of Second Bank in 1836, U.S. did not have any form of a central bank until establishment of Federal Reserve in 1914.

● Uniform national currency not achieved until National Currency Act of 1863, creating national banks issuing national bank notes.

● U.S. Civil War (1861-65) temporarily split national MU into 2 separate systems.

- Several kinds of currency circulated before 1914
- Federal Reserve notes introduced in 1914
- Par check clearing for members of the Fed
- Federal Reserve system, Reserve Banks had monetary independence in the 1920s.
- Regional conflicts over the conduct of monetary policy contributed to the Great Depression.
- Banking Act of 1935 created full MU.

Italy

- Creation of monetary Union with political unification in 1861.

- Before 1861, as many as 90 different metallic currencies were legal tender.

- Currency union created in two stages: all currencies converted into four, then into one, the lira in 1862.

- All pre-unification coins and paper monies abolished and exchanged for coins, denominated in the new lira, equal in value to the French franc.

- Italy goes on bimetallic standard at French ratio of 15.5 to 1.

- Italian monetary history chequered with suspensions of convertibility associated with fiscal indiscipline.

- Between 1862-1894 Italy had several competing Banks of Issue. The Banca Nazionale nel Regno d'Italia formed by previous national bank of Sardinia had a dominant position and acted as the Italian government's fiscal agent. Eventually it became the Bank of Italy with a monopoly of the vote issue.

- Thus the formation of the Italian MU, like the U.S. took place after political unification.

Germany

- German monetary unification proceeded stepwise along with political unification.

- 1857 political unification, coinage acts of 1871 and 1873 unified coinage throughout the Reich and introduced the Mark as the unit of account. Gold standard adopted.

- Reichsbank created in 1875 as central bank.

- We interpret monetary unification as following political unification.

Multinational Monetary Unions

The Latin Monetary Union, 1865

● Arrangement between France, Belgium, Switzerland and Italy to create a standard weight. Silver subsidiary coin after Italy upon unification lowered the silver content of her small coins below the standard set by France.

● The LMU was successful in standardizing the coinage but was threatened in the 1870's by the forces of Gresham's Law replacing gold with silver and by the issue of inconvertible paper money by France (1870-71) and Italy (1866-1881).

The Scandinavian Monetary Union 1873

● Denmark, Norway and Sweden dealt with the problem of differing value silver coins by creating a uniform Scandinavian unit of account, the krona which replaced the old unit of account, the viksdaler. The value of the Scandinavian krona was specified in terms of gold and was to be equal in all three countries.

● All coins given legal tender status.

● The SMU was enlarged in 1885 and 1894 to encompass note clearing at par between the three central banks.

<u>Other Monetary Unions</u>

● Currency boards in many (British) colonies in the 19th century

- Issued notes and coins fully backed by reserves denominated in the currency of the colonial power.
- Recent currency boards in Argentina, the Baltic states, Bulgaria.

● <u>CFA Franc Zone</u> in West and Central Africa, 1959

-Two MU's covered by same arrangement, each having own monetary authority
- Uses CFA franc as unit of account, set in 1948 as equal to 1/50th of a French franc.
- CFA francs are legal tender within MU and are convertible into FF.

- East Caribbean Currency Area
  - Evolved from British Caribbean Currency Board
  - Issues the Caribbean dollar which is legal tender in the seven member states.

- Small countries adopting the monetary system of a large country
  - E.g. Luxembourg- Belgium, Monaco- France

- Small countries adopting monetary system of distant country
  - E.g. Liberia and Panama use U.S. dollars

- Ireland- Britain
  - 1925 Irish pound introduced, explicitly pegged to sterling.
  - Ended in 1979 when Ireland joined EMS.

<u>The Dissolution of Monetary Unions</u> (See Table 2)

<u>Multinational Monetary Unions</u>

● Both the LMU and SMU broke down in World War I when the different countries issued flat currencies and the metallic basis of the unions disappeared.

● The dissolution was uneventful

- Other multinational MU's dissolved peacefully in the 20th Century

- E.g. Luxembourg Belgium, Britain Ireland

- The LMU and SMU dissolved due to an unexpected major exchange rate shock, WWI.

- The monetary separation was easy to carry out as each member country maintained a central bank of its own during the monetary union. The central banks of the nation states could rapidly re-establish the domestic "national" monetary union.

