

Banking and Industry between the Two Wars: An International Comparison

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Introduction

The topic chosen for its centennial celebration by the Banco di Roma could hardly be more timely. Action is taking place on several fronts. In the United States, the Reagan administration appears to be considering earnestly plans to undo much of the regulatory legislation of the 1930s. In France, on the contrary, the new Socialist administration of President Mitterand is engaged on a program of carrying through the nationalization of important segments of the credit market, begun feebly in 1936, and carried out with great restraint in 1945, with the nationalization of the banques d'affaires. These had been spared from nationalization in 1946 by President De Gaulle in a sort of Passover (Kuisel, 1981, p. 207).

Before I get to the interwar period, however, I propose to start with a bit of historical background, and then a smattering of economic theory.

Background

A series of eminent economic historians — Hoselitz (1956), Cameron (1961), and Gerschenkron (1962) — has held that the major innovation in industrial financing in the 19th century was the *Crédit Mobilier*, founded in 1852 by Emile and Isaac Pereire. Gerschenkron's theory was elaborated into a model of backwardness, in which first banks, then government, depending on how backward a country was, substituted for the entrepreneurship that had been the driving force in the United Kingdom that Peter Mathias calls "The first industrial nation." Cameron explained in detail how the *Crédit Mobilier* and its imitators were responsible for the economic development not only of France, but of continental Europe as a whole. The imitators included the Bank of

Darmstadt in Germany, the Creditanstalt in Austria, a series of banks established in Italy and Spain by the *Crédit Mobilier* itself and by its French rivals, with strong influences apparent in such countries as Sweden and Belgium. Cameron also traces the origin of these industrial or mixed banks of the *Crédit Mobilier* to the *Société Générale de Belgique* of the 1820s.

Evolution proceeded rather differently in different countries. Britain had a flurry of imitations of the *Crédit Mobilier* in the 1860s, but all expired in the Overend, Gurney panic of 1866. Thereafter British banks appeared to provide only short-term credit to industry, leaving long-term capital either to the informal local market, or the more structured London stock exchange. These appearances are somewhat deceiving, as Jeffrys points out for the 19th century, especially in the north (1938). And the major banks, by this time consolidated into a network of large branched banks, with headquarters in London, lent heavily to industry in the securities boom after World War I, and took on a load of frozen debt which weighed them down all during the 1920s.

In France, as Bouvier has explained elsewhere (1955), the new banks founded in the 1860s after the *Crédit Mobilier* turned away from industry. There were some tragi-comic episodes such as the case of La Fuschine in which the *Crédit Lyonnais* cut off credit to the pioneer dye firm of France and drove it to Switzerland. In 1903, Henri Germain (or perhaps it was another banker, the source is unclear) was quoted in reply to a stockholder asking about loans to industry — sarcastically I believe — as saying “There are advantages and more security in lending abroad since the credit of a state represents the best guarantee” (Charpenay, 1939, p. 28). The large profits made in the Thiers rente in the early 1870s induced both deposit banks and *banques d'affaires* that survived the decade to speculate in foreign bonds. Only slowly at the end of the century did the *banques d'affaires* lend to industry, as did the regional banks of Lorraine and the Dauphiné (Grenoble). The Bank of France began direct discounting to industry at this time, partly perhaps to maintain its profits but largely, I believe, because the governor, George Pallain, was a “neo-Keynesian” who thought that more credit was needed in the system. Its initiative was resented by the deposit banks. As Bouvier's present paper shows, to be sure, most large companies financed their fixed-capital needs with plowed-back profits. After 1919, the banks employed their funds mainly in lending to government and financing speculation in foreign exchange.

German development took the example of the *Crédit Mobilier* and developed it to the utmost. Apart from Hamburg and Frankfurt which clung longer to commercial banking, the German banks went in for close relations with industrial and mining firms. Even the *Deutsche Bank*, created in 1872 for the express purpose of financing foreign trade (and freeing Germany from

London's domination of the European foreign exchange market) quickly turned in the euphoria of the *Gründungszeit* to financing industrial enterprise. Close relationships built up between particular companies and particular banks, between Siemens and the Deutsche Bank, for example, AEG and the Berliner Handelsgesellschaft, between the Gelsenkirchen Bergwerkgesellschaft and the Diskontogesellschaft. Riesser's classic study notes that Thyssen and Stinnes pursued policies of friendly relations with a number of banks, without wedding themselves to any one, and the chemical industry made large profits for years which it plowed back so that banks had little influence with those companies (1911, pp. 721, 741). In chemicals, to be sure, Germany was a pioneer, as Britain in textiles, iron and steel, coal, etc., so that the backwardness thesis did not apply.

There was French capital, as well as a French idea, in German banking, especially in the Bank of Darmstadt. Borchardt's classic article on the capital shortage so complained about in German economic history makes clear that the problem lay not in the supply of savings — despite an underdeveloped mercantile sector — but in the initial lack of demand (1961). Gerschenkron and Cohen (1966) have demonstrated to their satisfaction that the Italian economic spurt of the two decades prior to World War I was the consequence of German founding of the Banca Commerciale Italiana (Comit) and the Credito Italiano in the 1880s, without, however, fully explaining why the surge of French banking into Italy in the 1860s did not produce a similar result, and without noting that the German investors of the 1890s quickly sold off their holdings to French and Italian investors (Confalonieri, 1976, III, pp. 3-17).

