

ESSAYS IN INTERNATIONAL FINANCE

No. 198, June 1996

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A MORE PERFECT UNION?  
THE LOGIC OF ECONOMIC INTEGRATION

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BARRY EICHENGREEN



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS  
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## ESSAYS IN INTERNATIONAL FINANCE

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The author of this Essay, Barry Eichengreen, is John L. Simpson Professor of Economics and Professor of Political Science at the University of California, Berkeley. Professor Eichengreen has written extensively on the history and prospects of the international monetary system. His *Globalizing Capital: A History of the International Monetary System* will be issued by Princeton University Press this year. The following Essay was delivered as the Frank D. Graham Memorial Lecture on April 16, 1996. A complete list of Graham Memorial Lecturers is given at the end of the volume. This is Professor Eichengreen's fourth contribution to the publications of the International Finance Section.

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A MORE PERFECT UNION?  
THE LOGIC OF ECONOMIC INTEGRATION

This lecture is about the connections between three types of union—customs union, monetary union, and political union. The first section asks whether monetary integration is a concomitant of commercial integration.<sup>1</sup> The second asks whether political integration is a concomitant of monetary integration.

I use the ambiguous word “concomitant” to indicate that I am actually looking at several questions. One is whether monetary integration must accompany commercial integration before efficiency advantages can be obtained from the latter. Another is whether commercial integration delivers a larger increase in efficiency and welfare when accompanied by monetary integration, and whether the welfare improvement from monetary integration is greater when accompanied by political integration. A third asks what combination of commercial, monetary, and political integration is Pareto optimal. And a fourth, and different, question—concerned with the political equilibrium rather than the social optimum—asks whether monetary union is necessary to maintain political support for commercial integration and whether political integration is necessary to assemble support for monetary union.

My answer to the first question is that neither a common currency nor measures to limit the fluctuations of exchange rates are essential to derive efficiency advantages from a customs union, assuming that the union is “natural”—that the benefits of trade creation dominate the

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This essay was delivered as the Frank D. Graham Memorial Lecture at Princeton University. Portions of it owe much to my teachers Sheldon Wolin and John Schaar, whose influence it gives me pleasure to acknowledge. Ron Rogowski instructed me on the literature on legitimacy. Jeffrey Frieden’s council clarified my thinking on matters political. Fabio Ghironi generously allowed me to draw on joint work and critiqued my analysis. Finally, I thank Max Corden for helpful comments; in a sense, this paper is a sequel to his Graham Lecture on the same subject.

<sup>1</sup> Throughout this lecture, I use the term “commercial integration” to refer to movement toward the establishment of free-trade areas and customs unions, and “economic integration” to denote more far-reaching initiatives, such as the European Union’s effort to establish an integrated internal market both in goods and services and in factors of production.

costs of trade diversion (Krugman, 1991). No strictly economic obstacle prevents countries from removing trade barriers and restructuring along lines of comparative advantage while retaining national, potentially fluctuating, currencies. Although one can argue, along the lines of the European Commission (1990), that the complete integration of product markets requires eliminating the transactions costs and uncertainties associated with separate currencies, few would question that the approximation possible in the absence of monetary integration is still an improvement over the status quo. For example, most would agree that the member states of the European Union (EU) benefit from their common market despite the fact that they lack a common currency.

Similarly, it is possible to obtain efficiency advantages from a single currency while maintaining separate, sovereign, political jurisdictions. There is no strictly technical obstacle, for example, to constructing an optimal contract for the future European Central Bank (ECB), as in Walsh (1995), while allowing other policies to be determined at the national level by separate, sovereign, political entities. In particular, there is no economic obstacle to appointing members of the executive board of the ECB at the national level while continuing to formulate fiscal policy in national capitals.

From the standpoint of political equilibrium, however, there are reasons to think that these three forms of integration should go hand in hand. Swings in the exchange rates of the currencies of customs-union members inflict costs on concentrated interests; when a currency appreciates, the profit squeeze on producers of tradables may lead them to lobby for import restraints. Cooperative exchange-rate management and even a common currency may be needed to alleviate this threat; otherwise, beyond some point, commercial integration without monetary integration may be politically infeasible.

Similarly, there are reasons to worry that monetary integration without political integration is problematic. Different interest groups—debtors and creditors, laborers and capitalists, producers of traded and nontraded goods—are differently affected by monetary policy. They will need reassurance that the ECB's implicit contract weighs their preferences appropriately and that a mechanism exists to enforce that contract. In the United States, the Congress is such a mechanism; the threat of a bill compromising the independence of the Federal Reserve System is its ultimate sanction. A European monetary union comprising separate sovereign states, and an ECB the statute of which can be changed only by renegotiating an international treaty, will face no such sanction. The implication is that steps toward political union that vest



significant power in the hands of the European Parliament may be needed to render the ECB politically acceptable.

This is the point in the introduction when I am supposed to anticipate my conclusions. Unfortunately, it is hard to offer a statement such as "monetary union is necessary for economic union," or "political union is needed for monetary union." Although it is not unusual for an economist's conclusions to depend on the assumptions adopted, the results in the present case are especially sensitive. In the interest of being provocative, let me offer a conjecture. I suggest that economic integration without monetary integration is not a political equilibrium, but that political integration is not needed to render monetary integration politically acceptable.

## **1 Commercial Integration and Monetary Integration**

The argument that economic union without monetary union is not a political equilibrium can be set forth using Europe as an example.<sup>2</sup> The more integrated European economies become, the more pronounced will be the distributional consequences of intra-EU currency swings. With the perfection of the Single Market, EU countries that let their currencies depreciate will flood other member states with exports. Those countries that experience import surges will, in response, demand the imposition of voluntary export restraints by their EU trading partners or the granting of subsidies for their own affected industries. Thus, exchange-rate instability may be fatally corrosive to the Single Market.

The corrosive effect of currency fluctuations was clearly evident in the wake of the 1992 depreciation of the lira, which caused a sharp depreciation of Italy's real exchange rate and an appreciation of the real exchange rates of France and Germany.<sup>3</sup> Given Europe's increasingly integrated market, this boosted Italian exports, strengthened Italy's

<sup>2</sup> Space and time constraints lead me to neglect two complications, both of which have to do with the politics and economics of alternative exchange-rate regimes. One is that Economic and Monetary Union (EMU) will not necessarily lock all intra-EU exchange rates, because countries that do not meet the preconditions for entry or possess an opt-out clause may not participate. The other is that, regardless of the number of EU countries participating in the monetary union, there will still be scope for exchange-rate movements and independent monetary policies insofar as the euro can fluctuate against the dollar, the yen, and other foreign currencies.

<sup>3</sup> Some months earlier, in July 1992, the Italian government, industrialists, and trade-union leaders had agreed to eliminate the country's existing system of wage indexation. This agreement, which was renewed in July 1993, prevented nominal depreciation from being passed through into wages and prices.

current account, and helped to moderate its recession. The repercussions abroad, however, were strongly negative. The EU commissioner for the internal market, Mario Monti, warned of "growing concern among industrialists that the lira's devaluation is giving Italian companies an advantage over their European competitors," reflecting the fact that inflation had not risen to match the depreciation of the currency (*Financial Times*, February 28, 1995, p. 6). "It was impossible to have a guaranteed single market in a situation where currency fluctuations remained unchecked," Mr. Monti maintained, adding that "the continuing devaluation of the lira would in the long run lead to prolonged disruption in the internal market."

