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MONETARY AND FISCAL UNIFICATION
IN NINETEENTH-CENTURY GERMANY:
WHAT CAN KOHL LEARN FROM BISMARCK?

HAROLD JAMES



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

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CONTENTS

1	THE EXTENT OF INTEGRATION BEFORE GERMAN MONETARY UNION	2
	A Single Market for Goods	3
	An Integrated Capital Market	4
	A Single Labor Market	4
	Steps toward Political Union	5
2	THE MONETARY UNIFICATION OF GERMANY	5
	The International Move to Gold	6
	Germany and the Gold Standard	8
	The Need for Banking Regulation	10
	The Gold Drain and the Central-Bank Debate	12
	Rejecting Limits on Note Issue	16
	The Structure and Character of the Reichsbank	17
	German Monetary Management	21
3	THE FISCAL UNIFICATION OF GERMANY	22
	Federal Income and Taxation	23
	Protective Tariffs	24
	Spending and Debt in the German States	24
4	THE MODERN EUROPEAN PARALLEL	27
	Competition among Financial Centers	29
	Control of Monetary Policy	30
	Discretion in Monetary Policy	30
	The Loss of Seigniorage and the Gain of Stability	31
	Fiscal Problems of Federalism	32
	The Size of the State	33
	REFERENCES	35

MONETARY AND FISCAL UNIFICATION
IN NINETEENTH-CENTURY GERMANY: WHAT CAN KOHL
LEARN FROM BISMARCK?

The German Empire of 1871 was the most ambitious act of state creation and institutional reform in nineteenth-century Europe. The empire was formed out of eighteen separate states, which had previously had their own currencies and banking systems. The introduction of a single currency, the adoption of the gold standard, and the establishment of a new central bank, the Deutsche Reichsbank, occurred relatively smoothly as the outcome of a continuing and intense dialogue between the legislature (the Reichstag) and the executive (Reich chancellor Otto von Bismarck). The newly created bank stood for progress as the nineteenth century conceived it: in the setting aside of a multitude of archaic local moneys, and in the commitment to an international order and to management by a rule-based and nonarbitrary institution. Germany's new monetary order laid a foundation for almost half a century of dynamic economic growth, a period during which Germany overtook Britain to become (after the United States) the world's second largest industrial economy.¹

Nineteenth-century Germany has frequently been used as a historical model to demonstrate the logic of a unification process. Because Germany is also central to the story of post-1945 European integration, the analogy with European economic and monetary union (EMU) seems

This essay draws on material prepared for a short history of the Reichsbank, which will appear in a volume commissioned by the Deutsche Bundesbank to commemorate the fiftieth anniversary of the introduction of the deutsche mark (to be published in German in 1998 by C.H. Beck Verlag, and in English by Cambridge University Press). The author is grateful to Professors Knut Borchardt, Gerald D. Feldman, and Dieter Lindenlaub, and to Dr. Marzenna James for comments on an earlier version of the essay.

¹ The fiscal problems associated with political and monetary union were barely discussed during the unification process, however, and subsequent developments, notably increased demands on the state governments following industrialization, made the inadequate fiscal arrangements of 1871 increasingly problematic. Budget and tax issues became a source of rising political tension and undermined the political stability of the new empire.

additionally attractive.² Even the form of German unification, in which the process was driven by the political and economic interests of Prussia, the largest German state, has an analogue in the EMU process, which appears to have been shaped by the role of Germany in contemporary Europe.

A comparison between the institutions of German monetary union and those planned for EMU is also compelling. The modern Bundesbank is the successor of the Reichsbank, the institution produced by the drive to German monetary union. The Bundesbank's traditions, autonomy, and orientation toward stability owe much to the experiences—both negative and positive—of the Reichsbank (Marsh 1992). The proposed European Central Bank (ECB) in turn mirrors the structure of the Bundesbank, and the division of responsibility for monetary and exchange-rate policy between the ECB and the European Council of Ministers reflects institutional arrangements in Germany. Like the Bundesbank, the ECB has a “primary objective” to maintain price stability, as well as a duty to “support the general economic policies in the community” (Kenen, 1995, p. 30). The Reichsbank's experience has thus indirectly exercised a powerful influence on the most important development of contemporary Europe.

The autonomy of the Reichsbank, established by law in 1922, was the result of the catastrophic German hyperinflation after World War I, when the bank had too easily discounted (monetized) government debt. Legal autonomy was enforced as a prerequisite for international assistance in stabilization and currency reform. The fact that the 1922 law was later violated by Hitler made central-bank autonomy appear even more desirable at the end of Hitler's war.

This essay examines the connection between the establishment of a common market and additional moves to monetary and political union. It then reviews both the monetary and fiscal aspects of nineteenth-century German unification. Finally, it discusses what modern Europe can and should learn from nineteenth-century Germany.

1 The Extent of Integration Before German Monetary Union

One question raised by the study of preunification Germany is common to discussions of modern European integration: To what extent do economic integration and the step-by-step creation of a single market

² Peter Kenen has accurately stated that “from the start . . . it was clear to all participants that the actual design of EMU would have to satisfy German concerns” (Kenen, 1995, p. 19).

create a momentum toward further integration? The favorite modern metaphor is the movement of a bicycle, which depends for its stability on constant forward motion.

In Germany, the development from the customs union (Zollverein) of 1834 to political union is interpreted either as a case in which an existing level of integration set in motion a dynamic leading to ever closer union or as an example showing that without political will and an additional push (from Bismarck in the historical case), the customs union would not have developed further. Most modern writers are skeptical about the wider political and economic effects of the German customs union. Knut Borchardt concludes that it cannot be determined “whether its creation really helped to liberate dormant powers of production” (Borchardt, 1973, p. 107). And even at the end of the nineteenth century, A. Lawrence Lowell wrote that “valuable as the Zollverein was in teaching the people their common interests, Bismarck was no doubt right in thinking that no further progress could be expected without the use of force” (Lowell, 1896, p. 238).

There are similar debates about other aspects of German integration. An apparently striking contrast with modern Europe is that the adoption of a single currency (in 1873) and the creation of a central bank (in 1875) followed rather than preceded political union in Germany. Yet there had been attempts at monetary reform in Germany prior to political union.³ Even while Germany was still divided into thirty-nine states of widely differing sizes in the first half of the nineteenth century, and when political unification appeared to be only a very remote possibility, there had developed a substantial measure of integration in goods, capital, and labor markets.

A Single Market for Goods

The Zollverein, combined with the building of the first railroads in the 1840s and 1850s, had created a single market for goods. This was largely a domestic market at first, because the great north German seaports, the city states of Bremen and Hamburg, remained outside the Zollverein even after unification (Hamburg joined the customs union only in 1882, Bremen in 1884). Many supporters of the Zollverein hoped that it would be only the first step toward a larger, Central European customs union—in short, that a process of widening would

³ Holtfrerich has recently used the German case in an attempt to demonstrate that “far-reaching monetary unification is possible prior to political unification” (Holtfrerich, 1989, p. 237).

occur without a necessarily simultaneous deepening. Indeed, one of the union's early members (since 1841) was Luxembourg, which in 1867 was neutralized and thus excluded from the German Empire of 1871.

An Integrated Capital Market

The common market in goods was accompanied by the integration of the capital market. In the early stages of industrialization,⁴ a substantial amount of capital moved from one German state to another, with entrepreneurs from the most advanced areas transferring skills and capital to build factories elsewhere. Thus, by 1851, the Karlsruhe engineering industry was owned by businessmen from the pioneering manufacturing areas on the Rhine and Ruhr. In addition, because state laws on banking prevented the establishment of joint-stock banks in certain parts of Germany, businessmen from restrictive states established out-of-state banks in areas where the banks were allowed. In Prussia, by far the largest German state as well as the most advanced industrially, joint-stock banks required government permission—rarely given before 1870, when the new banking legislation of the North German Confederation came into effect. The proliferation of German states, however, meant that this obstacle could relatively easily be circumvented. In 1853, Prussian businessmen from Cologne founded a joint-stock bank, the Darmstädter Bank für Handel und Industrie, in the territory of Hesse-Darmstadt. The bank did most of its business outside Hesse-Darmstadt and as early as 1854 was issuing state loans for Baden and Bavaria. The Darmstädter Bank soon became the model for the universal German bank (combining deposit and investment banking), which would play a crucial role in late-nineteenth-century industrialization.

A Single Labor Market

From 1815, when the Congress of Vienna had established the German Confederation, subjects of the thirty-nine German states were free to move across states without restriction. But there were still important obstacles to a national labor market. As the population grew and the movement of unskilled workers began to create welfare problems, cities and states reacted by requiring licenses or by tightening guild regulations. These attempts to maintain restrictions on labor mobility failed, however, and in 1868, the North German Confederation introduced the freedom of occupation (*Gewerbefreiheit*) and, thereby, a single

⁴ W.W. Rostow (1990, p. 38) identified the 1850s and 1860s as the German “takeoff.”

labor market. In practice, however, interregional migration remained at relatively low levels.