Bouvier's paper mentions banking crises in France in 1848, 1867, 1882 and 1891. The first two were international, the second two local. Italian crises occurred in 1866, 1893 and 1907, each precipitated by withdrawals of foreign capital. In 1893 the Banca Tiberina and the French inspired Credito Mobiliare collapsed; and in 1907 the Società Bancaria Italiana. The 1907 crisis has been studied in depth by Franco Bonelli, who found it connected with the 1907 stock-market panic in New York. That event tightened interest rates in New York, London and Paris, and pulled funds from Milan and Turin to Paris. Bonelli comments that colonial countries, among them Italy, suddenly found themselves deprived of capital (1971, p. 43). The adjective "colonial" is evocative as it suggests Italian inability to provide for its own capital needs and dependence on a flow of funds from abroad.

I shall not pursue this sketch of historical background to Austria, Hungary, Spain or the United States, largely because of ignorance, but also, in the case of the United States, to spare many of you a recital of the familiar. The federal United States had long had free banking, sometimes called "wildcat banking",

with prohibitions against branching, chaining, and even spilling out beyond the confines of the country in many states. Various ways around these restrictions through trust companies and the like took place before World War I. With the surge of industrial growth stimulated by that war, a new spurt of innovation occurred in the 1920s, as Minsky's paper indicates. I want at this stage only to call your attention to the fact that both Italy and United States found it necessary at the outbreak of war to create new institutions for financing wartime expansion of industry — in Italy the Consortium for the Support of Industrial Securities, created in December 1914, the father of the Autonomous Section of March 1922, grandfather of the Liquidation Institute of 1926, and great-grandfather of the Istituto per la Ricostruzione Industriale of January 1933; and the War Finance Corporation in the United States, father of the Reconstruction Finance Corporation of 1931, and grandfather of the Defense Plant Corporation of 1941. The point to be borne in mind is that Italy kept IRI going, the United States wound down the RFC, only to have to rev it up again at the outbreak of World War II as the Defense Plant Corporation to help finance major industrial expansion of military equipment. It functioned brilliantly but was liquidated at the end of the war, selling off its assets without a breath of scandal. Some economists would have liked to have had it in existence in 1974 after the OPEC price rise to help finance major energy projects too large, expensive, or uncertain for the private market, as a public good, i.e. as part of expenditure for national defense.

In my analysis of monetary policy, I make a distinction between trend and crisis — trend when a monetarist policy of a growing supply of money at some appropriate rate is desirable, and crisis when a lender of last resort is required to make money freely available. A similar distinction may not be amiss in the capital field, where the market should be left to its own devices on trend, but where in crisis, as in a world war, a deep depression, or drastic sudden demand for investment, governmental steps of the last-resort type may need to be taken.

In the field of money, the problem is often how to get back on trend by mopping up the large amounts of money produced in crisis. In capital, the question is whether to wind down emergency measures, as in the cases of the United States, and, as we shall see, Germany, or to elevate an expedient into a principle, as in Austria and Italy.

Theory

In my paper for the Banco di Roma meeting last December, I suggested that IRI, IMI and the like were a second-best solution to the problem of providing external finance for industry. Gianni Toniolo took exception to this designa-

tion, on the ground that there were no "missed opportunities (1981, p. 135)." I am sorry to have been misunderstood. I was using the term in the technical sense developed by international trade economists, in which a normally desirable policy step, such as a move to freer trade, may not be appropriate if the conditions for a Pareto-optimal solution are not met, such as, for example, if there are distortions between private and social marginal cost, or if lowering a tariff in a customs union results in more trade diversion than trade creation. In these circumstances, a second-best solution may consist in moving away from the normally recommended direction, e.g. to impose a tariff instead of taking one off. For general audiences, the theory of the second best can be summarized concisely as: if the market doesn't work, don't use it.

Partisans of rational expectations and efficient markets tend to believe that markets always work. The Coase theorem, for example, suggests that institutions don't matter, or at least that they adapt themselves readily to changing conditions — in the absence of a minor exception where transactions costs are high — so that they can be disregarded. Institutionalists, of course, take the opposite view, that institutions determine historical outcomes. Between the two positions there is room for an eclectic (or wishy-washy) view, that markets mostly work but occasionally break down, and that sometimes institutions adapt to underlying changes in demand and supply conditions and sometimes do not. Even in Britain where external finance for industry was provided initially for small firms at the local level, and for the few big firms in the London capital market, a gap has been detected for middle-sized firms — the so-called Macmillan gap — too big for the local market and too small to cover the overhead costs of finance in the City. While this gap was discovered only in the Macmillan report of 1931, and said by it not to have existed before World War I, its existence has now been established for the nineteenth century (Committee on Finance and Industry, 1931, para. 377; Jeffreys, 1938, p. 370). A similar gap existed in the 1930s in medium-term credits to finance the foreign sale of capital equipment, too long-lived to be financed by three-to-nine months acceptances, and too short to warrant the expense of floating long-term bonds. This gap was filled by governments with the Export Credit Guarantee Department in Britain, the Export-Import Bank in the United States, COFACE in France, the Kreditanstalt für Wiederaufbau in Germany (after World War II), etc.

