

## THE UNITED STATES AS A MONETARY UNION AND THE EURO: A HISTORICAL PERSPECTIVE

*Michael D. Bordo*

The creation of the euro in January 1999 was a milestone in monetary history. One currency supplanted the centuries old currencies of 12 sovereign nations, and the European Central Bank began conducting monetary policy for the new European Monetary Union. Moreover, major legal hurdles to the free movement of goods, financial instruments, and labor have been removed along with some steps taken toward fiscal harmonization. These are preliminaries for the formation of an integrated European Union economy. Finally, economic and monetary integration is also a key component of political integration. The ultimate aim is a United States of Europe.

Despite all these institutional changes the question still arises: Will it all work out to fulfill the dreams of the postwar visionaries for a United States of Europe? Will it collapse? Or will it just muddle along with no definite political structure?

In several recent articles, Lars Jonung and I examined the success of monetary unions in historical perspective (Bordo and Jonung 1997, 2000, 2003). We found that there was a key difference between the success rates of national monetary unions like the United States, Canada, Germany, and Italy compared with international monetary unions like the Scandinavian Monetary Union and the Latin Monetary Union. The key reasons for this outcome were the force of political will and greater economic integration. In the case of national monetary unions, monetary integration was an integral part of the process of creating a nation state. In the case of the historic pre-1914 international monetary unions, the union basically involved adoption of a specie coin of similar weight and quality by the members. These

---

*Cato Journal*, Vol. 24, Nos. 1–2 (Spring/Summer 2004). Copyright © Cato Institute. All rights reserved.

Michael D. Bordo is Director of the Center for Monetary and Financial History at Rutgers University and a Research Associate at the National Bureau of Economic Research.

international monetary unions effectively dissolved in the financial turmoil of World War I. We thus concluded that the future success of the EMU depended on the extent to which it is closer to a national than an international monetary union.

Given the extensive institutional changes that have already been made, if the EMU is closer to a national rather than an international monetary union, then we need to consider its long-run prospects within the historical frame of reference of successful monetary unions. In this vein, I follow the approach of Barry Eichengreen and Hugh Rockoff and compare the EMU with the most successful monetary union, the United States. The choice of the United States rather than other successful monetary unions is dictated in part because the United States is about the same size in population and GDP as the EMU. A reexamination of the history of U.S. monetary and economic 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.

## Monetary Integration

I define a monetary union as one in which a common currency (high powered or outside money) and bank money (inside money) are accepted at par across the geographical area of the union. In the modern context it also refers to having a common monetary authority or central bank. According to Rockoff (2003), it took the United States close to 150 years to achieve a full-fledged monetary union.<sup>1</sup> However, a successful currency union was attained with the Constitution of 1789 that gave the Congress (not the states) the power “to coin money and regulate the value thereof.” It took the next century and a half to create a unified monetary union (with both outside and inside money) and a viable monetary authority.

The story of antebellum state bank notes circulating at varying rates of discount from par is well known, as is that of the attempts by the First and Second Banks of the United States to create a uniform national currency (Fraas 1974, Rockoff 2003). The Civil War split the political union and the monetary union in two. In the North, paper money (greenbacks) circulated at a considerable discount relative to gold coins.<sup>2</sup> In the South, Confederate notes circulated until war’s

<sup>1</sup>However, Rockoff’s criteria for a successful monetary union are very exacting and would also have ruled out England until the 1844 Bank Charter Act was passed. For a critique see Schwartz (2003b).

<sup>2</sup>In the East, greenbacks were used as a medium of exchange, and gold coins at a premium

end in 1865. The national banking system, established in 1863, 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 establishment of the Federal Reserve 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 check clearing 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, D.C. As described by Eichengreen (1997a) 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 those conflicts were an important aspect of the paralysis in decisionmaking that helped create the Great Depression (Friedman and Schwartz 1963, Meltzer 2003). It was only with the Banking Act of 1935 that full power to implement monetary policy was given to the Board of Governors.