Steps toward Political Union

The first, and constitutionally decisive, step toward political union was the creation of the North German Confederation in 1867, following Prussia's defeat of Austria at the battle of Sadowa (1866). At the same time, Prussia also absorbed Hanover and Schleswig-Holstein, as well as a number of the microstates. The North German Confederation had a confederation parliament (a Reichstag) elected by universal adult male suffrage, and an upper federal chamber (a Bundesrat) in which the states were represented. Prussia's dominance was reflected in the seventeen seats its government held in the fifty-eight-member Bundesrat (where, constitutionally, only fourteen votes were required to veto legislation). The constitution of the North German Confederation also required the surrender of state sovereignty in monetary and fiscal affairs. On June 11, 1870, the confederation passed a banking law allowing for the establishment of joint-stock banks throughout its territory, and on June 16, 1870, it restricted the issue of new state debt. Following the Franco-Prussian War of 1870–71, the south German states (with the exception of Austria) were taken into the (former) North German Confederation, and a German Empire was proclaimed on January 18, 1871. The Reichstag and Bundesrat continued to operate in the new empire as they had in the confederation.

The creation of the German Empire posed a problem in terms of monetary and fiscal rules. Monetarily, there was chaos. Member states had different currencies, with coins of different weights and, in some cases, different levels of metallic purity. Fiscally, the empire created an entirely new layer of spending authority. The federal government needed to pay for defense as well as a new civil and diplomatic service. In addition, demands on federal services grew as a consequence of new urban problems and of increased economic difficulties in the countryside following the collapse of grain and farm prices during the 1870s and 1880s.

2 The Monetary Unification of Germany

In the first half of the nineteenth century, the most obvious practical impediment to business among the German states was the diversity of moneys in circulation. Most coins were silver, but they were of different sizes and purity in different states. Some of the small states (Nassau,

Coburg, and Hildburghausen) derived a substantial income from issuing and widely circulating coins of low silver content. Although broadly speaking, the southern German states had systems based on the gulden, and the northern states had systems based on the thaler, the weights and purity within each group were not identical.

The standardization of coinage had been actively debated in the 1830s, and some initial results had been achieved. In 1837, the Munich Coinage Treaty specified common standards for the gulden; a year later at Dresden, the Zollverein states agreed to a convention by which states would choose either the gulden or thaler and would accept the specific silver content laid down by the convention. This effectively established a locked (metallic) exchange-rate system.⁵ Nevertheless, day-to-day transactions remained cumbersome. An agreement was implemented to mint a common coin that would circulate in both currency areas and be worth 2 thaler or 3½ gulden, but the coin was too big to be of much use for daily transactions (Rittmann, 1975, pp. 538–542; Holtfrerich, 1989, pp. 220–221). Coins minted by countries outside the German Confederation continued to circulate, and some of these (notably, those issued by Switzerland) were low-silver coins that were hard to distinguish from the (900-silver) coins specified by the Zollverein. In the 1860s and 1870s, German monetary reform was again discussed in the context of both the drive to German political union and the desirability of a new level of integration in a global economy.

The International Move to Gold

An international move to the gold standard was well under way before the creation of a united Germany in 1871. The 1850s and 1860s were marked by a new enthusiasm for international regulation and an unprecedented drive for the internationalization of standards and norms of all sorts. In 1863 and 1864, an international postal congress met in Paris, an international statistical congress met in Berlin, the First Geneva Convention on the Treatment of Wounded Soldiers was signed, and the International Committee of the Red Cross was established. In 1868, the Mannheim Rhine Shipping Agreement complemented already effective railway and telegraph links between markets by enabling large-scale navigation on Europe's largest inland waterway. Monetary regulation was seen as an obvious area in which internationalization could provide substantial benefits.

⁵ Holtfrerich (1989) is therefore right to conclude that the main obsession of modern European monetary politics with differing rates of inflation had essentially been solved for Germany as early as 1839.

Although only two countries, Britain and Portugal, followed a true gold standard in the 1860s, many others saw the adoption of gold as the best and easiest way to facilitate international commerce. In 1866, a U.S. Congressional Coinage Committee concluded that “the only interest of any nation that could possibly be injuriously affected by the establishment of this uniformity is that of the money-changers—an interest which contributes little to the public welfare” (Russell, 1898, p. 35).

A preliminary stage in standardization was the partial monetary unification of a core group of countries. Belgium, France, Italy, and Switzerland agreed in 1865 to establish a “Latin Currency Union,” which represented a decisive step in the direction of the gold standard. In part, this union was a defensive move by France and Belgium against the flooding of their countries with depreciated Swiss and Italian silver coins (Reddish, 1993). In addition, the French emperor, Napoleon III, hoped that the union might be the first stage of a broader development and that it would become a tool of French national power and influence. One French official said: “If the question comes up hereafter before higher powers, as we hope it will, France will bring a great influence with her forty millions, or, if expected annexations are realized, her one hundred millions of people using her monetary system” (Russell, 1898, p. 34). There could scarcely be a more blatant or less attractive statement of the link between currency and political power.

There were several reasons for the new international enthusiasm for a gold standard. Some economists believed it would be impossible to operate a joint gold and silver standard (bimetallism, or as it was known in the nineteenth century, a “double standard”).⁶ And many believed that gold, because it was precious in small amounts, would be a more convenient medium than silver for transactions (although the high value of gold made it unsuitable for everyday use). The possibility, moreover, that a scarcity of metallic gold might create deflationary pressure should gold become the world currency had been banished by the discovery of large gold deposits in California and South Africa at the end of the 1840s. Finally, gold also produced a bandwagon effect. Once a critical mass of countries accepted it, others would find it irresistible as a means of integration into the newly dynamic world economy. Modern economists thus argue that the adoption of gold was

⁶ A succession of distinguished thinkers, however, from Leon Walras through Joseph Schumpeter to Milton Friedman, have argued that the bimetallic standard would have had substantial advantages for securing international price stability.

“path dependent.” Ultimately the German decision to adopt a gold currency was the decisive step in making the gold standard the world currency system—not least because a German move to gold would very likely place a great deal of silver on the world market and thus depress its price (Gallarotti, 1993).

Germany and the Gold Standard

In Germany, gold appeared as the choice of modernity and progress. At the International Monetary Conference of 1867, called by Napoleon III to urge the general adoption of gold, the strong opinion of Financial Counsellor Meinecke, the Prussian delegate, helped to move the delegates to a golden consensus. Although Prussia was then on a silver standard, Meinecke said that “it would be necessary to prepare the change from one standard to another by measures of transition” (U.S. Congress, 1879, p. 826). At the end of the conference, the man in charge of the emperor’s currency program, Marie-Louis-Pierre-Félix de Parieu, concluded with a report stating that “even in the last century, a learned man from Germany, where so many grand ideas originate, declared that gold was destined to become the bond of the monetary system of the universe.” The conference had laid “a sort of siege to the citadel of monetary diversity, the fall of which you would like to behold, or, at least, to gradually destroy its walls, for the benefit of the daily increasing commerce and exchanges of every description among the different members of the human family” (U.S. Congress, 1879, pp. 875–876).

Germany’s foremost monetary economist, Adolf Soetbeer, was the official reporter of the Fourth German Trade Assembly, which met in Berlin in October 1868. The assembly recommended the adoption of a single standard based on a gold coinage with a 25 franc piece and a gulden of 2½ francs. It concluded that “the speedy attainment of a practicable monetary unity in all German states is now, as formerly, regarded as exceedingly important and desirable” (U.S. Congress, 1879, p. 728).

The urgency of a German move to gold increased as the decade came to an end. Not only did the opening of a huge silver lode in the American state of Nevada threaten to cause a general silver glut, but the accelerated progress toward German political unification made currency standardization increasingly imperative. The establishment of the 1867 North German Confederation and a federal parliament was a decisive step. As Walter Bagehot, the British monetary expert, commented in 1869, “Germany has a currency to choose; none of her many currencies which have descended from her divided states are fit to be her exclusive

currency now that she is one. If things remain as now, she is sure to adopt the French currency; already there is a proposal in the Federal Parliament that she should take it” (Russell, 1898, pp. 90–91).

Things did not, of course, remain as they were. The Franco-Prussian war of 1870–71 turned events in quite a different direction. The coinage system adopted after 1871 was not the franc-based internationalist version recommended by Soetbeer and the Trade Assembly but, rather, a Prussian-centered reform that more closely corresponded to the actual distribution of political power in the new Prusso-centric empire. The political character of the new currency arrangements was underlined by the fact that the necessary gold reserves came in large part from the 5 billion gold-franc indemnity paid by France under the terms of the Treaty of Frankfurt (although it is a myth to think of the French indemnity actually being paid in gold; 4.3 billion was paid in bills, which Germany used to purchase gold on the London market).⁷ The poetically inclined might see the French gold as the treasure of the Nibelungs on which a new German polity could be built.