In a perfect capital market, private external finance would be available for every conceivable financial need, at least for hedge finance, to use Minsky's term, whether from a continuum of different specialized institutions or from large department-store-like credit institutions which maintained a full line of financial devices. The establishment of the *Crédit Mobilier* and its spread throughout Europe can be regarded as a demonstration of the Coase theorem at

work — an innovation adapting to a felt need — although in my view of the matter the *Crédit Mobilier* was more interested in public works than in industry. When *government* moves in to fill a gap, however, it must be scored as a point against the Coase theorem, since it implies market failure at the private level. There may be adequate explanation; in the case of war insufficient time may be available for the private market to devise the appropriate institutions. But government intervention is “second best” in the sense that the private market has failed to provide the necessary production or finance or management that is called for by efficient markets and the Coase theorem.

Other theories of government exist, of course. It is a provider of the public goods of national defense; it may be a monster in which egoistic politicians maximize their importance by undertaking unnecessary and even harmful tasks. The theory implied here is a vacuum theory of government in which government is called upon from time to time to repair gaps left by market failure. Such failures may be structural, as in an anaemic capital market, or ephemeral as in the lender-of-last-resort task in financial crises, where markets normally function effectively on trend, but occasionally break down in crisis. Trend and crisis may get mixed up, as when an evanescent crisis leads to undertaking structural repairs not actually necessary.

A few words may be useful on the view of government as a monster, intervening in ways which are so pervasive, inconsistent and misguided that the private market becomes incapable of responding to underlying conditions of demand and supply as they evolve. The move in the United States today to deregulate industry and banking rests on the assumption that years of government intervention in one direction and another have produced so distorted a set of incentives and restraints that it is urgent to sweep them away and start afresh. Joseph Pechman regards the income tax in the United States in this light and wants to make a bonfire of all deductions, shelters, loopholes and exception and start afresh taxing all income at a lower set of rates. It is a counsel of perfection, but note that European governments have taken steps of this character on at least two occasions historically, once when the Navigation Acts were swept off the books of the United Kingdom in 1846 after having become so complicated with regulations, exceptions, special discriminatory treaties and the like that only three men in England understood them (Clapham, 1961, p. 161); and in Baden where *Gewerbeförderung* — the system of encouraging industry through patents, monopolies, subsidies, prohibitions and other governmental guidance — became so complex that it proved useful to make a dash for *Gewerbefreiheit* — freedom of entry into any and all industries (Fisher, 1962, p. 82). A modern example from the United States is the action of Secretary of the Treasury, George P. Shultz, under President Nixon, wiping the books clean of the I.E.T.,

Gore amendment, Voluntary Credit Restraint Program and Mandatory Credit Restraint Program that tried successively to restrain capital exports from the United States through one and another channel.

On the other hand, there may be occasions when the underlying conditions for a successful market solution may be missing. In such cases, the second—best expedient must be adopted as a principle. The presumption emerging from Italian financial history of the interwar period is that the “colonial” experience of the Italian capital market, plus low company profits partly resulting from negative rates of protection for a number of industries, made savers wary of equity investments and disposed to favor liquid claims on banks and government bonds. In these circumstances, risk capital was provided initially by banks, and when this proved unstable, by governmental institutions. But it is time to focus on the interwar period.

The 1920s

The experience of the countries under observation in the 1920s was sharply disparate. All experienced in varying degrees the boom and bust of 1919-20. Thereafter some like the United States enjoyed prosperous growth for the rest of the decade. Others like Austria remained depressed. Between were cases of a turbulent first half of economic and financial reconstruction followed by entry into the smoother waters of 1925 to 1929 before encountering new storms.

The impact of the speculative boom of 1919-1920 on traditional British industry and the banks that financed it has already been mentioned. Peace and the prospect of reduced competition from Germany in coal, steel, shipping and cotton textiles led to a wave of takeovers, mergers and formation of new companies, financed by bank lending, that left a heavy burden of debt on traditional industry, and a lump of frozen loans in banks when the collapse of prices in 1920 and 1921 altered the rosy prospect. Restoration of the pound to par in 1925 and the coal and general strikes of 1925 and 1926 compounded the difficulties of the industries on which the British economy had rested in the 19th century. As Courakis underlines, the record was not uniformly stagnant as new industries grew in the South, especially west of London, as opposed to the depressed areas of northern England, Wales and Scotland. Overvaluation of the pound and subsequent undervaluation of the French franc piled up foreign complications that would yield trouble in the 1930s, but bank lending to industry after 1921 was limited to short-term advances, and the long-term capital needs of the new growing industries were supplied by the private market and by direct foreign investment from abroad.

Austria, defeated in war and cut off from its empire, was a basket case.

Some assistance was rendered by League of Nations loans in the early 1920s, but the amounts in retrospect proved far short of the structural needs. The banking system was weakened by participating in the 1924 speculative attack on the French franc, and one by one, weak banks began to fail in that year to be taken over by larger and putatively stronger banks. At the beginning of 1927 the Unionbank and the Verkehrsbank were taken over *in extremis* by the Bodenkreditanstalt, and in early 1929 the Bodenkreditanstalt was merged overnight into the Creditanstalt, leaving it the only sizeable bank in Austria, loaded with industrial loans and equities, and with many more liabilities than assets from its enforced merger. It was in no position to weather a decline in the Viennese stock market.