That Monti was not merely blowing smoke is evident from the French government's demand that Brussels extend subsidies to affected industries. In addition, Helmut Werner, president of the Mercedes-Benz automotive group, warned, on April 26, 1995, that "unpredictable exchange rate fluctuations are threatening the European single market with disintegration, . . ." and he appealed "for political action to restore cohesion and the introduction of a single European currency to stabilise industry's cost and price structure" (Parkes, 1995, p. 1). Similarly, *Corriere Della Sera* reported on May 24, 1995, that Alain Juppé, the new French prime minister, warned that France would "react against" those countries that play "out of the [Maastricht] rules," making it clear that "French irritation against the depreciation of the lira and the peseta has reached the top level: the government level . . . that which until yesterday seemed the position of some sectors of the French economy (like the automobile and textile industries, which see Italian competition as unfair) is now the official position of France." The implication is that countries cannot support the internal market and at the same time oppose the single currency. The conflict between market integration and exchange-rate fluctuations points to the need for, as Monti suggests, "some sort of monetary arrangement . . . to complement the single market." If the gains from completing the Single Market are large, it follows that Europe must achieve monetary union.

It is revealing that no one accused the Italian government of deliberately manipulating the lira. The currency's weakness reflected the failure of the Italian parliament to adopt a 1995 budget that would hold the deficit to its original target of 8 per cent of GDP. The fiscal problem implied debt-service difficulties and, in the eyes of the market, the possibility that the Bank of Italy might be forced to monetize budget deficits or backstop the market for public debt. It was believed, in other words, that inflation might accelerate in the future, and the lira's

depreciation in January and February reflected market anticipations of this outcome. Yet the depreciation gave rise to strenuous objections elsewhere in Europe despite the fact that (1) the lira's value had not been manipulated and (2) there was good reason to believe that the impact on competitiveness would eventually die out. Imagine the complaints if the government of Italy—or of Greece or the United Kingdom—were perceived as *deliberately* manipulating its currency to steal market share from European competitors.

This danger has, in fact, been emphasized by some observers. On February 11, 1995, *The Economist* (p. 14) wrote that “as long as Europe’s currencies are free to move against one another, the single market will never be secure. The risk will remain that national governments will seek to protect their countries’ firms against rivals in countries that have just devalued. The greater the volatility, the greater the pressure for national protection, and the greater the danger to all the past achievements of the common market.” On March 4, 1995, *The Economist* (p. 59) told its U.K. audience that “the benefits we now gain from the European single market will come under threat and a question may arise over our very membership of the EU. If the pound is the only major EU currency outside the Ecu bloc, it is likely to come under frequent pressure. The Ecu countries may well regard progressive devaluation of a weak pound as unfair competition. It is very possible that they will retaliate, and there are a variety of ways in which single-market rules can be changed to our disadvantage. The pressure to raise trade barriers could be considerable. Meetings of the European Council could become increasingly acrimonious.”

The argument that monetary union is required to reap the benefits from the Single Market is sometimes rebutted by the assertion that Europe can have stable exchange rates without attaining monetary union. I am skeptical that this is so. The liberalization of capital movements has made intermediate exchange-rate arrangements like the pegged-but-adjustable rates of the narrow-band European Monetary System (EMS) more difficult to sustain. The elimination of capital controls, a corollary of the Single Market project, strips governments of the insulation they need to defend pegged-but-adjustable rates and removes the breathing space they require to organize orderly realignments. The interest-rate hikes that governments must impose when their currencies come under attack may so aggravate unemployment, raise the costs of servicing the public debt, inflate mortgage payments, and destabilize the banking system as to be insupportable. In such an environment, a government that would have been willing otherwise to

maintain an exchange-rate peg might be induced to abandon it in the face of speculative pressure; in other words, speculative attacks could become self-fulfilling.<sup>4</sup> As it becomes more difficult to operate pegged-but-adjustable rates, governments will have to choose between some form of floating, on the one hand, and permanently fixed rates, on the other, with the second alternative achievable only through monetary union. And there is by now considerable evidence that since the shift from fixed to floating currencies, the volatility of exchange rates has increased much more than the volatility of fundamentals, a fact convincingly demonstrated by Andrew Rose (1994). This is the basis for arguing that economic integration requires monetary integration.

Having presented this argument, I now want to challenge it and suggest that the connections between commercial integration and exchange-rate stability are not so straightforward as is sometimes supposed. Today, when there is so much discussion of the effect of exchange-rate volatility on trade, it is easy to forget that the presumption for many years was that currency fluctuations and trade restraints were substitutes, not complements. "The ossification of exchange rates," as Peter Kenen (1994) puts it, was widely lamented in the 1960s; the difficulty of dismantling trade barriers was attributed to the reluctance of deficit and surplus countries to alter their exchange rates. More freely adjustable currencies, many observers believed, were needed to repel the protectionist threat.<sup>5</sup>

Observers were predisposed to this interpretation because of the frequency with which governments had resorted to trade restrictions to balance the external accounts over the years. During World War II, countries had used exchange and trade controls in lieu of currency depreciation. After the war, they had retained exchange and trade restrictions for fear of the inflationary consequences of currency

<sup>4</sup> For models of this situation, see Maurice Obstfeld (1986, 1994) and F. Gulcin Ozkan and Alan Sutherland (1994). Although the point is controversial, I would argue that this model fits the 1992 attack on sterling quite well (Eichengreen and Wyplosz, 1993). The lira presents a more complicated case insofar as there exists considerable evidence that it was overvalued in the first half of 1992. But no one would claim that this overvaluation reached 35 per cent—the magnitude of the depreciation that occurred subsequently. Thus, it can be argued that subsequent events led to a policy shift that was itself contingent on the speculative attack—that the lira crisis both depended on fundamentals and had self-fulfilling features.

<sup>5</sup> In the words of one contemporary: "The removal of the balance-of-payments is an important positive contribution that the adoption of flexible exchange rates could make to the achievement of the liberal objective of an integrated international economy" (Johnson, 1972, p. 210).

depreciation; the Bretton Woods Agreement allowed for the transitional use of controls on current-account transactions precisely in order to support the par values established in 1946, although it turned out that even stringent current-account restrictions did not obviate the need to devalue in 1949 (Polak, 1951). In the 1950s, European countries established the European Payments Union (EPU), which authorized them to use exchange and trade restrictions, again in order to support the maintenance of pegged rates. Observers at the time emphasized this connection between pegged exchange rates and the survival of trade restrictions. Milton Friedman's famous 1953 essay on floating rates is properly interpreted as advocating floating exchange rates in lieu of the pegged rates supported by the EPU, which he saw as encouraging the retention of exchange and trade restrictions. Policy-makers also acknowledged the connection. In 1952, the British pondered floating the pound in order to permit the immediate resumption of current-account convertibility, but they retreated instead into the trade and monetary controls of the EPU (Cairncross, 1992).

Some observers, casting their gaze back further, blamed the rigid exchange rates of the gold standard for the protectionism of the 1930s. Having emerged from World War I with their competitive positions transformed, countries experienced persistent payments surpluses and deficits. Those in deficit, beholden to gold-standard ideology and reluctant to devalue, used tariffs to limit their reserve losses and to support their gold-standard parities (Eichengreen, 1992, chaps. 11–12). The conflict between trade liberalization and exchange-rate stability sharpened with the onset of the Great Depression. Tariff protection became the only way of reconciling the gold standard with the desire to reflate.<sup>6</sup> In the United States, the deflation associated with the fixed exchange rates of the gold standard heightened support for the very high duties of the Hawley-Smoot Tariff.<sup>7</sup> In Britain, where free trade

<sup>6</sup> Textbook treatments emphasize the tendency for exchange-rate variability to fan protectionist flames following the collapse of the gold-exchange standard in the early 1930s. My point here is that much of the literature contemporary to the collapse argued the opposite: that overvaluation in the countries that remained on gold posed a problem for free trade. Charles Feinstein, Peter Temin, and Gianni Toniolo (1995) provide a recent restatement of this view.