In contrast to the U.S. experience, the euro and the ECB were established, according to schedule, in 1999. The euro has been universally accepted by the residents of member countries.<sup>3</sup>

A common monetary policy dedicated to low inflation set by the ECB (which was mandated to be independent of the fiscal needs of EMU members) is also in place. However, its governance by a Governing Council consisting of the 6 members of the ECB Executive Board and the presidents of the 12 national central banks 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 (Schwartz 2003a).

In sum, the hurdle of creating an effective monetary union, in the sense of the widespread acceptance of the euro, has been surmounted. Whether the long-run commitment to stable monetary policy and to a strong euro continues, however, remains to be seen.

---

were used to finance external trade. In the West, gold coins, certificates, and deposits were the medium of exchange and greenbacks were discounted (Greenfield and Rockoff 1996).

<sup>3</sup>Although bank money is accepted at par in euros across the EMU, the national banking systems of the member states are still separate. Yet, until very recently, interstate banking was also restricted in the United States.

## 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.<sup>4</sup> The United States, in many ways achieved real integration long before it attained full monetary integration. Indeed the Constitution created a firm political base for integration by prohibiting taxes and duties on interstate commerce and by ensuring mobility of labor and capital (Kim 1998). In some respects the United States was much better integrated than Europe is today well over a century ago.

There is evidence of U.S. goods market integration, in the sense that similar products sold for similar prices, adjusted for transportation costs, across diverse regions well before the Civil War (Slaughter 1995). Rapidly declining transportation costs were an important catalyst. By contrast, in the EMU today, although legal impediments to trade have been removed, it is not clear that the law of one price is fully working.<sup>5</sup>

In the market for financial capital there is considerable debate over exactly when the United States became financially integrated. The traditional view, attributed to Davis (1965), is that financial integration was achieved by the end of the 19th century. More recent research by Bodenhorn (1992) and Bodenhorn and Rockoff (1992) suggests that short-term interest rates converged on the Atlantic seaboard by the 1850s, but that the Civil War then displaced the South from the national capital market for over a quarter of a century.

Europe may be as financially integrated today as the United States was early in the 20th century. Both long-term and short-term interest rates (real and nominal) have converged rapidly since the 1990s (Dorrucci et al. 2002). Other attributes of financial integration, such as the correlation of stock price indexes across financial centers, however, suggests considerably less integration (Eichengreen 1997b).

In the case of labor markets, it is clear that the United States was probably well over a century ahead of Europe. Margo (1998) provides evidence of convergence of both nominal and real wages across regions (the Northeast and Midwest; old and new South) before the Civil War. Most of the integration reflected movement of people

<sup>4</sup>A narrower set of criteria, which was the subject of an enormous literature in the 1990s, was whether Europe was an optimum currency area (OCA) in the sense of Mundell (1961). The key criteria of interest were whether shocks to the member states were asymmetric and whether labor was mobile between them.

<sup>5</sup>See Haskel and Wolf (2001) for evidence of very significant price differentials between branches of the furniture discount store Ikea in different EU countries.

seeking a better life. According to Slaughter (1995), very little of the convergence reflected the indirect effects of interregional trade in commodities as posited by neoclassical trade theory. Rosenbloom (1996) documents national integration of the U.S. labor market by the 1870s, with the principal exception of the South, which, because of the legacy of slavery and the Civil War, took until World War II to integrate (Wright 1986).

Europe by contrast suffers from both immobility of labor, reflecting deep-seated cultural, language, and institutional barriers (e.g., housing restrictions and guilds), and greater nominal rigidities (e.g., nationwide bargaining, high minimum wages, and generous unemployment insurance benefits and eligibility). As Krugman (1993) argued, a regional shock in the United States is largely adjusted to by an outflow of workers to another region; in Europe the outcome is permanently higher unemployment.