The critical legislative measures were the proclamation of December 4, 1871, on the minting of imperial gold coins, and the coinage act of July 9, 1873. The basic unit of account under these laws would be the mark, worth one-tenth of the “Reich gold coin” and valued at 1,395 marks for a pound of gold. The thaler of the Prussian north was given a conveniently round figure of 3 marks, whereas the southern gulden was valued at an arithmetically complicated 1.71 marks. Silver thaler coins were to continue to circulate until 1907, when a full gold currency would begin to operate. Even before 1907, however, the remaining note-issuing banks had generally ceased to pay out silver on demand against their notes, thus creating a *de facto* gold-standard regime (Borchardt, 1976, pp. 8–9).

The new coinage laws made some important as well as symbolic and psychologically reassuring concessions to the German states. The old coins would continue to circulate, and their status as legal tender would be eliminated only very gradually. The new gold coins, as well as silver coins over 2 marks in value, would carry the imperial eagle of the new German Empire on one face and either a portrait of the state’s ruler (for example, the King of Bavaria or the Grand Duke of Baden) or the coat of arms of the free cities on the other. Measures such as these helped to ensure popular acceptance of a reform that might otherwise have been quite traumatic.

⁷ Here and throughout, billion equals a thousand million.

The Need for Banking Regulation

The introduction of a gold standard did not necessarily imply the establishment of a new central bank, for many central-banking functions could be handled quite adequately by existing, private banks. Indeed, even the business of selling silver in the transition to the new monetary regime was managed by the (private) Deutsche Bank.⁸ The private banking world in general, however, was in turmoil and needed some sort of regulation.

Plans for a central bank played a crucial role in reform discussions, although the term “central bank” as employed in the mid-nineteenth-century debate may mislead modern readers. The Reichsbank as eventually constituted—as well as its predecessor, the Prussian Bank—gave credits and took deposits in addition to performing central-banking functions such as issuing notes against gold reserves and against the rediscounting of bills presented by the banking sector. In short, these central banks, which had branch networks, did ordinary banking business. Private banks, with which they thus competed, sometimes accused them of wanting to be monopolies.

Germany faced a general monetary and banking chaos. The 1838 Dresden Coin Convention had simplified the coinage somewhat, but it had left the thaler and gulden as two rival systems. The 1857 Vienna Coin Treaty gave the thaler some preeminence, with legal-tender status throughout the Zollverein, but it did not resolve the coinage issue.⁹ In addition, there were shortages of coins, and the demand for money was met in part through the use of foreign coins, which amounted to almost 10 percent of the total coinage (valued at 2,615 million marks) circulating in Germany at the beginning of the 1970s, and by paper notes issued by the various states, which again were equal to 10 percent of the total coinage.

In the boom of the mid-1800s, as the demand for money rose with the general level of economic activity, note-issuing banks were created in the various German states, mostly in the form of private banks licensed by the state governments. In 1851, there had been nine of these note banks; by 1857, there were twenty-nine (Dierschke and

⁸ Because the large quantities involved would have depressed prices on the London market and led to losses for the Reich, the bank handled these sales through its Asian branches (Barth, 1995, pp. 20–21).

⁹ Holtfrerich is, thus, incorrect in claiming that monetary unification in any significant sense preceded the establishment of German political unity (Holtfrerich, 1989, pp. 223–224, 237).

Müller, 1926, p. 6). To make up for the shortage of circulating money and to reduce the confusion caused by the simultaneous circulation of coins of different origins and values, the banks issued notes. The result was that some forty different kinds of paper money were put into circulation, leading to obvious difficulties in detecting forgeries. In addition, because the note banks' profits depended on their success in issuing and circulating as many small-denomination notes as possible, some microstates, such as Anhalt-Bernburg and Anhalt-Köthen, succumbed to the temptation to overissue money (Sommer, 1931, p. 57). Public opinion in the larger states was increasingly irritated by the uncertainty generated by such overissue, as was the Prussian government (Lotz, 1888, pp. 73–74), which unsuccessfully tried to ban the circulation of small-denomination non-Prussian notes.¹⁰

By the beginning of the 1870s, there were thirty-three note banks issuing notes totaling about one and one-third billion marks in value, an amount representing about 8 percent of net national product (NNP) (Born, 1991, p. 262). It was clear that in a panic, the banks would be unable to redeem their outstanding notes. If this proliferation of fundamentally unregulated banking had continued, German monetary history might well have resembled nineteenth-century U.S. history, when periodic crises of confidence and bank failures were followed by outbursts of populist anger. As it was, there were widespread panics in Germany in 1857 and 1866. If the Prussian armies had not defeated

¹⁰ The risks of financial instability, as well as its own fiscal interests, had led Prussia to restrict banking activity and to attempt to concentrate business with the Prussian Bank, which, in practice, exercised a near monopoly.

The Prussian Bank offered three principal attractions to the Prussian state. First, the bank's profits were a potential source of revenue. In the early 1870s, it contributed 4 to 9 million marks annually to the Prussian budget (Lotz, 1888, pp. 142–143). Second, the government could borrow from the bank. This was especially attractive in a period of political tension such as the 1860s, when the liberal-dominated Prussian parliament had refused to approve Bismarck's budgets. Third, the bank, which took deposits and then channeled them as credits, especially to the agrarian districts of eastern Prussia, could be used to gain political support from the landed aristocracy, the most influential group in Prussian society. These credit-giving functions had been the main reason for the transformation of the royal bank into the new Prussian Bank in 1846 (Lotz, 1888, pp. 25–26). The Prussian Bank had private shareholders, whose funds were used to pay off the Prussian state deficit, but the bank was subject to state supervision, and its employees (like those of the later Reichsbank) were state officials. Its president was responsible directly to the king of Prussia. The Prussian Bank was the only note-issuing bank authorized in Prussia, and the Prussian government argued that no additional credit-giving institutions (that is, private banks) were needed in Prussia (Lotz 1888, p. 63).

Austria at Königgrätz in 1866, Berlin would have suffered a major financial collapse. The banks, facing liquidity problems, were forced to restrict their purchases of commercial bills. In the end, they were saved only by the intervention of the Prussian Bank, which offered assistance, but at the very expensive rate of 9 percent.

On March 27, 1870, a ruling of the North German Confederation made the creation of new note-issuing banks subject to federal law. Although the law was extended after 1871 to southern Germany (where Baden and Württemberg had taken advantage of its delay to create their own note banks), the rights of existing institutions remained intact. In consequence, one of the aims of the banking reform was to ensure, through a *douce violence*, that the note banks would give up their issuing activities (Reichstag, 1889–90 [1], p. 619). Thus, although the central monetary problem in the first years after unification had been the choice of a monetary standard, the debate shifted increasingly to discussion of a suitable institutional design for a mechanism to restrain speculative tendencies and banking abuses. This issue became central following the boom and then crash (*Gründerkrach*) of 1873. Many of the newly founded joint-stock banks had been created to launch industrial companies, and a speculative mania developed. In 1873, a number of banks failed, including one of the largest of the new banks, the Quistorpsche Vereinsbank. Karl Helfferich's influential study of the currency reform concludes that "the consequence [of the unstable monetary situation] was that the boom was not constrained naturally, as it would have been in normal circumstances, by the quantity of money, and that growth was not kept in reasonable bounds by a noticeable increase in the cost of credit" (Helfferich, 1898, p. 356).

The Gold Drain and the Central-Bank Debate

The second major issue of debate was a consequence of internationalization and the adoption of the gold standard. The international linkages created by gold required a new approach to monetary management. After 1874, approximately 900 to 950 million marks in gold left Germany, more than the total of the Reich Gold Coins issued up to 1873 (Helfferich, 1898, p. 378). As the brand new coins disappeared from view (they were melted down for export), public alarm increased, and exaggerated figures were quoted about the amounts of gold lost (Lotz, 1888, p. 159).

The gold drain corresponded to a large German trade imbalance that resulted from the rapid growth of the early 1870s. The Reichstag discussion about the need for a new central bank took place in the context of these gold losses and fear of even greater outflows. It was,

thus, far from being a simply academic debate about the relative advantages of different methods of currency management. Explaining why circumstances had changed, the president of the Reich chancellor's office, Rudolf von Delbrück, explained that "silver currency isolated us from fluctuations resulting from the in- and outflow of metallic money in international transactions" (Reichstag, 1874, p. 150). Silver coins, with their uncertain purity and poor condition, had, indeed, been much less exposed to international movements. The proponents of a gold currency added that a double currency would lead to even greater movements of precious metals (Reichstag, 1874, pp. 150, 156). They argued that the best mechanism to orchestrate an appropriate response to an outflow of precious metal, and thus to ensure monetary stability, would be a central bank. In the absence of a central bank, the flows that would follow from the adoption of the international gold standard would threaten stability. Later, the first president of the Reichsbank, Hermann von Dechend (who never became a convinced adherent of monometallism) characteristically defined the bank's "principal task" as "providing for the currency and sustaining monetary circulation in the country" (Reichstag, 1889–90 [1], p. 203). The economist and sociologist Georg Simmel noted at the beginning of the twentieth century that "in recent times, the interest in the stability of money value has even led to proposals for abolishing the metal reserve against which notes are issued. . . . Unguaranteed paper money, because it could not be exported, would have the advantage of being available for all kinds of enterprises within the country, and above all of having complete value stability" (Simmel, 1978, p. 190). It was in the context of keeping German gold in Germany that the subsequently often used phrase "guardian of the currency" was first employed.