<sup>7</sup> A debate about how much capacity the United States could muster to offset the depression without threatening the dollar's fixed gold-standard parity arrays Milton Friedman and Anna Schwartz (1963) against Elmus Wicker (1966) and the present author (1992). But even those who would deny that a fixed exchange rate inhibited monetary-policy activism would probably agree that the ideology of the gold standard was a significant constraint.

had been the hegemonic ideology for nearly a century, Keynes's arguments for a general tariff to reconcile interest-rate cuts with sterling's gold-standard parity fell on increasingly sympathetic ears (Balogh, 1976; Eichengreen, 1984).

One year after abrogating the gold standard, the United States was able to move back toward freer trade and adopt the Reciprocal Trade Agreements Act. The United Kingdom did not revoke its general tariff, but it did negotiate preferences with the members of the Commonwealth and British Empire beginning with the Ottawa Conference in 1932. The remaining gold-standard countries found their currencies overvalued. To stem their reserve losses, they raised tariffs and tightened quantitative restrictions. Only when the last members of the gold bloc devalued in 1936 did the vicious spiral of trade destruction end. In 1985, Jeffrey Sachs and I published an article in which we argued that the "competitive devaluations" of the 1930s were by no means as incompatible with macroeconomic stability as has sometimes been asserted by recent scholars. In so stating, we were merely resurrecting an interwar argument to the effect that greater willingness to alter exchange rates was needed to solidify the commitment to open markets.<sup>8</sup>

If this was the state of the debate in the early postwar period, it has subsequently been turned on its head. Economists now argue that exchange-rate *variability* jeopardizes the commitment to free trade. Ronald McKinnon (1996) blames the exchange-rate fluctuations associated with the post-1973 system of floating rates for the "new protectionism" of the 1970s. Fred Bergsten and John Williamson (1983) blame erratic currency movements, particularly between the dollar and the yen, for the trade conflicts of the 1980s. Enzo Grilli (1988) offers statistical evidence connecting exchange-rate fluctuations with trade protection in the United States and Europe.

<sup>8</sup> The evidence Douglas Irwin and I (1995) present on the trade-creating and trade-diverting effects of the currency blocs of the 1930s also supports this view. We estimate gravity equations explaining the volume of bilateral trade in 1928, 1935, and 1938. In addition to the standard arguments of the gravity model (national incomes, per capita incomes, distance between the trading partners, and contiguity), we include measures of membership in the leading commercial and financial blocs of the period. We find that the different currency blocs of the 1930s had very different implications for trade. Sterling-bloc countries traded more among themselves and with the rest of the world than was predicted by the gravity model, suggesting that policies followed by the members of the bloc did, on balance, create trade. Gold-bloc countries, by contrast, did not trade disproportionately with one another or with the rest of the world, possibly because they used tariffs and quotas to prop up overvalued currencies.

This perspective reflects the strains placed by the post-1973 float on the global trading system. The failure of the dollar to depreciate against the European currencies in the mid-1970s and its subsequent overvaluation were perceived as jeopardizing free trade; the combination led the United States to adopt the trigger-price mechanism for steel and to restrict imports of sugar and shoes. The dollar's appreciation in the first half of the 1980s squeezed the profits of American producers and generated a protectionist ground swell in the U.S. Congress. Only the Plaza Agreement and Louvre Accord, which brought the dollar back to earth, rescued the multilateral trading system.

Similarly, when sterling depreciated against the franc starting in September 1992, and the Hoover vacuum cleaner manufacturing company moved 200 jobs from Dijon to Scotland (no more than a little "sucking sound" by Ross Perot's standards), politicians in Paris and Brussels were led to ask whether a country that failed to play by the monetary rules of the EU game should be accorded the privileges of the Single Market. When the Mexican peso lost half its value against the dollar starting in December 1994, U.S. producers complained of "cut-rate" Mexican competition, swelling the ranks of those opposing the North American Free Trade Agreement (NAFTA). Finally, talk of a transatlantic free-trade area in 1995 was thwarted by European politicians who complained that the dollar's decline was enabling Boeing to undercut Airbus unfairly. The presumption was that floating rates, not fixed rates, were incompatible with commercial integration.

There is no real inconsistency among these arguments about the protectionist effects of fixed and floating rates. Their common elements are that *misaligned* exchange rates fan protectionist flames and that currencies may become misaligned both when they are pegged and when they are floating. The question then becomes, would monetary unification prevent real misalignments? Imagine that monetary union were to begin in Europe without the emission of euros or the withdrawal of the national currencies from circulation; the ECB would simply exchange national currencies at par, just as the currency notes issued by the district reserve banks in the United States are exchanged at par by the Federal Reserve System.<sup>9</sup> Real exchange rates could be computed as before, by converting an index of national prices or wages

<sup>9</sup> The Maastricht Treaty does not require the ECB to issue the single currency immediately, although national central banks will immediately lose all rights to issue national currencies on their own initiative and will become mere operating arms of the ECB. Nothing essential changes if we assume, instead, that national currencies are replaced with euros immediately, but the case in the text is the easiest one to consider.

into one national currency, say, deutsche marks, using the fixed exchange rates. It would still be possible for real exchange rates to be misaligned in a meaningful sense if their levels were to give rise to large unemployment differentials across countries.<sup>10</sup> If this is what we mean by misalignment, it is entirely possible for misalignments to occur within monetary unions, whether they pertain to Spain in EMU or to New Jersey in the United States. The likelihood that unemployment will foster resistance in the affected region to economic and monetary union is precisely what I mean by the political repercussions of misalignment.

What grounds, then, are there for thinking that monetary unification will eliminate resistance to economic integration? That conclusion may still follow if one believes that eliminating the exchange rate as an instrument of adjustment will induce changes in labor-market structure and performance that enhance wage flexibility and labor mobility. In fact, there is some empirical support for this application of the Lucas Critique (which says that the very structure of an economy may be affected by changing or even fixing one of the variables functioning within it). It can be argued that Italian unions gave up indexation and agreed to other policies enhancing wage flexibility in recognition of the fact that labor-market reform was needed to prepare for monetary union. And Olivier Blanchard and Pierre-Alain Muet (1993) find some evidence that wage flexibility has increased in France as the *franc fort* has gained credibility. I would argue that the flexibility of wages in New Jersey and the willingness of workers to move to neighboring states should be understood, at least in part, as reflecting the absence of any prospect of an exchange-rate change that would raise the demand for labor.

This was also true internationally during the classical gold-standard era. In the countries at the core of that pegged-rate system, wages were flexible and workers migrated in unprecedented numbers, partly because they realized that there would be no change in the exchange rate to improve labor-market conditions.<sup>11</sup> Tamim Bayoumi and I (1996) present evidence that the labor- and product-market response to

<sup>10</sup> What is a misalignment, after all, if not a wage explosion that prices workers out of employment, or a failure of wages to fall in response to a decline in local labor demand? Clearly, this is only one possible definition of the term, although I would argue that it is the relevant one here. For alternative definitions, see Jeffrey Frankel (1985).

<sup>11</sup> To be precise, workers migrated in unprecedented numbers *relative to the size of the world economy*. Note that I characterize the gold standard as a pegged- rather than fixed-rate system. As Michael Bordo and Finn Kydland (1995) have emphasized, the gold standard featured an escape clause that allowed for exchange-rate changes in the event of exceptional shocks. This provision was rarely, however, invoked in the countries at the core of the international gold standard in the final decades before 1913.



shocks was faster under the gold standard than under monetary regimes characterized by greater exchange-rate variability. This was at least in part an endogenous consequence of the monetary regime.

I am not suggesting, of course, that wages and prices will become perfectly flexible once exchange-rate changes are a thing of the past. As a partly reconstructed Keynesian, I believe that nominal inertia will persist, and so will unemployment. My hypothesis is that wage and price setters will adapt so as to avoid increases in unemployment sufficient to provoke resistance to continued participation in the economic and monetary union.