France and Germany spent the first years of the decade preoccupied with problems of reconstruction, reparations, war debts, hyperinflation in the case of Germany and exchange depreciation for France. A new beginning occurred in 1924 for Germany with the Dawes loan and the start of U.S. lending. Governments borrowed abroad and a few industries. For the most part industry went back into its cosy relationship with large banks. In France the breathing room acquired by the successful squeeze against bear speculators in the franc in March 1924 was frittered away. *De facto* stabilization of the franc in 1926, however, touched off a five-year recovery period, but one in which a heavy reflow of capital enlarged the money supply, rendered the Bank of France liquid, and with substantial profits left the banks concerned with government bonds and foreign exchange but with little activity in lending to industry.

The United States recovered rapidly from 1921 and started a boom based on wartime innovations and heavy capital accumulation. There were new holding companies in utilities, speculation in shares of rapidly growing companies, notably in electrical equipment, radio and automobiles. A highly-leveraged securities market provided opportunities for what Minsky calls — not without criticism — speculative and Ponzi, as well as hedge, finance. The success of the Dawes loan led to a boom in foreign securities which was positively correlated with the business cycle, in contrast with contra-cyclical British lending for most of the period before the war. Financial innovation was widespread, and some banks broke away from the unit atomistic pattern to form, in certain permissive states, branching and chains.

By way of digression it should be noted that branch and chain banking are not unambiguously helpful to bank stability. If the trouble — that is, the poor assets — are in the home unit, it is helpful for it to be part of a system, helped by assistance from other parts of the system. But if the trouble occurs elsewhere, in another part of an integrated whole, integration transmits it to the home unit. The first major collapse in the United States was not that of the unit Bank of the

United States in December 1930, but the bankruptcy of the Caldwell chain a month earlier. Here the poor investments of the Nashville head office pulled down the other members of the group and spread the loss of banking and the decline in deposits from Tennessee to three other states (Wicker, 1980).

The first four million share days on the New York stock exchange were recorded in March 1928 and the boom in shares became so pronounced by June that attention began to turn from foreign and domestic bonds to stocks on the one hand, and call loans to finance stock-market speculation on the other. The flow of capital turned inward from Europe. Germany had to shift from borrowing through bonds to attracting short-term capital on deposit. The same was true of the underdeveloped periphery — especially Australia, Argentina, Chile, Brazil. By June of 1929 business peaked in the United States with rising interest rates, pulled along by the tightening call-money market, cutting down long-term investment and consumer borrowing.

Spain remained for the most part on the edge of the boom of the second half of the 1920s, cut off from the ebb and flow of international funds. The relations of banks to industrial borrowers were not central to the macro-economic picture. Some banks increased their industrial stakes; others shrank theirs.

The 1920s saw further developments in the Italian progress to governmental domination of the provision of long-term capital to industry. After the deflationary squeeze of 1921 in which the Banca Italiana di Sconto went down along with the Perrone brothers, though their industrial interests in Ilva and Ansaldo were saved, there was a brilliant if brief period of recovery.

From a low of 80 in 1921 (1922 = 100) the stock-exchange index rose to 183 by February 1925. At this stage Mussolini called for appreciation of the lire from 150 to the pound to 90 (the infamous *quota novanta*). The action was taken against the advice of economists, and in foolish imitation of the British action appreciating the pound. It harmed the balance of payments, and particularly dealt a savage blow to the stock market. In March 1926, Volpi for the Treasury and Stringher for the Bank of Italy asked the leading four banks to borrow 500 million lire and the support security prices with it. When these banks had lost 200 million lire in operations of 600 million (through an instrument called the Società Finanziamento Titoli), they petitioned the Bank of Italy to be allowed to suspend interest on the loans. In November of 1926, beyond this, the Bank of Italy decided to convert the Special Section of the Consortium for the Support of Industrial Securities — the Consortium formed in 1914, the Special Section at the time of the liquidation of the Banca Italiana di Sconto — into a Liquidation Institute to mop up some of the excess liquidity generated by these salvage operations. From 1926 to 1930, this effort to withdraw from industrial finance, and to limit money creation, went forward successfully, with

the debt of the Liquidation Institute to the Bank of Italy declining from 1,900 million in November 1926 to less than 1,300,000,000 by 1930.

1929 - The Turning Point

Friedman and most monetarists think that the collapse of the New York stock market in 1929 was an exogenous event, with no particular explanation, and of no particular importance in the great depression that followed. Jude Wanniski with his rational expectations/efficient markets theories of security markets has found an explanation for the declines of Black Thursday, October 24, 1929 and Black Tuesday, October 29, 1929 in the defeat in the U.S. Senate of a group of liberal free traders who sought to prevent a rise in the tariff on carbide (1977, pp. 133-6).