Table 2. The dissolution of some monetary unions in the 20th century.

Monetary union (1)	Time of dissolution (2)	Causes of dissolution (3)
National monetary unions:		
Austria	1919-27	Defeat at war, creation of several new nation states
Russia	1918-20	Creation of several new nation states
Soviet Union	1992-94	Political unrest, creation of several new nation states
Yugoslavia	1991-94	Political unrest, civil war, rise of new states
Czechoslovakia	1993	Political divergences, rise of new nation states.
Multinational monetary unions:		
Latin Monetary union	1914-27	Divergent monetary policies
Scandinavian monetary union	1914-24	Divergent monetary policies

Source: Bordo and Jonung (1997), Garber and Spencer (1994, p. 36-37) and Goodhart (1995).

National Monetary Unions

- Two world wars led to break-up of MU’s: Austro-Hungarian empire and Russian empire after WWI; German MU after WWII.

- 1990’s national MU’s of Soviet Union, Yugoslavia and Czechoslovakia broke up.

- Common cause of the break-up in the political process, not in the MU by itself nor in economic forces
  - War and/or political disunity led to termination of nation states.

- Collapse follows two paths
  - First path, fiscal and monetary turmoil and high inflation, e.g. Austria-Hungary, Russia, Soviet Union and Yugoslavia
  - Second path more peaceful and orderly, e.g. Czechoslovakia

- In sum break-up of national MU’s precipitated by political forces- wars and civil war.

Summary: Why are monetary unions created and dissolved?

● Our account of the establishment of monetary unions points to some central explanations as to why unions are created.

● The most important reason is that the creation of a national monetary union generally follows as part of the process of political unification.

● The second reason is economics. This includes the following factors: a reduction in transaction costs by standardizing the coinage, gains from trade, access to wider markets and harmonization of policies.

● Third and finally, other non-economic reasons besides political unification such as a common history, a common language, culture and religion have contributed to monetary unification. This is in particular the case with multinational monetary unions.

● We also conclude that the causes of the break-up of national monetary unions are foremost found in political developments. Political unity is the glue that holds a monetary union together. Once it dissolves, most likely the monetary union will dissolve.

● Although we argue above that national monetary unity follows from political unity, we do not want to make a watertight separation between political and economic factors. They are closely interlinked. Political unity is based partially on economic conditions. As long as the economic gains from political unification outweigh the benefits from separation, the nation state will be a viable alternative, not running the risk of falling apart.

● Within the nation state political tensions created by economic differences - such as differences between various regions and ethnic groups - can result in the demise of the unity necessary for keeping the nation state together.

● Most nation states have created - or create when deemed necessary - institutions and mechanisms to resolve domestic economic and political conflicts.

- Differences in economic outcomes are commonly alleviated by transfer payments.

-Tensions due to language, religion and culture can be reduced within the nation state through various constitutional designs allowing a high degree of sovereignty for various minority groups. Switzerland is an example of a nation state, as well as a monetary union, with widespread local political power devised to allow diversity in religion, language and culture.

- Most modern nation states, even federal ones, require substantial redistribution of income.

- Such redistribution may not be enough: fundamental differences between members for example due to religion and ethnicity, combined with political and/or economic shocks may produce break-ups of nation states and consequently of national monetary unions. Yugoslavia, Czechoslovakia and the Soviet Union are examples of this in the 1990s.

The future of the EMU. The lessons from history.

● When considering the future of EMU, we first should ask whether EMU should be viewed as a national or a multinational monetary union?

● We are inclined to view EMU as closer to a national monetary union than to a multinational union for several reasons.

- EMU has one common central bank, the ECB. It issues the only circulating money in Euroland.

- Monetary policy is centralized on a pan-European level under the ECB.

- Membership in EMU and the adoption of the Euro are regarded as permanent steps. There are no escape clauses as the Maastricht treaty gives no right for a country to leave EMU.

● This implies that, when forecasting the future of EMU, our conclusions derived from the history of national monetary unions are more relevant than those from the experience of multinational unions. EMU involves considerably stronger monetary integration than was the case for the multinational unions of the past.

● These cases demonstrate how a complete monetary union, that is the use of the same money as well as a common monetary policy across all jurisdictions, evolved over time without initially having all the institutions required for successful monetary policy according to the conventional monetary policy wisdom of today.