If one wishes to argue that labor markets will adapt to a fixing of the exchange rate, one must also argue that they will adapt to currency volatility if currencies continue to float. When exchange rates fluctuate, workers demand wage indexation, the frequent renegotiation of wage contracts, and other mechanisms to prevent real wages from being disturbed by exchange-market shocks. Insofar as a depreciation of the currency then causes money wages to rise, the impact on international competitiveness will be minimal. The export surge to other EU markets that jeopardizes economic and monetary union in the scenario described above will thus be averted or at least moderated. Again, I would not go so far as to argue that this *de facto* or *de jure* indexation can eliminate the real effects of exchange-market shocks, only that movement in this direction will attenuate the conflict between exchange-rate variability and market integration.

What should we conclude about whether monetary unification is necessary to maintain political support for market integration? It is not possible to mount a general argument that monetary union is either essential or irrelevant. If exchange rates are locked, labor markets will adapt to prevent the emergence of persistent pockets of high unemployment. If exchange rates continue to fluctuate, markets will adapt to moderate their impact on competitiveness. Neither adjustment will be complete, however, and political problems will remain. My own instinct is that monetary unification is the more stable long-run solution. If currency fluctuations persist, complaints about competitive depreciation and exchange dumping will be an enduring problem. Markets have already adjusted about as far as they can to accommodate fluctuating rates, and they have not neutralized completely the effects of fluctuations on competitiveness, at least not enough to eliminate serious complaints about competitive depreciation. If exchange rates are locked once and for all, however, we can expect to see considerable additional adjustment in market structure and response. Although asymmetric

shocks will remain a problem in the immediate future, because labor and product markets will adapt only gradually to the new regime, market institutions and arrangements will evolve in the long run to compensate more effectively for the absence of the exchange-rate instrument. Few Princeton professors would argue that New Jersey's unemployment rate would be lower or more stable if Governor Whitman controlled a separate currency. Given sufficient time for institutions to adapt, I submit that the same will be true of Belgium. The phrase "sufficient time," however is crucial; it is intended to emphasize that the first years will be difficult.

## 2 Monetary Integration and Political Integration

Michael Mussa is fond of describing how, each time he walks to the IMF cafeteria, down the corridor where the currency notes of the member states are arrayed, he rediscovers one of the most robust regularities of monetary economics: the one-to-one correspondence between countries and currencies. If monetary unification precedes political unification in Europe, it will be an unprecedented event.

There is not much historical evidence consistent with this view. In virtually all of today's advanced industrial countries, political unification has preceded monetary unification. When the United States was a loose confederation of former British colonies, individual states retained the right to issue their own money-like liabilities. State governments issued bills of credit, certificates of interest, and special indents that circulated as money, and state legal-tender laws required that these be accepted at par in settlement of tax and other obligations (Schweitzer, 1989). Given the states' divergent demands for seigniorage, the separate monies led to fluctuating exchange rates. Only with the decision to form a political union and the adoption of the U.S. Constitution in 1788 was the right to issue legal tender limited to the federal government.<sup>12</sup>

In Germany, economic unification began with the creation of the Zollverein in 1834. Its constituent states initially had separate systems of coinage. Although they eventually negotiated treaties designed to standardize their coinage and fix the exchange rates between their currencies, this was not a monetary union in the strict sense. The individual German states refused to allow their right to issue paper

<sup>12</sup> Arthur Rolnik, Bruce Smith, and Warren Weber (1993) tell this story in reverse. They suggest that the inefficiencies of separate currencies created pressure for the creation of a single currency and that this required political unification. By implication, the U.S. Constitution was the product of floating exchange rates!

money to be regulated by treaty. Governments created note-issuing development banks and otherwise subordinated monetary policy to the goal of state-led development. They were willing to agree to a uniform currency and common central bank only after political unification in 1871 (Holtfrerich, 1989, pp. 226–228).

Similarly, Italy had several currency systems in place at the time of political unification in 1861. The states brought together in the Kingdom of Italy each depended on bank notes issued by a single institution (often private, or semiprivate), except for Sardinia, which had two banks of issue. Although the newly created government of the Kingdom of Italy saw the merit of creating a single central bank, it had difficulty limiting the prerogatives of the local banks.<sup>13</sup> The creation of a true central bank, by the Banking Act of 1893, required political integration that subordinated regional interests to the national interest. Thus, although political integration preceded monetary integration in Italy, other forms of economic integration preceded political integration, in the sense that regional political interests disintegrated as a result of the creation of a more integrated Italian economy.

Why have nations been so reluctant to cede control of the central bank's printing press? One reason is that monetary sovereignty has historically been essential for the national defense (Goodhart, 1995). Because a credible defense presupposes the ability to resist attack, certain tax instruments, prominent among them the inflation tax, are assigned to the national authorities. Money can then be printed to pay soldiers and purchase war materiel when other revenues are insufficient or interrupted.

National defense helps to explain why Germany and France resisted early postwar proposals for European monetary integration.<sup>14</sup> It cannot, however, account for the present resistance to European monetary unification. French and German opponents of monetary unification do not seriously believe that war between the two countries is possible. If

<sup>13</sup> Only in 1874, thirteen years after political unification, did Italy succeed in limiting bank-note issues (by tying them to historical market shares). Gold convertibility was established in 1884, when the discount rates of the leading banks were brought under government control, and banks were allowed to increase their issue only if they obtained 100 per cent backing for the excess (Sannucci, 1989). The local Italian banks had developed to serve the distinctive financial needs of the regional economies, and the local populace defended them against attempts to limit their prerogatives.

<sup>14</sup> Helge Berger and Albrecht Ritschl (1995) argue, for example, that enthusiasm for the EPU rested in large part on the ability of this form of European monetary integration to lock Germany into the European economy.

a revenue of last resort is needed for defense against a common external threat, it can be provided by the ECB.

More typically, economists understand Mussa's observation about countries and currencies in terms of optimal taxation. Jurisdictions differ in the value they attach to different taxes and public spending programs. The structures of national economies differ; where nonmonetary demands and supplies are more elastic, for example, optimal tax rates will be lower. Furthermore, those who bear the burden of taxes other than the inflation tax are more powerful in some countries than in others. They prefer different levels for the inflation tax, and in the absence of a political process to reconcile their views, they agree implicitly to retain a national currency.<sup>15</sup> The problem with this argument is that seigniorage typically accounts for only a small share of government revenues; this is certainly true of the high-income, low-inflation nations of Europe. It is hard to imagine that such countries attach much value to the inflation tax.

Another argument, put forward by James Ingram (1959) and popularized in the current European context by Xavier Sala-i-Martin and Jeffrey Sachs (1992), is that a monetary union requires fiscal federalism to operate efficiently. Fiscal federalism on the American scale, however, requires the centralization of national tax revenues and expenditure decisions, and European nations are unlikely to cede control of taxes and spending in the absence of political integration. It is conceivable that the EU budget could be rigged to mimic the shock-absorber role of the federal fiscal systems in the Canadian and U.S. monetary unions; Alexander Italianer and Jean Pisani-Ferry (1992) have suggested how this might be done. There remains considerable resistance, however, to expanding the EU budget by even the modest amounts required to activate such a scheme, and there are worries that a system in which the distribution of intra-EU transfers becomes a function of national unemployment rates might give rise to problems of moral hazard.

Not everyone agrees that fiscal federalism is essential for monetary union. To the extent that national fiscal policies remain free of the constraint that would be imposed by strict enforcement of the Maastricht Treaty's Excessive Deficit Procedure, stabilization—automatic and otherwise—can be provided by adjusting fiscal policies at the national level. In other words, there may be several ways of organizing the stabilization provided by fiscal federalism.