This victory for higher tariffs is seen as an indication that the Hawley-Smoot tariff act of almost nine months later would raise tariffs substantially, lead to massive retaliation and plunge the world into depression. Some elements of this explanation have recently been subscribed to by Allan Meltzer and Anna Schwartz, who admit the Hawley-Smoot tariff into an otherwise exclusively monetarist explanation of the depression, in the face of the normal international-trade model in which tariffs are expansionary rather than lead to contraction. With retaliation on a vast scale, a tariff can of course be contractive, but it is difficult to see how the market in October 1929 can instantly form a judgement on how much tariff retaliation will be undertaken, when and if the bill will be passed and signed.

Minsky's model of the impact of the credit system on the prices of financial assets, and their repercussions back on banking, credit and income is much richer than the simple monetary model. It is nonetheless limited, as Minsky indicates. It is limited to the United States. There are no capital movements, no exchange rates, no international commodity prices, nor even any impact of price changes on bank liquidity for domestic commodities. All assets are financial. In combination, these limitations mean that Minsky is not interested in the communication of the collapse of stock market prices to commodity markets between September and December 1929, nor in the further pressure on United States, German and gold-bloc prices from the depreciation of sterling (appreciation of the dollar, Reichsmark, French franc, etc.) in September 1931. On an unweighted basis, this was a 30 percent appreciation and was strongly deflationary in its effects on prices, and through commodity prices on bank liquidity. It is of great interest that a lively literature has sprung up in Germany in the last one or two years over whether Germany made a mistake in 1931 in not depreciating the Reichsmark along with the pound sterling (Schiemann, 1980; Borchardt, 1980).

There is not much interest for us in choosing *causa proxima*, *causa remota* or *causa causans* on the start of the 1929 depression. Candidates for *causa remota* include the cut off of United States lending to Germany in 1928; those for *causa proxima* include French pressure on the London money market in August 1929 that led to the Hatry crisis of September, that tightened interest rates and pulled "all other" funds out of the stock market to precipitate liquidation. Friedman and Schwartz of course ascribe *causa causans* to monetary policy in the United States, although the money stock declined only minimally to December 1930 or March 1931 (1966), whereas Herbert Hoover insisted that the origin of the depression was squarely in Europe (1952). The exercise is futile, and wisdom lies in R.C.O. Matthew's statement about the depression of almost one hundred years earlier in 1836, that it is futile to draw any hard-and-fast line assigning to either country causal supremacy in the cycle as a whole or its individual phases (1954, p. 69).

Note the parallel collapse of stock-market prices on other national exchange (evocative of the Granville collapse of stock market prices in Paris, London and Tokyo on September 28, 1931), with only psychological connections between them. The 32 percent fall in the New York stock market between the September average and that of December 1929, after a recovery from the November low, was exceeded in Canada with a decline of 33 percent, almost matched in Belgium with 30 percent, and echoed in declines in other markets running from 16 percent in Britain, 15 percent in the Netherlands, 14 percent in Germany, 12.5 percent in Italy (from February 1929 to January 1930), 11 percent in France, 10 percent in Switzerland and 8 percent in Sweden. The fall in Germany came on top of an earlier decline between June 28 and September 1929 of 15 percent. That in Italy followed a collapse due to quota novanta of 32 percent between February 1925 and December 1927, with some subsequent recovery (23 percent) to February 1929.

A point on which I insist but one neglected by virtually all other observers is that the decline in stock prices was communicated to commodity prices through the banking system. Non-bank lenders to the call money market were mordantly afraid that the authorities would close the stock market, as had been done in 1873, converting their one-day loans to frozen assets. They therefore pulled out. Out of town banks followed suit in somewhat less panic, leaving New York banks to bear the brunt of refinancing loans with adequate margin. To manage this, they cut down drastically on all other credit outlets, including financing commodity brokers and traders. In consequence, foreign commodities, then normally sold in New York on consignment, plunged in price between September and December 1929 in a range from 25.7 percent for rubber to 10 percent for silk. Export commodities such as cotton and wheat, and

commodities normally financed in the United States, such as sugar, declined much less. Moreover the fall in prices was world wide: 22 percent in Japan, 16 percent in Canada, 15 percent in the United Kingdom, 14 percent in Italy and 12 percent in the United States and Germany. No monetarist or Keynesian model can account for such precipitous declines. It is true that monetarists wave away declines of commodity prices on the ground that losses are matched by gains, unless there is money illusion. I regard this as an absurdity as it ignores lags on the hand, and dynamic effects of price declines on credit worthiness and liquidity of loans on the other.

The course of the depression should be divided between 1929-30 on the one hand, and 1931-33 on the other. This distinction is usefully made by Robert Gordon and James Wilcox (Brunner, ed., 1981), but by few others and certainly not by Friedman and Schwartz, who measures the change in money supply always from 1929 at the top to 1932 or 1933 at the bottom, nor by Temin (1976), nor in the extant case, by Minsky. The empty debate between Friedman and Schwartz (now Schwartz alone [Brunner, ed., 1981]) on the one hand, and Temin on the other, as to whether the IS curve moved first or the LM focuses on a model with no international capital movements, no commodity prices, no prices of financial assets. Minsky's paper has the merit of explaining bank failures through changes in asset price, rather than dragging the failures in exogenously. Mishkin's attempt to link consumption to wealth through asset prices extends the analysis slightly but falls well short of connecting asset prices with bank failures and the money supply. Here Wicker's paper on the collapse of the Caldwell chain in Tennessee, Kentucky, North Carolina and Arkansas in November 1930 is particularly helpful. This is connected with speculation in insurance and mortgages, not the farm products which later wrought devastation to banks in the Middle West and South. One should add, to be sure, that the Keynesians either do not attempt to find a cause for the decline in income that preceded the decline in money, as in the case of Temin, or produce emphases on automobiles — Rostow and Aaron Gordon — or housing, Barber who ties it to population change, and Robert Gordon and Wilcox — none of which can explain the precipitous character of the 75 percent drop in automobile sales in the United States from March 1929 to December of the same year, a decline unrelated to the Keynesian consumption function but easily explicable in terms of a sudden drastic credit squeeze.