● Starting from our critical assumption that EMU is close to a national monetary union, our review of the history of national monetary unions invites a few conclusions that may have a bearing on the future of the EMU.

1. EMU will need to be a flexible monetary union. The history of monetary unification suggests that national monetary unions that survive have to be permanent and flexible institutions. They evolved over time in response to political and economic events. Their durability and flexibility was a consequence of the political process that once established monetary unity. EMU was created by a strong will for political unity, despite a number of primarily "economic" objections to the project. This political determination hopefully will design mechanisms and institutions to deal with the shortcomings of EMU as they emerge in the future, despite the initial set of rules and treaties embodied in the Eurosystem.

2. EMU will be hit by major shocks. Second, history shows that exceptional shocks and crises will eventually hit any monetary area. Countries like the US, Canada and Italy have been the subjects of asymmetric or region-specific shocks and structural shifts that have left permanent scars. However, they have not in themselves led to the breakdown of political unity, splitting up the nation state, and thus the monetary union. Major idiosyncratic disturbances and crises will hit EMU sooner or later. Judging from the record, national monetary unions survive such events except in the case of a collapse of the political unity underlying monetary unity.

3. EMU will need to be based on political unity. Monetary unions of the past were in two important respects different from the present process leading to the common European currency. First, the national monetary unification of the 18th and 19th century followed after political unification and, second, they were based on specie. Consequently, monetary unification was a much simpler process than the road to EMU, thus also politically easier to carry through.

4. EMU is not and likely will not be an "optimal" currency area. The major objection of the economics profession towards EMU has been that the future EMU will not be an optimal currency area. History shows that the creation, operation and dissolution of national monetary unions have hardly any connection with the OCA-criteria. Instead, they have developed in a historical context as a result of the political process.

III. Does the Euro Have a Future?

- The creation of the euro in January 1999 was a milestone in monetary history .
- Major legal hurdles to the free movement of goods, financial instruments and labor have been removed.
- Preliminaries for an integrated EU economy and ultimately political integration.
- Despite these changes the question still arises: will it all work out?
- Bordo and Jonung (2003) historical survey of MU's found that national MUs like U.S., Germany, , Italy were more successful than International MUs like Scandinavian MU and Latin MU.

- Success reflected political will and greater economic integration.

- We concluded that future success of EMU depended on the extent to which it is closer to a national than an international MU.

- If EMU can be viewed as a national MU, how does it compare to the U.S. - - an area of similar size and population.

- A reexamination of the history of US integration should give some perspective on the hurdles that Europe still needs to jump.

- I focus on three sets of hurdles: monetary integration, real integration, and political will.

2. Monetary Integration

- Definition - A monetary union is defined as an area in which a common currency (high powered or outside money) and bank money (inside money) is accepted at par across the geographical area of the union. In the modern context it also refers to having a common monetary authority.

U.S. History

- According to Rockoff (2003), it took the US close to 150 years to achieve a full fledged monetary union.

- As we described above the process began with the constitution of 1789 and only really was completed with the Banking Act of 1935.

EMU

- In contrast to the US experience, the euro and the ECB were established, according to schedule, in 1999 and the euro has been universally accepted.
- Common monetary policy dedicated to low inflation set by the ECB is also in place.
- But governance still leaves open the possibility that national concerns over the real side of the economy could in the future threaten the commitment to price stability.

● Thus the hurdle of creating an effective MU has been surmounted but whether it will remain strong remains to be seen.

Real Integration

● Real integration encompasses the integration of goods, capital and labor markets. It also pertains to fiscal harmonization and the synchronization of business cycles.

● U. S. achieved real integration long before it attained full monetary integration. In some respects the US was much better integrated over a century ago than Europe is today.

Goods Market Integration

● U.S. goods market integration, in the sense that similar products sold for similar prices, adjusted for transportation costs, achieved by Civil War.

- EMU, not clear law of one price fully working.

Financial Capital Integration

- U.S. became financially integrated in sense of convergence of short-run interest rates by 1890.

- Recent evidence sees integration on the Atlantic seaboard by the 1850s.

- Europe may be as financially integrated today as the US was early in the twentieth century but other attributes of financial integration like inter Europe correlation of price indexes suggests less integration.