<sup>15</sup> The Keynesian version of this argument is that countries will resist monetary integration if they prefer different positions on the Phillips Curve tradeoff between output and inflation (Corden, 1972).

A different argument—one that dominates discussion in Europe today—is that monetary unification requires political unification, because only with political unification will it be possible to prevent reckless fiscal policies from destabilizing the common currency. The Germans argue that high debts and deficits threaten the stability of the single currency because they raise the specter of debt runs, which will force the ECB to bail out countries in financial distress. This view must confront the fact that the Maastricht Treaty includes a “no-money-financing rule” that states that the ECB may not monetize public debt. The fear must be that the ECB cannot really stand by while a member state experiences a debt run (like large commercial banks, national governments will be “too big to fail”). Knowing that the no-money-financing rule will not be enforced, member states will be tempted to incur excessive deficits, a temptation they will resist only if inhibited by stronger restraints on their fiscal autonomy. Effective restraints, however, imply transferring power and authority to the EU level—that is, they imply political integration.

The stability pact among EMU countries that was recently proposed by Germany’s finance minister, Theo Waigel, illustrates the point. It would commit members of the monetary union to keep deficits below 1 percent of GDP under ordinary circumstances, would require a deposit of 0.25 percent of GDP by countries violating the 3 percent upper limit on deficits, and would create an EU stability council to monitor compliance and to issue (presumably binding) guidelines for fiscal policy. These measures are stronger than the Excessive Deficit Procedure of the Maastricht Treaty, which requires member states to keep their deficits below 3 percent of GDP and imposes only weak sanctions on violators once they have entered the monetary union. There is reason to doubt, however, that a European Union already plagued by an inability to force its members to abide by the rules of the Single Market could actually collect substantial fines. Sovereign nations are unlikely to agree to transfer a significant fraction of national income on the word of an ad hoc EU entity. Only within formal federations, the argument runs, are subnational jurisdictions prepared to turn over significant fiscal autonomy to the center. Political unification is, consequently, a prerequisite for the credible fiscal restraints that monetary union requires.

In work with Jürgen von Hagen (Eichengreen and von Hagen, 1995), I have suggested that this logic is flawed, because it fails to consider what determines the credibility of the ECB’s commitment to avoid a bailout. It ignores the extent to which a government experiencing a

fiscal crisis has other instruments at its command. Most obviously, a government can employ fiscal policy. In particular, it can raise taxes to make available the resources needed to service and redeem its debts. The implication for the European Union is that, so long as national governments continue to control their tax bases, they can raise taxes to deal with fiscal crises and should be expected to do so. The existence of these instruments will help the European Commission and the European Central Bank resist pressure to intervene. The cost of coping with the crisis will thus be borne by the member state in question, minimizing moral hazard. There will be no need to transfer control of fiscal policies from national capitals to the European Union and no need to strengthen the political powers of the EU.<sup>16</sup>

In today's Europe, then, none of the arguments mentioned above explains why monetary union requires political union. Each view acknowledges that fiscal policy is at the core of sovereignty. Each recognizes that national governments are reluctant to cede their fiscal prerogatives. But it is a non sequitur to infer that monetary unification requires significant limits on fiscal autonomy. There is no necessary conflict between monetary integration and national political autonomy.

The argument that monetary integration requires political integration must therefore rest on the politics of monetary policy itself. A central bank's statutes should encourage the monetary authorities to formulate policies that optimize a social-welfare function defined in terms of inflation, unemployment, and other variables. Typically, the central bank

<sup>16</sup> We test this hypothesis by estimating a probit regression on cross-country data for 1985-87. The dependent variable is zero if a country has no restrictions on subcentral government borrowing or only a weak golden rule, and unity otherwise. The independent variable represents the vertical structure of the fiscal system by the share of subcentral government spending financed by its own tax revenues. We also include 1987 GDP per capita in U.S. dollars (PCGDP) to control for the stage of economic development. The estimated equation (with standard errors in parentheses) confirms that countries where subcentral governments control a large share of the tax base are significantly less likely to restrict borrowing by their subcentral governments:

$$\begin{aligned} \text{Restrictions} &= 0.25 - 3.51 \text{ Structure} - 0.04 \text{ PCGDP} \\ &\quad (0.65) \quad (1.16) \quad (0.04) \\ X^2 &= 8.00 \quad \text{Number of observations} = 45 \quad p = 0.045 \end{aligned}$$

The implications for EMU are clear. The vertical structure of taxes in the European Union is controlled almost completely by national governments. (The EU's own resources are limited to tariff revenues, a 1 percent value-added tax collected by national governments, and a modest levy on national governments.) The equation predicts that a political entity having these characteristics will not impose borrowing restrictions. Given the scope for the governments of EU member states to use their own taxes to deal with financial difficulties, the Excessive Deficit Procedure would appear to be redundant.

is given a mandate that reflects the value that society attaches to these outcomes. To shield the bank from problems of time inconsistency and interest-group pressure, it is granted independence, but oversight is still exercised by a congress or parliament capable of applying penalties if the central bank abuses its independence. These institutional arrangements may be regarded as mechanisms to simulate the kind of optimal contracts for central bankers that are modelled by Carl Walsh (1995). In the case of monetary union, political integration may be needed to emulate these arrangements. In particular, effective oversight, with credible sanctions, may require that there be a congress and president or a parliament at the union level. A national central bank is accountable to a national parliament, which can abrogate the central bank's statutory independence or eject from office central bankers whose agendas are incompatible with its own. But the European Parliament lacks the power to modify the ECB's statute, which can be changed only by renegotiating an international treaty. The "democratic deficit," to use the popular European term, is severe. Although the ECB is required to submit a report annually on its conduct of monetary policy, and members of its board may be called before the European Parliament to testify, it is not clear what difference this will make, absent any potential sanction. If the ECB is inadequately accountable to its constituents, its constituents will challenge its authority and perhaps even prevent it from coming into being.

We should ask, however, whether there are ways of lending legitimacy to an independent central bank other than by forcing members of its board to testify beneath the hot lights of a committee hearing room. Max Weber, from whose work the literature on legitimacy derives, does not attach much weight to democratic legitimacy. He emphasizes, instead, three other sources of legitimacy: charisma, tradition, and law.<sup>17</sup> Weber notes that legitimate authority has often been enjoyed by a charismatic leader—the "Colin Powell syndrome," in which the victorious general, the spell-binding parliamentary orator, or the captain of industry commands respect in the political realm. Although tall central bankers who smoke big cigars may enjoy unusual respect, I am not inclined to attach much weight to charisma as a source of legitimacy. It is difficult to imagine that doubts about the legitimacy of the ECB will be allayed by the appointment of a charismatic ECB president.

Weber's second consideration, tradition, is more clearly applicable to central banking. Weber notes that princes and patriarchs gain legitimacy

<sup>17</sup> A convenient introduction to Weber's writings on this subject is the selection of his work in William Connolly (1984). The literature on democratic legitimacy goes back further, of course, to Rousseau and Locke, among others.

by the very act of governing. One might thus imagine that a central bank's authority will acquire legitimacy simply because it has been responsible for monetary policy for a long time. Another central bank might command respect, however, because of its admirable record of guarding the stability of its currency. It is not clear whether Weber's argument hinges on reputation—that experience breeds respect only if the authority demonstrates its capacity for benign and effective rule—or whether experience elicits compliance in and of itself. Either way, however, the ECB cannot inherit this source of legitimacy quickly.