The argument for a Reichsbank was put most powerfully in the 1870s, not by the empire or the Prussian government, but by a liberal deputy, Ludwig Bamberger, when a draft monetary law not including a central bank was brought up for debate in the Reichstag (November 16–18, 1874). Bamberger was a bearded veteran of the radical liberal movement of 1848, who had turned to commerce in the aftermath of the failed revolution. He saw his critical contribution to the drafting of bank legislation as evidence that parliamentarism was "not just the fifth wheel on the cart, as is claimed by cheap critics" (Weber, 1987, p. 157). In fact, the parliamentary discussion on banking law proved to be a striking example of institutional design being shaped by the legislature, rather than from above, by Bismarck, as a stereotypical view of imperial Germany as an authoritarian system would suggest (Wehler, 1985).

Bismarck and Delbrück, in fact, were agnostic on the Reichsbank issue, although Otto Michaelis, the official in the Reich chancellor's office responsible for drafting economic legislation, had long been a critic of the note-issuing powers of private banks. It was Bamberger, however, whose rhetorical power and intellectual conviction shaped the eventual banking legislation. In a long speech to the Reichstag, he stated the need for "an institution which operates under the supervision and influence of the Reich, and which in turn supervises and influences the entire monetary and currency conditions of the Reich." He concluded his speech with the comment, "I will accept no law without a Reichsbank and I will accept any law with a Reichsbank" (Reichstag, 1874, pp. 155, 161).

In 1872, the German Trade Assembly had passed a resolution asking that the Prussian Bank be converted into a "General German Reichsbank"; a similar resolution was adopted in the Congress of German Economists in August 1874 (Born, 1991, pp. 266, 269). After the November 1874 Reichstag debate, the issue of a Reichsbank was referred to a Reichstag Commission under the chairmanship of the liberal deputy Viktor von Unruh, with Bamberger as rapporteur. In the upper chamber, the liberal south German states—Baden, Hessen, and Württemberg—had always insisted on the creation of a Reichsbank, so that they might be in a position to influence policy. Without such a bank, they feared that policy would continue to be molded according to Prussian interests by the already dominant Prussian Bank.¹¹

Opposition to the idea of a central bank came from an interesting but odd coalition comprising the Prussian government—which feared a loss of influence over the new institution and, in particular, of its seigniorage gains—and laissez-faire liberals on the far left of the liberal movement—who were suspicious of government regulation and attracted by the individualism of free banking.

In general, the issue at stake in this debate was the extent to which monetary power should be federalized, decentralized, or dissipated among private actors, such as commercial banks. The Prussian finance minister Otto Camphausen opposed a "Monopolbank" run on "French" or centralized lines and pointed out that the Bank of England coexisted in Britain with Scottish and Irish banks. It is worth recalling that

¹¹ There is a precise analogy in this respect to the contemporary argument made in France and Mediterranean Europe that the monetary policy of Europe is already effectively made by the German Bundesbank and that the creation of a European central bank is the only practical way for Germany's partners to achieve influence over monetary policy.

seigniorage gains had made a useful, though hardly decisive, contribution to Prussia's budget. In the early 1870s, they amounted to an annual 4 to 9 million marks, or between 0.6 and 1.3 percent of government expenditure (Lotz, 1888, pp. 142–143).

The free-banking argument was powerfully put by Bismarck's great parliamentary enemy, the liberal deputy Eugen Richter: "The arguments about a central bank underestimate what private banks can do; and overestimate the capacities of central banks because of a belief in the infallibility of a central bank directorate. . . . In particular I fear influences from the Reich Chancellor and the Reichstag on the Reichsbank which are not commercial but political in nature" (Reichstag, 1874, pp. 190–191).

The argument against these doubts, which in the end convinced the majority of Reichstag deputies, was that a central bank could control credit conditions (and so avoid speculative excess) through an appropriate use of its principal policy tool, the purchase of bills from commercial banks. Without such support, the international monetary flows that might result from adoption of the gold standard might threaten the structure of credit, and the Reichsbank would not be able to support the private banks. A central bank would thus play a decisive role in ensuring stable monetary conditions. Camphausen remarked that "the business world, which lightheartedly argued for the gold standard, seems to me quite frightened once we see the consequences of that decision" (Reichstag, 1874–75, p. 1297). Bamberger referred to the "blossoming of sins" of the Prussian Bank in 1872–73, when its large quantity of uncovered notes had encouraged speculation (Reichstag, 1874–75, p. 1271).¹² According to Camphausen, "the great drawbacks lie at the time of dangerous crises, when the individual banks must show what they are" (Reichsbank, 1876–1900, p. 215). In this view, the main function of a central bank was not so much to provide monetary stability—that was to be secured through the gold standard—as to check credit expansion during commercial booms and to serve as a lender of last resort to stabilize the financial system. The Reichsbank bill passed the Reichstag on January 30, 1875, against the votes of the Socialists, the Catholic Center party, and the Polish deputies, and received the imperial approval on March 14, 1875.

¹² Most comment at the time had, perhaps characteristically, run in the opposite direction, criticizing the Prussian Bank for its attempts to restrain speculation. The newspaper *Börsenwächter* described the discount-rate rise as "a crime, an economic crime, gross and unparalleled" (Sommer, 1931, p. 135).

Rejecting Limits on Note Issue

The discussions in the Reichstag and the Reichstag Commission had led to a decisive rejection of a legislative limit on note issue by the new bank (such as might definitively have secured monetary stability). An obvious model to have followed would have been the English system, which many liberals liked to view as a reservoir of enlightened institutional experience. The 1844 Peel Act had fixed note issue of the Bank of England as, in part, a fixed amount, based on confidence in the bank (the “fiduciary issue”); above that amount, notes could be issued only if they were fully backed by gold in the Bank of England’s reserves. Some of the German legislators found this solution appealing. Von Unruh, for example, believed that uncertainty as to whether the Reichsbank could issue additional notes (and thus support the commercial banking system) would make banks adopt a greater, and healthier, restraint in their credit policy. This would, in turn, make businesses more cautious. Von Unruh was sharply critical of the expectations of contemporary businessmen. “In our country, the businessman believes that he can demand an advance from the bank, that the bank must discount his bills. . . . But he goes further and says that if difficulties appear, then the bank must help, and is indeed committed to help, and that in the extreme case the state must step in. That is not possible under the English principle” (Reichstag, 1874, p. 212).

It was exactly such a constraint, however, that terrified most Germans. A sharply defined limit, such as that provided by the Peel Act, would cause business failures. Although it was possible for the British parliament to authorize a temporary suspension of the limits in the act, such a move would be a clumsy and noisy way of dealing with a crisis. Instead, the Reichsbank would be permitted to issue notes “according to the needs of its business” if one-third of such issue was backed by current German money, Reich treasury notes, or gold in bars or foreign coins. Because the rest of the note issue would be backed by discounted bills or checks, the institution could easily and effectively serve as a lender of last resort.

To limit the issue of currency, the Reichsbank law contained a mechanism whereby the first 250 million marks of the bank’s note issue (450 million after 1899) would be free of tax; beyond that, a tax would be levied on notes exceeding the one-third coverage requirement. This taxed issue of notes was intended to be exceptional, although the exception was not as spectacular as an operationally equivalent suspension of the English Bank Act. As envisaged by the authors of the Reichsbank law, the tax would create an incentive for the Reichsbank to

avoid the costly losses entailed by an issue of notes not backed by the prescribed proportion of gold reserves. Indeed, for most of its prewar history, the Reichsbank's notes were duly covered, and its issue of notes was not, in practice, constrained by the possibility of occasionally entering the "note-tax area."

The Reichsbank's role as a central bank was strikingly incomplete, however. Although the Prussian Bank disappeared into the Reichsbank, the banks of Bavaria and Saxony and Württemberg continued to print notes. Furthermore, the Reichsbank was not allowed to issue notes of less than 100 marks, an amount corresponding to four times the monthly income of a textile worker. The general public would thus never be exposed to the paper of the Reichsbank, which was, in effect, limited to dealings with the commercial world. In addition, the Reichsbank's note privilege was granted for a limited time only, and an intensive debate about the bank's policy took place when the law was renewed after fifteen years.