Contraction

The research of the Italian team set to work by the Banco di Roma has produced a most striking result in emphasizing the troubles of Italian banks well

ahead of those of the Caldwell chain and the Bank of the United States, not to mention the Austrian Creditanstalt. We have not learned about these troubles until fifty years after the events because trouble was taken to keep the information secret. Provincial banks were failing and being rescued in the summer of 1930, and the troubles of the Credito Italiano and the Banca Commerciale Italiana had occupied them from the spring of 1930. Toniolo notes that they followed two lines of action: one to segregate low-quality securities and industrial credits so as to buoy depositor confidence; a second, to assert more effective control over industrial enterprises to increase their profitability and capacity to yield a return (Toniolo, 1980, pp. 207-9). These efforts, such as the creation by Comit of the Società Finanziaria Industriale Italiana (Sofindit), were publicized. The state intervention discussed from the end of 1930 to the February convention between state officials and the Credito Italiano in February 1931, to "demobilize" its industrial investments, was secret. Participations were transferred to a new institution (Società Finanziaria Italiana or Sfi) and losses were absorbed by the Institute of Liquidation.

The secrecy with which these operations were surrounded is of course a double-edged sword. On the one hand, the public is not alarmed. On the other, it is possible in secret dealings of this sort to play favorites, taking care of insiders, and freezing out others. There is no hint of such favoritism in the Italian salvage operations of 1930, but it is strongly suggested that the Bank of the United States was done in December 1930 by the New York clearing house because it was not loved by its competitors. The difficulties of the Creditanstalt in Austria went public in May 1931, those of the Danatbank in Germany two months later, and each started a chain reaction that ended in national bankruptcy. The Reconstruction Finance Corporation started in December 1931 by President Hoover on the suggestion of bankers put to him in October had its effectiveness ruined by a subsequent requirement that bankers receiving loans should have their names made public. This was a partisan Democratic requirement forced through the Congress because of the fact becoming public that Charles G. Dawesbank had received an R.F.C. loan. Dawes was the Republican vice-president of the country, and aid to his bank was sardonically known as the "second Dawes" loan". The requirement proved to be a disaster because thereafter bankers were unwilling to use the R.F.C. as it would advertize the weakness of their institutions. It should also be noted that Hans Luther, the president of the Reichsbank, tried to keep secret in June 1931 the small amount of the loan — \$ 100 millions, when he sought to borrow \$ 1 billion — on the ground that it would disclose how limited his defensive ammunition was. Oskar Wasserman of the Deutsche Bank felt obliged to respond to the news published in Switzerland that a German bank was in trouble by pinpointing the

Danatbank of Jacob Goldschmidt, to prevent the public thinking the “bank in trouble was his” (Born, 1967, p. 89). But Goldschmidt was also an outsider, thoroughly disliked, whose bank was later allowed to fail. Heinrich Irmeler has lately commented that from today’s standpoint, it is not understandable that the Reichsbank could let it fail (1976, p. 287).

Recovery

After a crisis, as noted earlier, the question is whether to undo the emergency measures and return to trend, to limp along, or to accept the new position brought on by crisis measures, and to proceed from there. The choices are neatly illustrated in the recoveries of the 1930s by the histories of Austria, Germany, France and Italy.

The failure of the Creditanstalt in May 1931 set in motion a series of international rescue operations, first through the Rothschild network, and then at the official level through the Bank of International Settlements, which proved to be too little and too late. The government ended up owning the Creditanstalt, and the Creditanstalt in turn owned 64 companies, and 65 percent of the nominal capital of Austrian business enterprise. Despite socialist governments, however, there was no change in the relationships between banks and industry, and government stood aside.

In Germany, the runs of 1931 ended up with the Standstill agreement to freeze foreign deposits in process of withdrawal, the establishment of the Akzept- und Garantiebank in July to provide a third signature for rediscounting at the Reichsbank, and a guarantee of deposit liabilities organized by the Golddiskontobank established at the time of the Dawes loan. Bank capital had been weakened by the maintenance of dividends in the face of losses, and by the device used both in Austria and Germany of banks using reserves to support their own stock in the capital market. The government then came to the rescue with subsidies, advances and purchases of bank shares, as Hardach explains, the last at artificially high prices, and ended up owning percentages of the capital of the major banks ranging from 67 percent for the Norddeutsche Kreditbank to 91 percent for the Dresdener, which absorbed the Darmstädter und Nationalbank. Bit by bit, however, the banks were reprivatized. First public works, and then rearmament plus the four-year plans, provided a quiet time for the banks. Rearmaments were financed outside the banking system. Profits were high, bank deposits piled up, and the government was able to sell off its holding of bank shares.