The greater immobility of labor and to a lesser extent of capital and goods tend to create a serious maladjustment problem for Europe in the face of convincing evidence by Eichengreen and Bayoumi (1997) and others that shocks (especially supply shocks) hitting the different EU members are considerably more asymmetric than those hitting U.S. regions. However Krugman argues, from the U.S. experience, that increased integration leads to increased specialization, which would tend to worsen the problem of asymmetry.<sup>6</sup>

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 the EU was not an OCA and should not have created the EMU.<sup>7</sup> It also has been used to make the case for fiscal federalism—that is, the institutionalizing of a system like that which prevails in the United States and Canada of significant fiscal transfers to deficit states and provinces. The U.S. fiscal federal system was established during the Great Depression in the 1930s (Wallis and Oates 1998). According to Hartland (1949), fiscal federal transfers served to offset much of the interregional losses following the collapse of the U.S. banking system. Sala-i-Martin and Sachs (1992) document that fiscal transfers in the United States eliminate as much as 40 percent of a decline in regional income. Eichengreen (1997a) calculates fiscal

<sup>6</sup>However, integration could have the opposite effect: by encouraging trade, it could encourage greater synchronicity of business cycles. For some evidence to this effect see Frankel and Rose (1998) and Bordo and Helbling (2003).

<sup>7</sup>Real exchange rates are also more variable between EMU members than between U.S. regions, further evidence that the EU was a poor candidate for a monetary union (Eichengreen 1997b).

transfers between the member states of the EU as only a tiny fraction of the magnitudes in the United States.

In sum, real integration in the EU seems to fall short compared with the U.S. experience. Moreover, the palliative of fiscal federalism is also lacking. It will be of great interest to see if the necessary reforms will be forthcoming.

### Political Will

Political will has been the driving force behind real and monetary integration in both the United States and the EMU. As for the United States, 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, the 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.

### The Future

Our historical perspective leads to the conclusion that Europe achieved monetary union much more rapidly than did the United States 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 the EMU going in the face of slow integration? Will it take the equivalent of the U.S. Civil War to either destroy it or strengthen it? Or will institutional adaptation occur in a learning-by-doing process? (Jonung 2002). Will adding on 10 new countries to the EMU at much lower levels of economic development help the project like the Louisiana Purchase and the Mexican War did for the United States or will it be like the counterfactual exercise of the United States acquiring Mexico and Central America? The historic events basically allowed the United

States 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.

The evidence so far suggests that the best case scenario is guarded optimism. A more likely outcome based on the European response to the recent world downturn is probably not so rosy.

## References

- Bodenhorn, H. (1992) "Capital Mobility and Financial Integration in Antebellum America." *Journal of Economic History* 52 (3): 585–610.
- Bodenhorn, H., and Rockoff, H. (1992) "Regional Interest Rates in Antebellum America." In C. Goldin and H. Rockoff (eds.) *Strategic Factors in American Economic History: A Volume to Honor Robert W. Fogel*, 159–87. Chicago: University of Chicago Press.
- Bordo, M. D., and Helbling, T. (2003) "Have National Business Cycles Become More Synchronized?" Mimeo. Rutgers University (September).
- Bordo, M. D., and Jonung, L. (1997) "The History of Monetary Regimes: Some Lessons for Sweden and the EMU." *Swedish Economic Policy Review* 4 (2): 285–358.
- \_\_\_\_\_. (2000) *Lessons for EMU from the History of Monetary Unions*. London: Institute of Economic Affairs.
- \_\_\_\_\_. (2003) "The Future of EMU: What Does the History of Monetary Unions Tell Us?" In F. H. Capie and G. E. Wood (eds.) *Monetary Unions: Theory, History, Public Choice*, 42–69. London: Routledge.
- Davis, L. (1965) "The Investment Market, 1970–1914: The Evolution of A National Market." *Journal of Economic History* 25 (September): 355–69.
- Dorrucci, E.; Firpo, S.; Fratzscher, M.; and Mongelli, F. P. (2002) "European Integration: What Lessons for Other Regions? The Case of Latin America." ECB Working Paper No. 185 (October).
- Eichengreen, B. (1997a) "One Money for Europe? Lessons from the U.S. Currency Union." In B. Eichengreen, *European Monetary Unification: Theory, Practice and Analysis*, 13–49. Cambridge, Mass: MIT Press.
- \_\_\_\_\_. (1997b) "Is Europe an Optimum Currency Area?" In B. Eichengreen, *European Monetary Unification: Theory, Practice and Analysis*, 53–71. Cambridge, Mass: MIT Press.
- Eichengreen, B., and Bayoumi, T. (1997) "Shocking Aspects of European Monetary Unification." In B. Eichengreen, *European Monetary Unification: Theory, Practice and Analysis*, 73–109. Cambridge, Mass: MIT Press.
- Fraas, A. (1974) "The Second Bank of the United States: An Instrument for Interregional Monetary Union." *Journal of Economic History* 34 (2): 447–67.
- Frankel, J., and Rose, A. (1998) "The Endogeneity of the Optimum Currency Area Criteria." *Economic Journal* 108: 1009–25.
- Friedman, M., and Schwartz, A. J. (1963) *A Monetary History of the United States, 1867–1960*. Princeton, N.J.: Princeton University Press.