The Structure and Character of the Reichsbank

The practical conduct of the Reichsbank was further shaped by its legal structure, much of which resembled that of the Prussian Bank it replaced. The Reichsbank was supervised by a bank curatorium, meeting quarterly and consisting of the Reich chancellor as chairman and four members representing the federal German states. The management of the bank, which consisted of a Reichsbank directorate led by a president, followed the general principles of conduct set by the Reich chancellor. The first president of the Reichsbank, von Dechend, had as former head of the Prussian Bank, earned a reputation for a stern Prussian integrity and political independence. One newspaper commented: "It is the high fame of Herr von Dechend that he has guided the business of the Bank as if there were no political considerations in the world" (*Breslauer Zeitung*, cited in Sommer, 1931, p. 78). Even though he was briefly a member of the Reichstag, as a deputy for the pro-Bismarckian Reichspartei, von Dechend kept Bismarck at arm's length. The bank's constitution, however, meant that the bank was occasionally subjected to directly political commands. In 1887, for example, for reasons of foreign policy and at Bismarck's direct insistence, the Reichsbank forbade the use of Russian bonds as a security deposit against loans (*Lombardierung*), thereby reducing the marketability of Russian bonds on the German market and effectively banning new Russian issues. This was not the action of an independent central bank. Neither was the bank's occasional appearance in the Reichstag as

a designated representative of the government, as during the 1896 debate on the Stock Exchange Law. Typically at this time, however, even entirely autonomous central banks, such as the Bank of England, took political, and especially foreign-policy, considerations into account.

Like the Prussian Bank and the Bank of England, the Reichsbank was a privately owned institution. It held annual meetings of shareholders, who were represented between meetings by a central committee of fifteen members (of whom at least nine were to live in Berlin) meeting monthly and receiving reports from the management. Under Paragraph 32 of the Reichsbank law, the central committee also approved the total volume of commercial paper purchases. Three deputies appointed by the central committee participated in the meetings of the directorate. Profits were distributed to the owners in the form of an ordinary dividend of 3.5 percent; one quarter of the profits in excess of this distribution went to the shareowners, and the rest went to the Reich. In order to emphasize (and maximize) the practical character of the Reichsbank as a profit-oriented institution, officials of the bank were paid in part on the basis of profits in their particular area.

This semipublic, semiprivate character of the Reichsbank may seem puzzling in retrospect, but in one of the final Reichstag debates on the Reichsbank, this balance was depicted as critical to the successful operation of the new institution. The bank's character was actually a neat expression of the new empire—a mixture of private interest and a new public framework. Progress during these years, and perhaps in every age, meant using and adapting private interests to produce an outcome that corresponded to the public good. The commission that had drafted the Reichsbank legislation explained that the capital of the bank would be safer if it were not owned or managed directly by the state:

If the political directors of the Empire do not govern with the belief that they are simply defending their own interests, if they are more careful because they are responsible to a third party, and if in critical times the capital of the Bank is called on, then the activity of the shareholders will ensure that the guarantee for the holders of banknotes will be restored more quickly than if this were simply the affair of the state, which is much less interested in the coverage and in the restoring of the Bank's capital (Reichstag, 1874–75, p. 1356).

This calculation reflects the skillful character of the compromise of the early 1870s, when the task for public policy was to stabilize a volatile and immature financial system that shuddered quickly and spectacularly from boom to bust. If the bank were managed by the state alone, there would be too great an inclination to bail out banks and businesses in a crisis of

confidence; if private interests were more heavily represented, there would be an incentive to limit support to as short a term as possible.

This argument was made again and again over the next fifty years, particularly by the political Left, in defense of the Reichsbank's relative autonomy, and it was often given a distinctly political edge. Those groups that had been excluded from power, especially in the more authoritarian post-1879 empire, saw in the Reichsbank's independence a desirable counterweight to the power of the Prussian-German state. The liberals pointed out that central banks in progressive states were controlled by private owners, "that in no large civilized state, with the exception of Russia, is there a central bank owned by the state; rather, they are all based on private capital" (Reichstag, 1889–90 [1], p. 193). By the first decade of the twentieth century, the Socialists, who now played a much more central part in the political debates, also espoused this view. In the course of the debate conducted every ten years on whether the Reichsbank shares should be taken over by the Reich, the Socialist party set out its position, stating: "We are not in favor of a nationalization and do not want the basis of the Reichsbank to be altered" (Reichstag, 1909, p. 7077). One deputy, Albert Südekum, spoke of the danger "that the Reichsbank would become degraded into an agrarian watering trough" (Reichstag, 1908, p. 2439).

Some of the arguments supporting the private character of the bank were put in the form of a military calculation. A privately owned bank, it was argued, would be less likely to be seized by an invading army. As evidence for this, defenders of the 1875 Reichsbank law pointed to the fact that in 1870–71, German armies had not sequestered the (private) Banque de France, and that in 1806–7, the Napoleonic armies had spared privately owned Prussian banks.

The two chief economic concerns of the Reichstag debates, the preservation of the gold stock and the appropriate response to financial distress, were fully reflected in the eventual behavior of the new central bank. Institutionally, the Reichsbank opposed gold movements. In its early years, it used technical, and controversial, methods of limiting the activity of gold exporters; it refused, for example, to provide gold at the shipping point of Hamburg, insisting, instead, on using Berlin. In addition, for a short time between 1879 and 1881, it bought gold at prices over the official gold price (Reichsbank, 1910, p. 236). Most consistently, it used its discount policy and bill portfolio as instruments to achieve a target level of gold holdings (Giovannini, 1986).

Furthermore, until the hyperinflation and financial destabilization in the 1920s forced a rethinking, the Reichsbank was always prepared to

act as lender of last resort to the German banking system, even when such support became increasingly problematic in the years preceding the First World War. “The Reichsbank is the last support of the German home market,” argued the bank’s commemorative volume published in 1900 (Reichsbank, 1910, p. 41).

The legislative design of the Reichsbank had created a near-perfect instrument for the management of a gold standard operating through the regulation of domestic credit. The principal reason for the Reichsbank to change the rate of interest on discounts of bills lay, not in gold flows per se, but in changes in the Reichsbank’s liquidity—in particular, in the ratios of bank notes outstanding and of short-term liabilities to gold and silver. Thus, if discounts by the Reichsbank were to rise, either because the bank’s rate was closer to the (generally lower) prime rate or because interest rates abroad increased, the bank would be likely to increase the discount rate. If it were to lose gold, it would respond similarly (Sommariva and Tullio, 1986, pp. 83–120). It is remarkable that an institutional arrangement could be found that obliged the rather unwilling managers of the bank to bend themselves to the golden rule. Von Dechend, in particular, had originally been so antagonistic to the proposed transition to gold that he has taken the highly unusual step of addressing a direct petition to the Kaiser, expressing the conviction that “the planned banking law was in the highest degree dangerous to the welfare of the country” (Sommer, 1931, p. 109). The manner in which von Dechend submitted to his new responsibilities is a striking (and encouraging) demonstration of the triumph of rules and laws over personal judgment.

As the initial debates made clear in rejecting regulation of the Peel Act type, the Reichsbank would always be in a position to buy domestic bills. Bills thus became a practical substitute for money, and the cash value of commercial bills provided an absolutely secure basis for the expansion of German banking. This security provided a dramatic contrast to the uncertainty prevailing in most other banking systems. The German experts interviewed by the U.S. National Monetary Commission stated that “the great strength of our financial system in Germany is the Reichsbank. Under that system the question of our own cash reserve is of secondary importance, as we can at all times convert our holdings of commercial paper into cash at the Reichsbank” (National Monetary Commission, 1910, p. 374). The Reichsbank’s witness provided an even more astonishing formulation when asked what would happen if the Reichsbank’s reserve were to fall below the level of one-third of note issue specified in the Reichsbank statute: “We should have to go on

discounting bills. We should simply have to do it. We could not stop it. If we did it would bring about the greatest panic that we ever experienced” (National Monetary Commission, 1910, p. 356).

There was an additional peculiarity to the banking arrangements, in that the Reichsbank not only purchased bills from the banking system but also used its own branch network (487 branches in 1914) to buy bills directly from a wide range of customers. A total of 66,821 persons and firms were eligible to discount at the Reichsbank in 1910, of which only 2,361 were bankers (Reichsbank, 1910, pp. 154–157). Some of these customers were extremely small businesses, and some bills were as small as 10 marks. The Reichsbank thought of this discounting function as “a certain social policy via the giving of credit” (von Eynern, 1928, p. 35). Because the discount rate at the Reichsbank was usually above the rate for prime bank bills, first-class customers usually avoided the Reichsbank and went instead to the commercial banks. This reduced the quality of the Reichsbank’s own bill portfolio and inevitably led to occasional payment problems.

There were initially doubts and uncertainties as to whether financial panics could be avoided by these arrangements. By the 1890s, however, the system had been operating long enough to establish the credibility of the Reichsbank guarantee. The result was a tremendous expansion of commercial banking, and the Reichsbank was rapidly surpassed in size and importance by the large Berlin banks (von Eynern, 1928, p. 45). Thus, although the problem of the Reichsbank’s first twenty years lay in establishing its credibility, the bank’s very solidity led to the danger that it could lose control of the German money supply.