In Italy in 1914 and in the United States in 1914 and 1941, government created special institutions for war finance. In Germany in the 1930s, small

firms delivering materiel to the armed forces used the so-called Mefo-Wechsel, bills drawn on the Metallische Forschungsgesellschaft m.b.H., a special corporation set up by Siemens, Gutehoffnungshütte, Krupp and Rheinstahl, which in turned rediscounted the paper with the Reichsbank. The paper was guaranteed by the Reich, ran three months, and was usually prolonged to five. At the height, the amount of Mefo-Wechsel, was 12 billion RM. It was not placed with the private market as Mefo-Wechsel, but as blocked exchange or Solawechsel of the Golddiskontobank, for the sake of secrecy. When the demand for these bills dried up, financing switched to Lieferschatzanweisungen (deliverer's certificates) in April 1938. These amounted to 4 billions by the outbreak of the war (Hansmeyer and Caesar, 1976, p. 392 note). This system of defense finance allowed the banks to work their way clear of the government and return to the traditional system of close relations between large banks and large firms.

As Bouvier's paper emphasizes, France was under no pressure to innovate in finance during the 1930s for economic, as opposed to ideological and political reasons. The liquidity piled up by the return flow of capital after 1926 was enormous. There were some salvage operations in the depression, that of the Compagnie Générale Transatlantique for one, and Kuisel refers somewhat vaguely to rescue operations for major banks (1981, p. 96), though Bouvier specifies only the Banque Nationale de Crédit which was allowed to fail in 1931 despite massive infusions from the Bank of France and the Caisse des Dépôts et Consignations, the fund that gathered the deposits of the savings banks and typically invested them in the government bond market. (The Segré report and the capital market study of the O.E.C.D. after the war would both claim that European capital markets suffered from the structural weakness that governments reserved a large fraction of private savings for their own use 1966, 1967).

It was only after the war with the development of the Monnet plan that the French developed their own second-best system of financing industry — the coordination of counterpart funds developed by Marshall-plan aid, and savings gathered by the Caisse des Dépôts et Consignations —, as a supplement to private savings needed by firms expanding in conformity with the plans. It is not clear to me how closely the nationalized banks were required to conform in their lending to the plans, although most observers agree with Bouvier that the reform involved in nationalization was more apparent than real.

It was in Italy above all that the expedient of salvage operations was gradually developed into a new system. IMI was formed in 1931 when business profits were low and the mixed banks were unable to undertake further industrial lending, although the demand for more credit was low and IMI was not very active until after World War II. IRI, formed in 1933, took over the assets of the

Liquidation Institute and of Sofindit and Sfi, provided the banks more capital, and settled down to a program of liquidating the government's holdings and getting back to a private system. The need of the companies it acquired for direction, management and more capital, however, meant that the hope of liquidation was gradually given up, and about 1935, IRI settled down to become a new sort of institution.

The view is widely held, especially in England, that state intervention through IMI as a financing institution and IRI as an administrative one, as developed between the wars, now constitutes the best of all possible worlds. The state is entrepreneur and financier, but indirectly, avoiding state socialism with its overweening bureaucracies, and using intermediaries as a device to obtain industrial policies conforming to social objectives (Holland, 1972). There can be no doubt that IRI has been useful in the postwar period in making good the deficiencies in the Italian capital market, in buying up, for example, major Italian firms in temporary illiquid condition which would otherwise have been sold to foreign investors and in taking advantage of the illiquidity on the one hand, and the imperfection of the market which prevented adequate financing at home. On the other hand, the government has frequently pressed IRI into projects — coal mining in Sardinia, or establishing an automobile plan for Alfa Romeo in Naples — which are generally agreed as uneconomic but socially desirable to sustain employment. To the purist, business organizations should seek to maximize profit so as to achieve Pareto-optimality in resource allocation, while social objectives should be handled through the government's budget, rather than through the market.

Banking Reform

There was little if any reform of the relationships between banks and industry in Austria, England or Spain, while that in France and Germany was minimal or superficial. In Germany, as Hardach explains, there was an investigation in 1933, a reform law in December 1934. This provided for the appointment of a governmental supervisory body, and rules regarding reserve ratios and restraints on speculation and illiquid assets. But there was no fundamental change in the relations between banks and industry. Hans Luther was attracted to the idea of separating investment banking from the deposit banks, but the banks resisted and nothing came of it. When the government had sold off its holdings of bank shares, the system was more or less restored to its earlier position.

French reform had a strongly ideological basis, and went back to the 1924 to 1926 clash between the *Cartel des gauches* — a series of mildly left-wing

governments — and the regents of the Bank of France who refused co-operation on occasion, especially when it came to pledging the gold of the Bank as collateral for a second Morgan loan. When the Popular Front came to power under the Socialist Léon Blum in 1936, it seemed inevitable that the banking system would be reformed as the left wing took its revenge on the *mur d'argent* which had frustrated it a decade earlier. Little of importance was accomplished. The statutes of the Bank of France were revised to eliminate private interests as regents, but that was all. Again after the war, the nationalization of the Bank of France, that of the four largest banks and major insurance companies was a fairly empty gesture — called by Bouvier “nationalization without reform” — with the more important structural changes involving the Caisse and counterpart funds coming later. It remains to be seen whether the new Socialist government under President Mitterand will produce an important change. Nationalization of industrial firms of national prominence adds a dimension to the possibilities. In private control, these firms could escape the regulation of national government by borrowing abroad, as Hardach points out for the larger German firms in the interwar period, but as is particularly the case in the 1970s and 1980s with the rise to eminence of the Eurocurrency money and capital markets.