Weber's third factor, the law, is where the hopes of the framers of the Maastricht Treaty clearly lay.<sup>18</sup> In this view, individuals respect authority, because they are legally obligated to do so. This respect is rational because legal rules are efficient. To quote Weber (1984, p. 34), the legitimacy of legal rules derives from a belief "in the validity of legal statute and functional 'competence' based on *rationally* created rules" (*italics added*).<sup>19</sup> Viewed from this standpoint, the legitimacy of the ECB derives from a statute that is designed to insure its "functional competence." In other words, Europe's citizens value price stability and will respect the authority of the ECB if they believe that its structure and mandate—that is, the rules it follows—will lead it to guard the stability of the currency. That mandate, and the laws that establish the bank's constitution and composition—prohibiting board members from taking advice from national governments, for example, a practice that might lead them to disregard the bank's statutory mandate—may compensate for the ECB's lack of democratic legitimacy.

Essentially, this view suggests that democratic legitimacy—accountability to an EU government that provides national constituencies with a voice in the formulation of monetary policy—is superfluous, because the ECB statute prevents the bank from deviating from its mandate and because the various interest groups all attach priority to price stability. Both assumptions may be questioned. Some observers worry that ECB board members will be unduly responsive to special interest groups. In particular, they worry that representatives from high-debt countries will accommodate the desire of their national governments

<sup>18</sup> It is not surprising that this is the factor most relevant to our case: Weber himself suggests that modernization entails a progression from charismatic leadership to leadership grounded in law (Wolin, 1981).

<sup>19</sup> This is an argument Seymour Martin Lipset has pursued. Lipset (1960) suggests that there are two sources of support for a governmental arrangement: belief in its legitimacy and belief in its efficiency, and he implies that these two beliefs may be causally linked, presumably with causality running from the latter to the former.



for low interest rates to help with debt-servicing problems, preventing the ECB from delivering price stability. Its “functional competence” being inadequate, its authority will be dismissed as illegitimate.

Careful listeners will detect a shift in the argument, a change that is emphasized in the work of the political philosopher John Schaar (1969). Weber depicted the law as an objective, external set of incentives and constraints that lends legitimacy to authority because it leads to the pursuit of socially desirable policies. Modern definitions introduce an intervening variable—expectations—between law and legitimacy.<sup>20</sup>

As is often the case when expectations are introduced, multiple equilibria are possible. In one equilibrium, observers have confidence in the functional competence of the ECB. They believe that its statute protects the bank from partisan pressures, allowing it to pursue its mandate. Because they are content to let the bank pursue those policies, their expectations are self-fulfilling. In the other equilibrium, observers are skeptical of the ECB’s functional competence, believing that its statute leaves it exposed to partisan pressures that will lead it to disregard its mandate. Those who value various goals will therefore lobby the ECB to pursue them, making the ECB more likely to succumb to pressure and validating the expectations of those who doubted its functional competence in the first place.

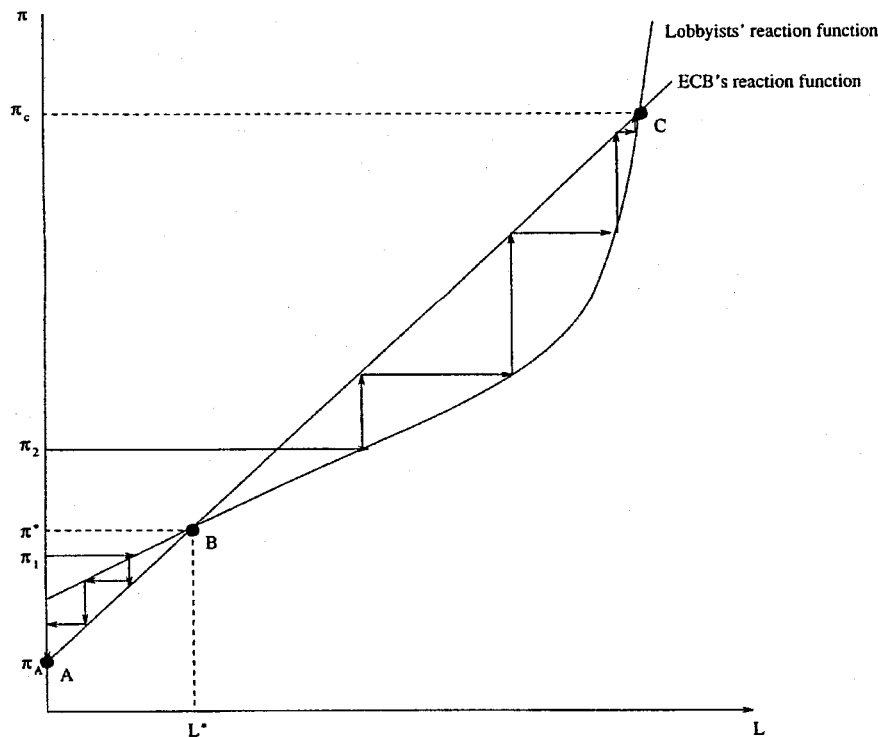
This interpretation of the rule of law is featured in the recent work of Barry Weingast (1995). Weingast argues that viable laws must be self-enforcing and that they must be enforced in democracies by the collective will of the masses. This gives rise to a coordination problem that, in the present context, runs as follows. If sufficient numbers of European citizens believe in the efficacy of the ECB statute, none of them will have an incentive to lobby the ECB, because lobbying is costly and not likely to succeed unless many citizens engage in it

<sup>20</sup> Schaar (1969, p. 284) states that “if a people holds the belief that existing institutions are ‘appropriate’ or ‘morally proper,’ then those institutions are legitimate. That’s all there is to it.” The point appears in Weber (quoted in Rosen, 1979, p. 76), who writes: “The basis of every system of authority, and correspondingly of every kind of willingness to obey, is a *belief*, a belief by virtue of which persons exercising authority are lent prestige.” Other examples of the line of thought cited by Schaar are, from Lipset (1960, p. 77): “Legitimacy involves the capacity of the system to engender and maintain the belief that the existing political institutions are the most appropriate ones for the society”; from Bierstedt (1964, p. 386): “Legitimacy has been defined as ‘the degree to which political institutions are valued for themselves and considered right and proper’”; and from Merelman (1966, p. 548): “That government is legitimate which is viewed as morally proper for a society.” The dates of these citations reflect the upsurge of interest in this topic associated with the civil disobedience of the 1960s.

simultaneously. If sufficient numbers of citizens lose confidence in its efficacy and independence simultaneously, however, they may coordinate on a lobbying equilibrium that erodes the autonomy of the ECB.

We can depict this situation using the simple diagrammatic apparatus in Figure 1, where  $L$  represents the level of lobbying by special interest groups and  $\pi$  is the level of inflation. The figure shows two reaction functions, one for the lobbyists and one for the ECB. The ECB's reaction function slopes upward on the assumption that more intense lobbying leads it to adopt more inflationary policies. The lobbyists' reaction function slopes upward to capture the idea that at low levels of inflation, special-interest groups do not doubt the ECB's commitment to price stability and thus refrain from lobbying, but that they come to doubt the ECB's resolve as inflation rises and therefore engage in increasingly intense lobbying activities. The ECB's reaction function intersects the vertical axis at the low inflation rate it would prefer in the

FIGURE 1  
LOBBYING AND INFLATION: THE POSSIBILITY OF MULTIPLE EQUILIBRIA



absence of outside pressure. The lobbyists' reaction function intersects the vertical axis at a higher level and is more elastic, capturing the idea that inflation must hit a certain threshold before interest groups begin to doubt the ECB's resolve and initiate lobbying, after which lobbying increases rapidly. A rationale for drawing the lobbyists' function as convex to the origin is that the capacity for lobbying activity is limited.

Assume that the ECB opens for business by setting the inflation rate at  $\pi_A$ . There will then be no lobbying. It is evident that A, like C, is a stable equilibrium. If the inflation rate rises to  $\pi_1$  as a result of a disturbance, it then falls back to  $\pi_A$ . But, if for any reason inflation rises above the threshold  $\pi^*$ , it then rises further to  $\pi_C$ .