German Monetary Management

The crisis-minimizing quality of German monetary management in the prewar period has attracted many plaudits. In 1909, the Hamburg banker and monetary theorist Friedrich Bendixen concluded: “We Germans are so lucky as to have an ideal solution to the problem of a central bank constitution, and intelligent observers abroad envy us” (Bendixen, 1920, p. 137). Indeed, in 1901, the British periodical *The Statist* had assessed the German model of central banking and concluded that “in the hands of the managers of the Imperial Bank of Germany the German banking law is carried out in a manner that must command the attention of all careful observers” (*The Statist*, October 12, 1901). A recent commentator notes that “German cycles were mild compared either to those in other countries at the time or in West Germany after 1950.” He concludes that “intentionally or not the

Reichsbank thus reached a goal that has eluded modern central banks at different periods, namely, avoiding procyclical movements in its money liabilities” (McGouldrick, 1984, p. 312). This observation is likely to occur particularly to American analysts, who may see a stark contrast with the history of the United States (or of Latin America) at this time. In the United States, the absence of a central bank, and the speculative character of banking, caused repeated failures of confidence and erratic economic development (Lewis, 1978, p. 22–23).

The absence of significant financial crises in Germany before World War I may or may not have increased Germany’s overall economic growth rate. It certainly made growth smoother and the political environment more stable, however, because interest groups, which had been attracted to the idea of a united Germany mainly by the promise of its economic benefits, reacted with significant displeasure to even small economic downturns. Just before the Bismarckian unification, the political philosopher Ludwig August Rochau had written that:

German unification is not at all a question of a national longing. . . . Unity is for the Germans in principle a purely commercial transaction, in which no one wants to lose but everyone wishes to carve out as much as possible for themselves. . . . Although such a view and such a treatment of the question of unity is scarcely a testimony to the idealism which sometimes characterizes the German people, we can put up with these beliefs, as long as the process is accomplished with commercial efficiency and on the basis of correct figures (Rochau, 1869, pp. 26–27).

In the long run, the willingness of the Reichsbank to support the commercial banking system produced a problem of moral hazard. When the external check provided by the commitment to the gold standard was removed, the Reichsbank’s behavior proved highly dangerous. In the aftermath of the First World War, the bank’s virtually unlimited discounting of commercial paper was one of the main causes of Germany’s devastating inflation and hyperinflation. When the Reichsbank subsequently began, as part of the currency stabilization, to ration discounts of commercial banks, the banking system became highly vulnerable to speculative attacks. The result was a serious banking run in 1931, which intensified the depression.

3 The Fiscal Unification of Germany

Although German monetary unification was the subject of serious public and parliamentary debate, surprisingly little attention was given to the fiscal implications of monetary union. The fiscal settlement of the

empire was not subject to the legal scrutiny and specification given the Reichsbank charter. Later, the division of fiscal responsibilities among the empire, the states, and the local governments would become a subject of intense controversy.

Under Article 70 of the federal constitution, the empire was responsible for meeting its financial needs through taxes, which were generally expected to be indirect. It took a long time, however, for the empire to create its own tax system, which eventually developed only in response to the arms race in the decade preceding World War I. Even with an apparently pressing military necessity, new taxes became the subject of acute political controversy. When Kaiser Wilhelm II's most trusted chancellor, Bernhard von Bülow, proposed a package in which a small part of the additional revenue would be raised through a new inheritance tax (although four-fifths would come from new increases in indirect taxes), the Prussian land-owning elite was infuriated and forced von Bülow's resignation (Witt, 1970).

Federal Income and Taxation

For the first thirty-five years of the empire's existence, expenditures (most significantly for the army and navy) were met largely by income from the postal and telegraph services and from customs duties, and through contributions made by the German states. These last, made on a per capita basis, with no allowance for different levels of income and wealth, were known as "matricular" contributions and came to be widely disliked. As early as the debates on the North German Confederation, a liberal deputy in the Reichstag had secured the addition of a clause to the article setting out the states' matricular responsibilities, stating that the states were obligated to make contributions only "as long as federal taxes are not introduced."

Repeated attempts to introduce a federal tax failed miserably. Bismarck and some of the liberal leaders expressed an interest, first, in a unified commercial tax (*Gewerbesteuer*). This would have had the collateral benefit of increasing labor mobility among different parts of Germany by equalizing widely divergent methods and rates of taxation of commercial activity. The proposal foundered on the particularism and vested interests of the German states, however, and was never developed. Bismarck's favorite scheme for raising central-government revenue, the extension of the tobacco monopoly, also failed to come to fruition.

The new imperial government was allowed to issue treasury bills (*Schatzscheine*) up to a limit of 24 million marks. Paper notes (treasury notes, *Reichskassenscheine*) up to 120 million marks in 5, 20, and 50

mark denominations were also allowed and were issued to the individual states in proportion to their respective populations. The law that authorized this operation simultaneously imposed on the states the obligation to withdraw and cancel their own state notes, which totaled 184 million marks (Lotz, 1888, pp. 152–153).

The empire began its existence with no debt, for the war-related debts of the North German Confederation (and some of the costs of building the new administration) had been met out of the 5 billion gold-franc indemnity imposed on France by the Treaty of Frankfurt. Central-government deficits appeared only after 1877. They reflected military expenditure but also the costs of the monetary reform, in particular the losses incurred by the sale of silver on international markets during the transition to gold. These deficits were funded largely by bond issues, but they never represented a significant burden on the German capital market. The imperial debt was 1.8 percent of NNP in 1880, although it rose to 9.9 percent in 1913 (Deutsche Bundesbank, 1976).

Protective Tariffs

The main change in the early years of the empire was the transition from a tariff regime designed purely in terms of revenue (mostly from tariffs on coffee and tea) to a protective tariff, which came into effect in 1880. This protective tariff was the outcome of a political bargain between the iron industry and agrarian interests, but it also very effectively helped to meet the growing revenue needs of the empire. The duty on grains was repeatedly raised during the 1880s, climbing from 10 marks per metric ton initially to 50 marks in 1885. As a consequence, there was also a dramatic fiscal gain. The proportion of federal revenue coming from customs duties increased from 30.7 percent in 1878 to 61.2 percent in 1891 (Gerloff, 1928, p. 27).

Spending and Debt in the German States

There were no explicit constitutional mechanisms to control the spending or debt regimes of the German states. There appeared to be no need for regulation, because few states had any significant fiscal difficulties (Austria, the main exception, was left out of the process of German unification). The fiscal histories of the states had run along roughly similar paths. Their autocratic rulers had been inclined to reduce expenditure and avoid deficits, because attempts to raise new loans or taxes would require the calling of parliaments, which would then make unacceptable demands for political rights and freedoms. This bears out

Lamfalussy's comment that "much of the fiscal convergence achieved in federal states is probably the result of tradition and history—factors which in [modern] Europe appear to favour divergence" (Lamfalussy 1989, p. 100). Despite the substantial military spending associated with the wars of unification during the 1860s, debt levels in the German states actually fell. In Prussia, by far the largest state, the volume of debt outstanding fell 31 percent between 1869 and 1875, from 1,334 million marks to 919 million marks. Between 1870 and 1878, in fact, the Prussian government ran budget surpluses. Subsequently, however, state surpluses largely vanished, as the states were pressed both by expenditures and the failure to raise revenues.

For most states, unification meant an immediately increased fiscal burden, not only because of the matricular contributions, but because of new financial obligations imposed by imperial legislation (for example, the new imperial penal law of 1871 led to a need to build costly prisons). The consequences of fiscal unification for the states can be illustrated by the case of Württemberg, which had typically run a balanced budget between 1819 and 1871. As a result of unification, Württemberg was relieved of its obligations to pay military expenses (about 8.2 million marks), but it lost about 6 million marks in revenue from customs duties and had to pay about 6 million marks in matricular contributions. It thus lost or paid out 12 million marks while cutting its expenditure by only 8.2 million marks (Gerloff, 1913, pp. 142–143).

Württemberg is also a neat example of the political economy through which the federal tax structure responded to an asymmetric shock. Whereas most of the German economy grew very quickly during the first half of the 1870s, when a speculative boom occurred in construction and railroad building, Württemberg suffered. Its manufacturing speciality, textiles, was hit by competition from the large mills of Alsace, newly annexed to the German Empire under the terms of the Treaty of Frankfurt, and its revenues declined. Many liberals previously committed to laissez-faire began to demand tariff protection, blaming foreign rather than Alsatian industry for their economic difficulties. By the end of the 1870s, such pressure helped to tip the delicate balance of Reichstag politics toward protection. Higher tariffs then increased central-government revenues, which could be (and were) distributed to the states.¹³

¹³ In light of the concern many modern Europeans have about the likely consequences of asymmetric shocks to an area bound by monetary union, it is worth noting that the 1870s experience of Württemberg resulted from the creation of a new political entity and remained quite unique in the subsequent history of imperial Germany. It is hard to find another example of a regionally limited shock.