Labor Markets

- It is clear that the US was probably well over a century ahead of Europe.

- Evidence of convergence of both nominal and real wages across regions before the Civil War.

- National integration of the US labor market, except the South, by the 1870s.

- South only integrated by World War II.

- EMU by contrast suffers from both immobility of labor reflecting deep seated cultural, language and institutional barriers and greater nominal rigidities.

- A regional shock in the US is largely adjusted to by an outflow of workers to another region versus Europe outcome is permanently higher unemployment.

- The greater immobility of labor tends to create a serious maladjustment problem for Europe in the face of evidence of asymmetric shocks.

- The shortfall of real integration in the EMU, especially the immobility of labor and the asymmetry of shocks has long been touted as evidence that EU was not an Optimum Currency Area (OCA).

- Makes the case for fiscal federalism like U.S. system established in the 1930's.

- Evidence suggests fiscal transfers in the US eliminate as much as 40% of a decline in regional income versus Europe where transfers are very much smaller.

- Thus real integration falls short in comparison to the U.S. It will be of interest to see if the necessary reforms will be forthcoming.

Political Will

- In both the U.S. and EMU political will has been the driving force behind real and monetary integration.

- In the case of the US, it was the desire of the 13 colonies to separate from Great Britain and the subsequent realization that a Confederation of separate states was unworkable that led to the Constitution of 1789 which created the blueprint for the remarkable expansion and integration that followed in the next century.

- It was also political will and the desire to preserve and strengthen the union that created the institutions such as the National Banking Act, Homestead Act and railroad land grants after the Civil War that completed the monetary and real economic union.

- By contrast in Europe, it is political will, some would argue, of the political elites and not the populace at large, to push forward the EMU project. It is clear that the EU is not an OCA and that real integration has a long way to go.

IV. What are the key issues to be dealt with to ensure the Euro's future?

● The two key issues stressed by most observers, and that I concur with, that need to be dealt with to ensure that the Euro has a future are: overcoming institutional rigidities to real integration and some movement towards a fiscal union.

● The key institutional /structural impediment to creating a well functioning MU is to create conditions for greater labor mobility.

● When faced with both external shocks and with changes in tastes and technology factor (and goods) prices need to adjust and resources need to be redistributed to their best use.

● In the labor market this means that wages have to be flexible and/or people have to be able to move away from declining industries and towards growing industries across the union.

● At present, compared to the U.S., Canada and other successful MU's, as discussed above, Europe is lagging for various reasons including strong labor unions, language and cultural barriers and local restrictions on housing and local and national licensing and other regulations.

● These impediments not only prevent the resource reallocation needed in a vibrant Euro wide economy but also impede the overall rate of economic growth. Slow growth exacerbates the costs of dealing with the consequence of shocks.

● Globalization also requires flexibility to adjust to changes in comparative advantage. Countries which aren't flexible tend to lose in global competition.

● In the face of asymmetric shocks and changing patterns of global demand, the absence of domestic monetary policy to accommodate to the shocks makes the adjustment more difficult and puts more of the burden on fiscal policy.

● This raises the issue whether a monetary union also needs a fiscal union.

Monetary and Fiscal Unions

- Below I discuss some of the issues raised by the absence of a fiscal union in a monetary union

- Consider what happens if you have a monetary union in place with a well-designed independent central bank that sets monetary policy aimed at a well-defined goal across the MU. Consider what happens when different members face asymmetric shocks? How would adjustment work in an environment without a fiscal union?

- If the environment is characterized by full product and factor market integration, then adjustment would occur through both price adjustment, and through mobility in the factors of production. Therefore, no need to use fiscal policy for stabilization purposes.

- But if real integration is incomplete, especially vis-à-vis the labor market, then a case can be made for the use of fiscal policy.

- There are two possibilities: it can be done through domestic fiscal policy instruments, or it can be done through MU wide policy.

- The latter in turn could be done through two alternative channels: the first would be through explicit coordination or harmonization of member policies or through some form of centralization such as fiscal federalism.

- There are a variety of problems that can arise if relying on decentralized, uncoordinated response to shocks, i.e. each country responds the way it deems appropriate.

- First, there are the usual problems of fiscal policy: timing, the impact effects, discretion versus automatic stabilizers. The second issue relates to that regarding the spillovers; third, the sustainability of bond financed fiscal expansion which may even be the most important problem.