With time, the ECB may succeed in acquiring a reputation for pursuing stable and desirable policies and may earn the respect of its constituents. Weber's second factor, a long record of successful rule, will then enhance its legitimacy. It will do so, however, only if it enjoys insulation from political pressures, and that will be true only if its constituents are sufficiently confident in its commitment to its mandate to resist the temptation to engage in lobbying. A newly established central bank for which the commitment to price stability and insulation from political pressures are not yet clearly established may never have a chance.

### 3 Conclusion

In Europe, the EMU debate centers on whether completing the Single Market requires monetary unification and whether monetary integration is feasible without political integration. The Anglo-American view is that there is no connection between economic and monetary unification, whereas the French and the German governments insist that economic integration without monetary integration cannot provide a political equilibrium. German leaders further insist that monetary integration requires political integration in order to lend credibility to the governments' commitments to pursue fiscal policies consistent with price stability and to endow the EU with adequate enforcement powers.

I conclude that monetary integration is not essential to realize the efficiency gains from economic integration, and political integration is not essential to derive efficiency gains from monetary integration. Indeed, I am so confident of these conclusions—along with the rest of the economics profession—that I have hardly discussed them at all! Still, monetary integration may be needed to provide economic integration with a political equilibrium, and political integration may be needed to render monetary integration politically acceptable. The

emphasis in this sentence, however, should be on the word “may,” because neither case is clear cut.

My personal feeling is that currency fluctuations, if allowed to persist, will give rise to repeated charges of competitive depreciation and exchange dumping and to a political response, in the form of restraints on competition, that will severely hinder the operation of the Single Market. The alternative, monetary unification, will give rise in the short run to pockets of unemployment and political problems of its own. In the longer run, however, factor and product markets will adapt, reducing the costs of operating a currency union. Eventually, the absence of internal exchange-rate adjustments and of restraints on interstate commerce will become nonissues, as they are in the United States. The initial years will be difficult, however, and success is uncertain.

A corollary is that other regional integration initiatives—NAFTA for example—need not imply monetary integration, because they are more limited in scope. The lesser importance of Mexican exports to the United States, compared, say, to Italian exports to France, limits the political backlash from exchange-rate fluctuations. And the retention of limited capital controls by many developing countries strengthens their ability to limit exchange-rate fluctuations. At the same time, the importance of intraregional trade is likely to grow with time as a result of regional integration initiatives—as it has in Europe since the 1950s—and technological change in financial markets will continue to undermine the effectiveness of capital controls. This suggests that there will be an increasing need to buttress economic integration with monetary integration in other parts of the world, much as there has been in Europe.

I find unconvincing the argument that Europe needs political integration to give teeth to the Maastricht Treaty’s fiscal sanctions, because the fiscal restrictions in the treaty are redundant so long as national governments retain the power to tax, a power that gives them a relatively low-cost alternative to default and lends credibility to the treaty’s no-bailout rule. Indeed, in the event that political integration proceeds and the power to tax is shifted to Brussels, the ability of member states to raise their own taxes to deal with inherited debt problems will be constrained. This will, in turn, intensify the pressure for a bailout in the event of a debt run. Political integration may therefore be the problem rather than the solution (Eichengreen and von Hagen, 1996).

A stronger justification for political integration is to render the ECB accountable to the European citizenry or, alternatively, to hope that the ECB’s legal legitimacy will substitute for its lack of democratic legitimacy. It is possible that the Europeans will come to respect the

authority of the ECB because they are confident of its dedication to its legal mandate.

The element of confidence—expectations—is critical, however. If the ECB's constituents lack confidence in its policies, they will be reluctant to hold its liabilities, and the resulting high interest rates will make it much more difficult for the central bank to pursue its mandate. The costs of pursuing price stability, which take the form of unemployment, will also be greater, in turn intensifying the pressure on the ECB to divert its attention to other targets. Skepticism may thus prove self-fulfilling. If the ECB gets off to a good start, however, and acquires a reputation for faithfulness to its mandate, Weber's second source of legitimacy—tradition grounded in a record of good policies—will kick in. Again, this means that the first years will be critical.

## References

- Balogh, Thomas, "Keynes and the International Monetary Fund," in Anthony P. Thirlwall, ed., *Keynes and International Monetary Relations*, London, Macmillan, 1976, pp. 66–89.
- Bayoumi, Tamim, and Barry Eichengreen, "The Stability of the Gold Standard and the Evolution of the International Monetary System," in Tamim Bayoumi, Barry Eichengreen, and Mark Taylor, eds., *Economic Perspectives on the Gold Standard*, Cambridge, Cambridge University Press, 1996.
- Berger, Helge, and Albrecht Ritschl, "Germany and the Political Economy of the Marshall Plan, 1947–52: A Re-Revisionist View," in Barry Eichengreen, ed., *Europe's Postwar Recovery*, Cambridge, Cambridge University Press, 1995, pp. 199–245.
- Bergsten, C. Fred, and John Williamson, "Exchange Rates and Trade Policy," in William R. Cline, ed., *Trade Policy in the 1980s*, Washington, D.C., Institute for International Economics, 1983, pp. 99–120.
- Bierstedt, Robert, "Legitimacy," in *Dictionary of the Social Sciences*, New York, Free Press, 1964, pp. 386–387.
- Blanchard, Olivier, and Pierre Alain Muet, "Competitiveness through Disinflation: An Assessment of the French Macroeconomic Strategy," *Economic Policy*, 16 (April 1993), pp. 11–56.
- Bordo, Michael, and Finn Kydland, "The Gold Standard as a Rule: An Essay in Exploration," *Explorations in Economic History*, 32 (October 1995), pp. 423–464.
- Cairncross, Alec, *The British Economy Since 1945*, Oxford, Blackwell, 1992.
- Connolly, William, ed., *Legitimacy and the State*, Oxford, Blackwell, 1984.
- Corden, W. Max, *Monetary Integration*, Essays in International Finance No. 32, Princeton, N.J., Princeton University, International Finance Section, April 1972.

- Eichengreen, Barry, "Keynes and Protection," *Journal of Economic History*, 44 (June 1984), pp. 363-373.
- , *Golden Fetters: The Gold Standard and the Great Depression 1919-1939*, New York, Oxford University Press, 1992.
- , *Globalizing Capital: A History of the International Monetary System*, Princeton, N.J., Princeton University Press, 1996.
- Eichengreen, Barry, and Douglas A. Irwin, "Trade Blocs, Currency Blocs and the Reorientation of World Trade in the 1930s," *Journal of International Economics*, 38 (January 1995), pp. 1-24.
- Eichengreen, Barry, and Richard Portes, *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors*, London, Centre for Economic Policy Research, 1995.
- Eichengreen, Barry, and Jeffrey Sachs, "Exchange Rates and Economic Recovery in the 1930s," *Journal of Economic History*, 45 (December 1985), pp. 925-946.
- Eichengreen, Barry, and Jürgen von Hagen, "Fiscal Policy and Monetary Union: Federalism, Fiscal Restrictions and the No-Bailout Rule," prepared for the Kiel Week Conference on June 15-17, 1995; forthcoming in a conference volume edited by Horst Siebert.
- Eichengreen, Barry, and Charles Wyplosz, "The Unstable EMS," *Brookings Papers on Economic Activity*, 1 (1993), pp. 51-143.
- European Commission, "One Market, One Money," Commission of the European Communities, *European Economy*, 44 (October 1990).
- Feinstein, Charles, Peter Temin, and Gianni Toniolo, "International Economic Organization: Banking, Finance and Trade in Europe between the Wars," in Charles Feinstein, ed., *Banking, Currency and Finance in Europe between the Wars*, Oxford, Clarendon, 1995, pp. 9-76.
- Frankel, Jeffrey A., *Six Possible Meanings of "Overvaluation": The 1981-85 Dollar*, Essays in International Finance No. 159, Princeton, N.J., Princeton University, International Finance Section, December 1985.
- Friedman, Milton, "The Case for Floating Exchange Rates," in Friedman, *Essays in Positive Economics*, Chicago, University of Chicago Press, 1953, pp. 157-203.
- Friedman, Milton, and Anna J. Schwartz, *A Monetary History of the United States, 1867-1960*, Princeton, N.J., Princeton University Press, 1963.
- Goodhart, Charles A.E., "The Political Economy of Monetary Union," in Peter B. Kenen, ed., *Understanding Interdependence: The Macroeconomics of the Open Economy*, Princeton, N.J., Princeton University Press, 1995, pp. 448-505.
- Grilli, Enzo, "Macroeconomic Determinants of Trade Protection," *World Economy*, 11 (September 1988), pp. 313-326.
- Holtfrerich, Carl-Ludwig, "The Monetary Unification Process in Nineteenth-Century Germany: Relevance and Lessons for Europe Today," in Marcello de Cecco and Alberto Giovannini, eds., *A European Central Bank? Perspectives on Monetary Unification After Ten Years of the EMS*, Cambridge and New York, Cambridge University Press, 1989, pp. 216-241.