State spending was rising in any case during this period, in response to the growing social pressures and demands generated by industrialization. The influential economist Adolph Wagner formulated his famous theorem of the rising state share in national expenditure at this time, the “law of increasing government activity” (Schremmer, 1989, p. 360). And the historian Heinrich von Treitschke commented that “the old solution was freedom of economic activity; but now there is a demand for greater activity of the state” (Treitschke, 1914, p. 434). At the same time, the mobility of capital and labor encouraged a competition among the states in the lowering of taxes and the standardization of tax systems (Hallerberg, 1996). This competition, together with the legacy of past tax regimes, under which immobile (agricultural) property tended to be more heavily taxed than enterprises, helped to provide a substantial stimulus to Germany’s economic advance (Schremmer, 1989). It was the combination of tax competition and social pressure for increased spending that produced deficits in the state budgets. When states did manage to maintain a fiscal equilibrium, it was usually a result, not of tax increases, but of the increased revenue from state-owned enterprises, such as mines and, above all, from the railroad companies that were largely taken under the control of the state governments during the 1870s and 1880s.

The tariff of 1879 was accompanied by legislation (known as the “Franckenstein Clause”) giving the states any surplus arising out of increased revenues from the higher tariff. Bismarck had begun to see the tariff and the income it generated as a way of achieving his vision of reducing direct taxation by the states and of funding federal expenditures largely out of indirect taxes. A landowner himself, he made this promise a central feature of his speech introducing the 1879 tariff legislation: “to make the Empire more independent, to lighten the burden on the communes, and to reduce the payments of heavily indebted landowners through a move to indirect taxation. . . .” (quoted in Gerloff, 1913, p. 158). The immediate consequence of the new legislation was that the states became net beneficiaries, because the matricular contributions were less than the tariff rebates.

When imperial expenditure began to increase in the 1890s at the same time that tariffs on agricultural imports were lowered, the matricular contributions of the states once again became positive. Growing pressures to spend combined with reduced transfers from the federal government resulted in a steady rise of state as well as municipal debt. The total public debt, which in 1880 had amounted to 37.4 percent of NNP, rose to 50.4 percent by 1890 (and reached 62.7 percent by

1913). As debt mounted and it became more difficult for states to have access to the capital markets, state governments tried tax reform. The most radical and far-reaching of these reforms, one that served as a model for other states, was Prussia's introduction of a progressive income tax in 1891.

These fiscal measures, however, only increased the degree of controversy surrounding budget policy. Although the monetary experience of imperial Germany helped to stabilize politics, the fiscal conflicts were a source of division. The inadequate financial strength of the empire made inflationary war finance almost inevitable (Feldman, 1993; Ferguson, 1995) and thus set the stage for Germany's bitter and scarring experience of inflation and hyperinflation in the twentieth century.

4 The Modern European Parallel

It should now be clear that there are many parallels between German monetary union and European economic and monetary union (EMU). Two additional similarities are worth noting: the contrast between the technocratic discussion of monetary union and the idealistic rhetoric about a broader cause, and the international dimensions of pressure for integration.

Just as there was enthusiasm in nineteenth-century Germany for pan-Germanism and German nationhood, there has been considerable fervor in twentieth-century Europe for pan-Europeanism and a "European idea." In both instances, however, the period of idealism long preceded the protracted negotiations and complex decisions involved in shaping the monetary unions. The heyday of German romantic nationalism was during the 1810s, but Bismarck unified Germany only in the 1860s and 1870s. The great age of European idealism was in the 1940s and 1950s, in immediate response to World War II, but the hard planning for monetary union is taking place in the 1990s. As a consequence, the contemporary European debate about monetary union has become much like the "commercial transaction" described by Rochau (1869), in which questions of national gain and loss are similar to the 1860s and 1870s debates about how German states might profit from the creation of a united Germany.

As with nineteenth-century Germany, the impetus for closer European economic and monetary integration has come as much from external and global considerations as from a logic inherent in a previous measure of integration. The background to the 1970 Werner Report on economic and monetary union was the increasing concern about the position of the

U.S. dollar in the final years of the Bretton Woods regime and about the effects of the U.S. inflation on Europe (James, 1996, p. 202). The European Monetary System originated in 1979 as a response to the weakness of the U.S. dollar and the strains that large capital movements imposed on the exchange rates among European countries. The removal of barriers to capital mobility, as provided by the 1986 Single European Act and specified in the June 1988 European Council decision, was both a response to the increasing capital movements of the 1980s and a facilitator of new movements. In the 1990s, some discussion, especially in France, has focused on the need to manage the exchange rate of a European currency against the dollar.

The frameworks for German and European monetary union are thus analogous, although the sequence of institutional change laid down in the Maastricht Treaty is exactly opposite the order by which the German Empire moved to monetary union. For Germany, political union came first. Political union then brought a reordering of the fiscal regime, in which the new federal empire became the beneficiary of customs duties. The increase in tariffs then further strengthened the empire. A common currency, the mark, was introduced only after political union, in 1873, and a central bank, the Reichsbank, was formed only in 1875. Germany was not unique in this regard; the United States had a single currency but no central bank, until the Federal Reserve System began operations in 1914.

In EMU, a common central bank will precede monetary integration, and political union will be left to a distant and uncertain future. The Maastricht Treaty of December 1991 provides for a proto-central bank, the European Monetary Institute, to support the transition to a single currency and to hand over its function to the ECB once the transition is complete. There is no international rule analogous to the gold standard to bind the new money to other currencies and to facilitate the rule-making process during or after the transition. On the contrary, from the time of the Delors Report in 1989, many proposals for a European central bank have depended on the argument that European monetary policy needs to maintain economic advantages relative to the dollar and yen areas.

The Maastricht Treaty commits the central bank to the goal of price stability (Article 105 [1]), and its chief rule concerns the potential of the central bank to monetize public debt. Under the terms of Article 104 (1), the ECB and the national central banks are forbidden to give credits to the European Union (EU), to central, regional, or local governments and publicly owned enterprises, or directly to buy debt instruments from them.

At Maastricht, the task of achieving closer political integration within the EU was left largely to a subsequent intergovernmental conference. Although the fiscal rules that will underpin monetary union were included in the Maastricht Treaty, they were strengthened by the “pact for stability and growth” adopted in December 1996 at the European summit meeting in Dublin (the word “growth” was added at the insistence of the French president). The rules represent a response to the recommendation in the 1989 Delors Report, which had called for “binding rules” to limit budget deficits.

Under the rules contained in Article 104c of the treaty, public-sector deficits must not exceed 3 percent of gross domestic product (GDP), and public debt must not exceed 60 percent of GDP (although qualifying phrases are attached to both limitations). Member states that breach these limits will be cited by the Council of Ministers as having “excessive budget deficits” and will then be required to reduce those deficits. During the transition to EMU (Stage II), sanctions cannot be imposed, but a country that has been found to have an excessive deficit may be excluded from EMU. After EMU begins (Stage III), the Council can impose sanctions if a member state fails to reduce its deficit. Under the stability pact, moreover, participants in EMU are subject to tighter rules. They can run budget deficits larger than 3 percent of GDP only in the case of a natural catastrophe or severe economic downturn, defined as a fall in GDP by at least 2 percent over a year. If a country suffers a fall in GDP that is smaller than 2 percent but larger than 0.75 percent, it may plead its case before the Council (whose members, if they face similar problems, might be expected to be sympathetic). Otherwise, such countries, along with others that have no recessionary excuse, will be subject to heavy fines, and these may be imposed swiftly, not at the end of the long process described by Article 104c of the Maastricht Treaty.

Beyond a fascinating parallel, with a piquant continuity of German views about appropriate central-bank behavior, what concrete lessons can be learned from the nineteenth-century German experience?

Competition among Financial Centers

The most controversial part of the German monetary reforms in the 1860s and 1870s involved the restructuring of the financial sector amidst fierce competition among cities and regions. The common banking legislation of the 1870s, introduced in a highly unstable environment marked by bank runs and speculative booms and busts, was a major element in the success of the monetary union. Its result was to

make Berlin (the new imperial capital) the main financial center, bypassing the non-Prussian cities of Darmstadt, Frankfurt, Hamburg, and Munich, which had been financially dynamic in the 1850s.

The progress toward EMU has also been accompanied by intense competition among financial centers, the EU centers of Frankfurt, London, Luxembourg, and Paris, as well as non-EU centers such as Zurich. This rivalry is shaping part of the discussion on the timing of the conversion of government debt into euros and on the character and inclusivity of a payments system.

Control of Monetary Policy

In both the German case and in EMU, the impetus for creating a new central bank has derived from the desire of states on the periphery (the non-Prussian and non-German states, respectively) to have a greater influence on monetary policy. In nineteenth-century Germany, where the currency issue was limited by a metallic rule, the main interest was in credit policy and access to loans. The southern states wanted access to the Prussian Bank's credit, which for political reasons had been largely given to agrarian east Prussia. For the EU's non-German members, the attraction of a European central bank derives from the belief that such a bank will not exclusively reflect the stability-oriented concerns of the Bundesbank in setting monetary policy and responding to shocks. The French prime minister Alain Juppé voiced a widely held, non-German view when he said, "we don't want all decisions on economic, budgetary, fiscal and monetary policy to be shaped by a technocratically-driven, semi-automatic system under the sole authority of the ECB. That is not our concept of democracy" (*Financial Times*, December 14, 1996, p. 8). Such a view indicates a demand for greater political control—a point that has also been emphasized by a number of academic writers (Cooper, 1992; Williamson, 1993), who complain about the bank's "democratic deficit." The presumption is that a more politically accountable bank will pursue a more countercyclical monetary policy (in contrast, for example, to the Bundesbank's anti-inflationary insistence on maintaining high interest rates during the recession of 1992–93). This view leaves open the issue of the measure of discretion that should be left to the bank's leaders.