- But going the Union wide approach can also have problems: with respect to coordination, there is an extensive game theory literature. With respect to centralization, issues of the insurance mechanism; issues of heterogeneity: some countries are going to gain relative to others; winners versus losers.

And perhaps most importantly, the political economy of centralism.

The Topography of Monetary and Fiscal Unions

● I compare two cases that heuristically illustrate the core issues with regard to the relationship between the degree of integration, and the role of fiscal policy in different types of monetary unions:

● Case 1: Full fledged and successful fiscal and monetary union: e.g. the U.S., Canada, Australia (and even Germany).

● Case 2: A successful monetary union without a fiscal union: e.g. the EMU

Case 1: Fiscal and Monetary Union, e.g. the U.S.—States are not sovereign; therefore, even though they have independent budgets, and can run deficits to finance investment, they are constrained in their ability to raise revenues and run overall deficits (have to run balanced budgets on the current account).

● Consider the case of an asymmetric shock: if they run deficits, they will be disciplined by the bond markets in that their ratings will decline, leading to an increase in their spreads. This will require adjustment in taxes and spending: this can have a crucial impact depending on the degree of integration.

● If integration is almost perfect, factors of production will move, even before action is taken by state government in anticipation of that action. This occurs for two reasons, first, recession, and second the fiscal response—taxes go up, expenditures and services go down. Actual or potential mobility acts as a powerful disciplining device.

● There will be feedbacks through the political process: governments associated with this process will be blamed and replaced: so further pressure to ensure that the budget does not get too far out of whack.

If the states are big they will have spillover effects on other states or rest of the country.

● Under fiscal federalism, the central government collects most of the taxes, and following various formula distributes the taxes to states depending on size, income, and the size of shocks.

● The process is almost entirely automatic.

● Hence, the states' ability to stabilize their incomes is constrained.

Case 2: Europe, Monetary Union without a formal Fiscal Union

● In this case, you don’t have the mobility effect, you don’t have the balanced budget constraint on the members. You also have fiscal sovereignty which means that the bond market constraints are less, which raises the possibility of unsustainability and spillover effects.

● In the presence of asymmetric shocks, the real adjustment mechanism, especially through the labor market doesn’t work especially through barriers to mobility of labor and nominal rigidities.

● Then the role of fiscal policy is for each member state to conduct its own fiscal policy: thus countries can run fiscal deficits; issue bonds in euros; debt/GDP ratios increase. Because they are sovereign bonds, spreads don’t go up as they would if they were states or provinces.

Two reasons: qua sovereigns they might be expected to be able to tax (and hence the probability of default would be lower than would be the case otherwise); <u>at the margin</u>, they can tax because they have a "captive" base as the cost of leaving the state is too high; since the mobility of factors of production is restrained.

However, one cannot push this argument too far both because even if labor is not mobile, capital is still likely to be and the disincentive effects of rising tax burden would be still there.

- Secondly, the possibility of a bail-out by other members of a MU.

- So the sovereigns can run larger deficits, and have bigger debt ratios than states. But this then raises the likelihood of crisis further down the road.

- This would then suggest that with sovereignty given (assuming political sovereignty requires fiscal sovereignty), there have to be explicit and binding rules if the above is not to occur.

- If the member nations are big enough, to the extent that they can run big deficits and their spreads rise, this can feed into the cost of borrowing for other members of the EMU.

- If this persists, there would be pressure placed on the monetary authorities to react: MA could either tighten policy to signal its “concerns”, or conversely, if there is more than one major member being hit, to ease policy to ease the fiscal burden.

- If real interest rates increase following a rise in fiscal deficits: inflation is rising but bond yields are rising even faster. Nonetheless, the increase in inflation is likely to be more of a concern to the MA, which would then necessitate tightening policy.

● Is there an implicit bail-out that might occur through monetary policy? How would it work—one way might be via the political mechanism, that is the governance of the ECB, via the inflation tax. To the extent that the debt burden tends to lower output, the output gap that opens up, would other things equal, lead to easing of monetary policy.

● One could say that if the stability and growth pact are binding that such problems would be mitigated. But since this does not seem to be the case for the big countries then the likelihood of a bad outcome is not far fetched.

Relevance for Italy?