- Greenfield, R., and Rockoff, H. (1996) "Yellowbacks Out West and Greenbacks Back East: Social Choice Dimensions of Monetary Reform." *Southern Economic Journal* 62 (April): 902–15.
- Hartland, P. C. (1949) "Interregional Payments Compared with International Payments." *Quarterly Journal of Economics* 63: 392–407.
- Haskel, J., and Wolf, H. (2001) "The Law of One Price: A Case Study." *Scandinavian Journal of Economics* 103 (4): 545–58.
- Jonung, L. (2002) "EMU—The First 10 Years: Challenges to the Sustainability and Price Stability of the Euro Area—What Does History Tell Us?" In M. Buti and A. Sapir (eds.) *EMU and Economic Policy in Europe: The Challenge of the Early Years*. Cheltenham, U.K.: Edward Elgar.
- Kim, S. (1998) "Economic Integration and Convergence: U.S. Regions, 1840–1987." *Journal of Economic History* 58 (September): 659–83.
- Krugman, P. (1993) "Lessons of Massachusetts for EMU." In F. Torres and F. Giavazzi (eds.) *Adjustments and Growth in the European Monetary Union*. Cambridge: Cambridge University Press.
- Margo, R. A. (1998) "Labor Market Integration Before the Civil War." NBER Working Paper 6643 (July).
- Meltzer, A. H. (2003) *A History of the Federal Reserve*. Vol. 1. Chicago: University of Chicago Press.
- Mundell, R. A. (1961) "A Theory of Optimum Currency Areas." *American Economic Review* 51: 657–65.
- Rockoff, H. (2003) "How Long Did It Take the United States to Become an Optimal Currency Area?" In F. H. Capie and G. E. Wood (eds.) *Monetary Unions: Theory, History, Public Choice*, 70–103. London: Routledge.
- Rosenbloom, J. (1996) "Was There a National Labor Market at the End of the Nineteenth Century? New Evidence on Earnings in Manufacturing." *Journal of Economic History* 50 (3): 626–56.
- Sala-i-Martin, X., and Sachs, J. (1992) "Federal Fiscal Policy and Optimum Areas." In M. Canzoneri, V. Grilli, and P. Masson (eds.) *Establishing a Central Bank: Issues in Europe and Lessons from U.S.*, 195–220. Cambridge: Cambridge University Press.
- Schwartz, A. J. (2003a) "Risks to the Long-Term Stability of the Euro." Mimeo. NBER (October).
- \_\_\_\_\_. (2003b) "Comments on Chapter 4: How Long Did It Take the United States to Become an Optimal Currency Area?" In F. H. Capie and G. E. Wood (eds.) *Monetary Unions: Theory, History, Public Choice*, 108–10. London: Routledge.
- Slaughter, M. J. (1995) "The Antebellum Transportation Regulation and Factor Price Convergence." NBER Working Paper 5303 (October).
- Wallis, J. J., and Oates, W. E. (1998) "The Impact of the New Deal on American Federalism." In M. D. Bordo, C. Goldin, and E. White (eds.) *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century*, 155–80. Chicago: University of Chicago Press.
- Wheelock, D. C. (2000) "National Monetary Policy by Regional Design: The Evolving Role of the Federal Reserve Banks in Federal Reserve System Policy." In J. Van Hagen and C. J. Waller (eds.) *Regional Aspects of Monetary Policy in Europe*, 241–74. Boston: Kluwer Academic Publishers.
- Wright, G. (1986) *Old South, New South*. New York: Basic Books.