Discretion in Monetary Policy

Even highly rule-bound regimes depend on an element of discretion to prevent total systemic destruction in the course of a crisis. In the historical examples, such discretionary elements include the ability of

the English parliament to suspend the Peel Act and the German provision allowing the Reichsbank to issue notes in excess of the legal gold reserve on payment of a special tax. In the British case, parliament held the power; in the German example, the new bank was given a substantial measure of discretion.

The problem is that new central banks have difficulties in establishing credibility, particularly in turbulent financial situations. A new institution such as the future ECB may feel it necessary to pursue an even more austere line than has the Bundesbank. In the 1870s, for example, there were accusations that the new all-German central bank might be too easy in its credit policy. The liberals particularly feared the result of agrarian interventions. The solution adopted by Prussian Germany was both efficient and relatively obvious: to transfer to the new institution an existing structure (complete with personnel and director) that already had a fair measure of credibility, and that had been attacked for its interest-rate rises in 1873. The Reichsbank was the Prussian Bank transformed solely by adding representatives from the other German states to the bank curatorium. Such a solution, however desirable, is clearly not feasible for the ECB, even though its similarities in design to the Bundesbank and its siting in Frankfurt imply a measure of transferred credibility.

The Loss of Seigniorage and the Gain of Stability

In agreeing to join EMU, states are renouncing the possibility of seigniorage gains and, in particular, the possibility of using an inflation tax to reduce debt levels. During the 1970s and 1980s, when Mediterranean Europe relied heavily on inflation to finance government expenditure, seigniorage accounted for 6 to 12 percent of government revenues (Drazen, 1989; Grilli, 1989). Since the end of the 1980s, however, this proportion has fallen dramatically, and the contribution of seigniorage to government expenditure in Europe is now only about 1 percent. At the same time, the fiscal room for maneuver is limited by the new deficit criteria.

The gains and losses from seigniorage in nineteenth-century Germany are analogous to those of modern Europe, although the mechanism of gain from seigniorage is different in the two cases. In nineteenth-century Germany, it was the issue of debased coinage and treasury notes; in modern Europe, it is inflation. The greatest potential losses from abandoning seigniorage in nineteenth-century Germany were in the smaller German states, which had profited by their licensing of note-issuing banks. The experience of nineteenth-century Germany,

however, suggests that renouncing seigniorage gains is attractive because it leads to increased financial stability and to the capital inflows that follow from greater stability.

Fiscal Problems of Federalism

It is sometimes suggested that currency unions can work satisfactorily in a modern political environment only if automatic stabilizers in the form of central-government taxes and expenditures exist. Thus, if there is a shock in the United States that affects only California, federal tax revenue from California will fall and federal social expenditure in California will rise, providing a Keynesian stimulus. Quite varied estimates have been made of the quantitative extent to which federal taxes and transfers offset regional decline (the literature on the subject is vast, beginning with Ingram, 1959, and continuing through Sachs and Sala-i-Martin, 1992).

The problems of imperial Germany with respect to federal taxes and transfers have an interesting implication for modern Europe. The experience of Germany—which was more homogenous in 1871 than the EU is today—suggests that it is very difficult, indeed, to construct a centralized federal tax system that can play the role of automatic stabilizer after monetary, or even political, union. In Germany, only the First World War caused a significant increase in the central-government's financial role, and that was a very unhappy experience. In the United States, it was another national emergency, the Great Depression, that transformed the role of the federal government. The historical parallels suggest that considerable skepticism is warranted about the ability of the EU to expand its budget beyond the current low level of approximately 1 percent of GDP (Eichengreen, 1992). The EU is likely to find it as difficult to introduce new taxation as Bismarck did, and there are many good and obvious reasons why it should not adopt his approach to tariffs.

If this is the case, however, should there not be greater flexibility for national states to use fiscal policy to respond to national or regional shocks? Most economists do not see the idea of fixed limits set out in a “stability pact” as promoting increased financial stability in Europe. On the contrary, “economists who agree on little else are virtually unanimous in their belief that *ex ante* limitations on deficits and debt are not the best way to protect the financial system from the effects of prospective or actual defaults” (Kenen, 1995, p. 96). Even committed advocates of the use of such limitations recognize that “the stability or instability of a dynamic debt process cannot be read off from arbitrary

and rigid debt quotas” (Schlesinger, Weber, and Ziebarth, 1993, p. 142). Despite this academic consensus, there has been a consistent and unbending German insistence on the “strict and narrow” interpretation of the debt and deficit criteria of the Maastricht Treaty—and, recently, on the adoption of a stability pact.

The Size of the State

This last reflection implies that the EU will be unable to deal with regional shocks and that member states will be limited by their commitment to a stability pact. Are there any grounds for optimism, given the relatively straight path from Delors’ call for “binding limits,” through the German Bundestag’s 1992 requirement of strict interpretation of the Maastricht criteria (and the incorporation of that requirement into the German Constitutional Court’s ruling on monetary union), to the December 1996 EU summit in Dublin?

There are at least three ways to interpret the intense political concern of the 1990s with the fiscal concomitants of monetary union. The first, frankly irrational, sees the outcome as a concession to a probably misguided German obsession with government debt and deficits, an obsession explained by Germany’s historical experience of inflations.

The second views the debate as a product of the suspicion that, in arrangements among states, some other country is deriving an unfair advantage from a new measure—specifically, that high-debt countries might use the process of European integration to impose their own higher costs on their low-debt neighbors. Already existing, merely consultative, procedures for multilateral surveillance of fiscal policies in the EU through Ecofin are rejected because of the unsatisfactory and disappointing history of this practice, which has been subject to a high degree of politicization (Schlesinger, Weber, and Ziebarth, 1993, p. 128). Relying on the market alone to price the risk premia of different public authorities correctly is also unsatisfactory. Current differences in interest rates on public debt are very low in Europe. In general, the pricing of public debt is subject to a “disaster myopia,” the classic example of which is the enthusiasm banks had for acquiring Latin American debt prior to the Mexican crisis of August 1982 (Guttentag and Herring, 1986).

The third explanation of the Maastricht logic sees the fiscal criteria as part of a general rethinking of the role and size of the state. In this view, deficit and debt reduction are seen as a way of lowering future taxes. A high public deficit is a future tax, which will have to be paid at a highly unfavorable moment when the rapid ageing of the European

population in the early years of the next century imposes a heavy burden. There is consequently, it is argued, an urgent need to reduce deficit levels sharply in order to reduce the impact of a later crisis.

The processes of German monetary union and European monetary union developed in different social and intellectual environments, with very different attitudes and expectations about the role that should be played by the federal authority. German monetary union was preceded by an era of the small state and was accompanied by rising demands and the transition to the age of the big state. European monetary union is proceeding just as the size of the state is being questioned. Is EMU happening at the moment when the great political and social changes of the late nineteenth century are being reversed?

In nineteenth-century Germany, instability was the ultimate legacy of inadequately debating the fiscal problem. There had been no urgent need in 1871 to discuss fiscal issues. Most German states had not run large deficits, and the debt of the North German Confederation was discharged by the French indemnity. The fiscal difficulties that eventually emerged were in large measure the result of long-term trends that might reasonably have been expected to be unforeseeable in 1871, that is, the push for greater social expenditure and greater subsidies as economic change created pressures for compensation, and the great military arms race preceding World War I. The monetary unification of Germany took place in the context of increased expectations about what the state could and should do.

European monetary union, however, has been preceded by three decades of increased government deficits and by an expansion of state activity. There is general agreement that there should no longer be a rising share of state expenditure and, indeed, that the response to the global competition of the 1990s requires a reduction in tax and social burdens. A recent suggestion is that because most governments in industrial countries do not obviously do anything better than they did at the beginning of the 1960s, the share of government expenditure to GDP should be cut back to the levels (about 30 percent) prevailing then (Tanzi and Schuknecht, 1995). One of the (usually unspoken) attractions of the Maastricht process has been that it offers a way of using external pressure to undertake the politically highly contentious task of trimming back the West European welfare state.¹⁴ If this analysis is correct, the eligibility terms on debts and deficits are a means of doing something

¹⁴ Only Italy has had the courage to introduce a tax ("euro-tax") specifically designed to bring the country into conformity with the Maastricht criteria.

quite different than simply securing financial stability. They are an indirect way of beginning to roll back an overextended public sector. The risk for the Maastricht process is that it may well prove to be overburdened with a task that is so politically contentious.

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