- This scenario has some resonance to the present situation in Italy. In the face of global competition and the absence of effective adjustment mechanisms in the labor market and presumably for political economy reasons, Italy has been running large fiscal deficits and a rising debt to GDP ratio.

- This process is reflected in part in spreads on Italian euro bonds (which may be signaling sovereign risk). However, because of the monetary union the true default risk is not fully reflected in spreads. Also because Italy is a financially developed country and is part of the EMU, the problem of "original sin", which has been critical for emerging countries, is not present.

- This means that there will be spillover effects to the rest of the union as Italian euro bonds are close substitutes for other countries' bonds, which in a sense socializes the risk.

- This will ultimately raise Europe risk spreads and may put pressure on the ECB to raise the inflation tax.

- This EMU absorption of one large member's risk is amplified by an implicit bail-out in the event of a debt default.

- The whole problem could be circumvented by a Fiscal Federal system with binding rules on the members or of course by an independent Italian central bank or ultimately by allowing markets to work.

V. Will the Euro survive?

- What are the lessons from history for the future survival of the Euro

- First, our survey of the history of both national and international monetary unions suggests that EMU is closer to a national monetary union with one central bank and one common currency circulating within the union. Hence the history of national MUs has resonance.

- Judging from history, the major driving forces behind the establishment of national monetary unions as well as behind their dissolution are political ones. The "economic" shortcomings noted by economists concerning the workings of the EMU should for this reason be viewed with caution. They need not spell disaster. They can be overcome by political forces as well as by the market-based adjustment mechanisms.

● The EMU and the ECB will be subject to major shocks in the future—just as the case is with any monetary area and its central bank. Monetary deficiencies or monetary problems that can be solved within the nation state should be solvable in a monetary union covering many nation states, given that the union is organized as a national monetary union with one type of money circulating within the whole union and with one central bank.

● A major lesson from history is that monetary unification is an evolutionary process. EMU will evolve in the future different from the existing plans for the EMU. This process, allowing the EMU to adopt and adjust to future disturbances, should properly be regarded as a policy learning process, where policy makers learn to cope with the shortcomings that will emerge. This process will continue as long as the political will to maintain the union is present. Once it disappears, the EMU may break apart. Judging from the history of national monetary unions such an outcome appears likely only under extreme circumstances.

● In short, as long as the political will to keep the EMU together prevails, EMU should survive in spite of the economic problems that will surface in the future. However, should the political glue dissolve for any reason—and several may be suggested—EMU or parts of it will dissolve as well. The political glue does not exist by itself; it is related to economic factors as well; both to deep structural forces and current economic conditions. These forces are important in determining whether the political glue will hold in the long run and whether it will hold up in the face of future shocks.

- Secondly, our historical perspective leads to the conclusion that Europe achieved monetary union much more rapidly than did the US but that integration on the real side, especially in the labor market, which ultimately is what is required for the EMU project to be successful, has lagged way behind.

- The question then arises, will the necessary real side reforms required to foster greater flexibility occur at a pace that will come into play in the face of the vicissitudes of the world business cycle and changing world patterns of activity?

- Will political will continue to provide the glue to keep EMU going in the face of slow integration? Will it take the equivalent of the US Civil War to either destroy it or strengthen it? Or will institutional adaptation occur in a learning by doing process?

- Will adding on 10 new countries to EMU at much lower levels of economic development help the project like the Louisiana Purchase and the Mexican War did for the US or will it be like the counterfactual exercise of the US acquiring Mexico and Central America?

- The historic events basically allowed the U.S. to expand its territory, provide land for new settlers and acquire vast resources. The counterfactual exercise would involve adding on a densely populated, culturally different region, at a much lower stage of economic development.

● Since most of these countries seem to be adjusting quite well and have much more flexible economies than many of the older members, the outlook from their joining the EMU looks promising.

● Third, in the presence of slow progress in the adjustment capacity of the real economy, major fiscal reforms at the EMU wide level is required. A rule embodying the fiscal transfers of a fiscal federal system and/or policy coordination in an environment where the members can conduct domestic stabilization policy can take the place of factor mobility.

● Such a rule must embody both the ability to tax (both by members and the union) and constraints on the ability to borrow by the members.

● Absent some form of fiscal union, absent institutional reforms to speedily foster factor and goods market integration, even the force of political will may be put to the test.