- Ingram, James C., "State and Regional Payments Mechanisms," *Quarterly Journal of Economics*, 73 (November 1959), pp. 619-632.
- Italianer, Alexander, and Jean Pisani-Ferry, "Regional Stabilization Properties of Fiscal Arrangements: What Lessons for the Community?" Commission of the European Communities and Centre D'Études Prospectives et D'Informations Internationales (CEPII), 1992, processed.
- Johnson, Harry G., "The Case for Flexible Exchange Rates, 1969," in Johnson, *Further Essays in Monetary Economics*, London, Allen & Unwin, 1972, pp. 198-222.
- Kenen, Peter B., *Ways to Reform Exchange-Rate Arrangements*, Reprints in International Finance No. 28, Princeton, N.J., Princeton University, International Finance Section, November 1994.
- Krugman, Paul, "The Move Toward Free Trade Zones," in *Policy Implications of Trade and Currency Zones*, Kansas City, Mo., Federal Reserve Bank of Kansas City, 1991, pp. 7-42.
- Lipset, Seymour Martin, *Political Man*, Garden City, N.Y., Doubleday, 1960.
- Locke, John, *Second Treatise on Civil Government*, edited by Crawford B. Macpherson, Indianapolis, Ind., Hackett, 1980.
- Ludlow, Peter, *The Making of the European Monetary System*, London, Butterworth, 1982.
- McKinnon, Ronald I., *The Rules of the Game*, Cambridge, Mass., MIT Press, 1996.
- Merelman, Richard M., "Learning and Legitimacy," *American Political Science Review*, 60 (September 1966), pp. 548-561.
- Obstfeld, Maurice, "Rational and Self-Fulfilling Balance of Payments Crises," *American Economic Review*, 76 (March 1986), pp. 72-81.
- , "The Logic of Currency Crises," National Bureau of Economic Research Working Paper No. 4640, Cambridge, Mass., National Bureau of Economic Research, February 1994.
- Ozkan, F. Gulcin, and Alan Sutherland, "A Model of the ERM Crisis," CEPR Discussion Paper No. 879, London, Centre for Economic Policy Research, January 1994.
- Parkes, Christopher, "EMS Faces Threat of Collapse," *Financial Times* (April 27, 1995), p. 1.
- Polak, Jacques J., "Contribution of the September 1949 Devaluations to the Solution of Europe's Dollar Problem," *International Monetary Fund Staff Papers*, 2 (September 1951), pp. 1-32.
- Rolnik, Arthur J., Bruce D. Smith, and Warren E. Weber, "In Order to Form a More Perfect Monetary Union," *Federal Reserve Bank of Minneapolis Review*, (Fall 1993), pp. 2-13.
- Rose, Andrew, "Are Exchange Rates Macroeconomic Phenomena?" *Federal Reserve Bank of San Francisco Economic Review*, 19 (1994), pp. 20-30.
- Rosen, Paul L., "Legitimacy, Domination, and Ego Displacement," in Arthur J. Vidich and Ronald M. Glassman, eds., *Conflict and Control: Challenge to Legitimacy of Modern Governments*, London, Sage, 1979, pp. 75-95.

- Rousseau, Jean-Jacques, *The Social Contract and Discourses*, New York, Dutton, 1913.
- Sala-i-Martin, Xavier, and Jeffrey Sachs, "Federal Fiscal Policy and Optimum Currency Areas," in Matthew Canzoneri, Vittorio Grilli, and Paul Masson, eds., *Establishing a Central Bank: Issues in Europe and Lessons from the US*, Cambridge and New York, Cambridge University Press, 1992, pp. 195-220.
- Sannucci, Valeria, "The Establishment of a Central Bank: Italy in the Nineteenth Century," in Marcello de Cecco and Alberto Giovannini, eds., *A European Central Bank? Perspectives on Monetary Unification After Ten Years of the EMS*, Cambridge and New York, Cambridge University Press, 1989, pp. 244-279.
- Schaar, John, "Legitimacy in the Modern State," in Philip Green and Sanford Levinson, eds., *Power and Community: Dissenting Essays in Political Science*, New York, Random House, 1969, pp. 276-327.
- Schweitzer, Mary, "State Issued Currency and the Ratification of the U.S. Constitution," *Journal of Economic History*, 49 (June 1989), pp. 311-322.
- von Hagen, Jürgen, and Barry Eichengreen, "Fiscal Restrictions and Monetary Union: Rationales, Repercussions, Reforms," *Empirica* (January 1996), pp. 3-23.
- Walsh, Carl, "Optimal Contracts for Central Bankers," *American Economic Review* 85 (March 1995), pp. 150-167.
- Weber, Max, "Legitimacy, Politics and the State," in William Connolly, ed., *Legitimacy and the State*, Oxford, Blackwell, 1984, pp. 32-62.
- Weingast, Barry R., "The Political Foundations of Democracy and the Rule of Law," Stanford, Calif., Stanford University, Hoover Institution, February 1995, processed.
- Wicker, Elmus, *Federal Reserve Monetary Policy, 1917-1933*, New York, Random House, 1966.
- Wolin, Sheldon S., "Max Weber: Legitimation, Method and the Politics of Theory," *Political Theory*, 9 (August 1981), pp. 401-424.



FRANK D. GRAHAM  
MEMORIAL LECTURERS

1950-1951	Milton Friedman
1951-1952	James E. Meade
1952-1953	Sir Dennis Robertson
1953-1954	Paul A. Samuelson
1955-1956	Gottfried Haberler
1956-1957	Ragnar Nurkse
1957-1958	Albert O. Hirschman
1959-1960	Robert Triffin
1960-1961	Jacob Viner
1961-1962	Don Patinkin
1962-1963	Friedrich A. Lutz (Essay 41)
1963-1964	Tibor Scitovsky (Essay 49)
1964-1965	Sir John Hicks
1965-1966	Robert A. Mundell
1966-1967	Jagdish N. Bhagwati (Special Paper 8)
1967-1968	Arnold C. Harberger
1968-1969	Harry G. Johnson
1969-1970	Richard N. Cooper (Essay 86)
1970-1971	W. Max Corden (Essay 93)
1971-1972	Richard E. Caves (Special Paper 10)
1972-1973	Paul A. Volcker
1973-1974	J. Marcus Fleming (Essay 107)
1974-1975	Anne O. Krueger (Study 40)
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