Minsky has compiled a long list of reforms in the United States: the Federal Deposit Insurance Act, the Security and Exchange Act, the Holding Company Act, new forms of mortgages, the Glass-Steagall Act of 1933 which separated investment and deposit banking, etc. May I call your attention to a new interpretation of the origin of the Glass-Steagall Act of 1933 by Thomas Ferguson? He asserts that in considerable part it originated not in a groundswell of Populist resentment against the Chase Bank and the National City Bank of New York, whose leaders Albert Wiggins and Charles Mitchell had been guilty of highly questionable practices, such as continuing to peddle bonds to their customers after they had learned that default was imminent. The proximate origin of the act, at least in his view, was an attack of Winthrop Aldrich of the Chase Bank, Wiggins' successor, against J.P. Morgan and Co., an attack born of Aldrich's desire to push Morgans out of banking, and to take revenge on the house for its hesitancy in helping to finance the newly-building Rockefeller Center (pp. 707-8, 720-9). Lamont defended the Morgan bank by insisting that J.P. Morgan never solicited deposits, but that its customers found it convenient to keep monies there. Aldrich's public statement of March 9, 1933 advocating a separation of deposit and investment banking was a bombshell, very pleasing to the financial houses that specialized only in security underwriting. Thomas Lamont managed to have most of the objectionable (to him) provisions taken out of the bill, but failed to defeat separation. This was not so much reform,

then, as revenge. The move in the present Congress and present Administration to repeal the Glass-Steagall Act of 1933 and permit banks to underwrite securities may be justified by the growing freedom for security houses to associate themselves with money funds and check-writing facilities. It is objected to by Minsky on the ground that it, and the associated merger movement along state lines, will built up large banks in which the interests of small business may fall further into neglect.

In Italy, the state took over the finance of industry through IMI and IRI, and reformed the banking system *de jure* in 1936. The number of banks fell. The Credito Italiano and Comit sold off their industrial securities and long-term loans to holding companies *de facto* controlled by the state at prices based on their need for liquidity rather than the market value of the assets. The Bank of Italy was given monopoly of note issue, and powers to regulate credit, but left with a large bundle of illiquid assets. Industry with limited profits and forbidden to borrow from the banks was forced to turn to IMI and IRI which raised funds by issuing bonds with state guarantee. Conventions between the three major banks on the one hand the government and the IRI on the other in the early 1934s were solidified into the Bank Law of 1936. Credit became a function of public interest, not private, to prevent the domination of banks by industry, and presumably vice-versa. Banks of ordinary credit, i.e. making short-term loans, were cut off from long-term investment on which decisions were no longer made by banks but by business and government. Private investors had never overcome the handicap of the colonized capital market, and banks went in for such repeated "overtrading" (to use Adam Smith's phrase) that they had to be restrained. This left the provision of long-term finance to government.

Bank Concentration

The papers under review bespeak a process of bank concentration in practically every country but the United States, where, if deregulation takes place, a similar path is likely to be followed. In Britain the merger movement just before and just after the war led to the formation of a big five, now down to three. In France four major deposit banks remained to be nationalized in 1946. In Germany mergers of the 1920s led to the four D. banks which the failure of the Danat in 1931 brought down to 3. In Italy we end up with three, in Austria basically one. The concentration of banking in Spain was equally evident as the big six shrank to five and the three major financial centers from three to two.

The position in some countries is even more centralized as decision-making inside a given bank may be undertaken locally or mainly by the head office.

W.A. Thomas notes that in the 1920s the Midland, National Provincial and Westminster all operated in a centralized fashion, with Barclays decentralized, and Lloyd functioning in a compromised fashion (1978, p. 57). Computers now, if not then, may bring detailed local credit information into a central location, but it is hard to believe that small localized business can receive a sympathetic hearing in the metropolis hundreds of miles away. Large firms, as Hardach emphasizes, have access to the international market when they do not have monopoly profits available for reinvestment. Small business is at a disadvantage, as Minsky mentions, facing money funds without loan officers, as the Macmillan gap in Britain testifies, as the Small Business Administration in the United States implies, and as the establishment of Mefo-Wechsel in the interwar period in Germany indicates.

Here is where a question comes to mind over the IMI, IRI development in Italy. We know that a dual business economy has sprung up, with the development of a large sector of business, especially in the South, which pays no social security charges, nor minimum wages, deducted income taxes, and the like. What does it do for finance? Is it served by IMI and IRI, by the large banks in violation of the Bank Law of 1936 insofar as long-term capital is concerned, or has there developed a free private risk-taking capital market of the Pareto-optimal type in contrast to the risk-averse colonized capital market that is open in the North? Is there a possibility that the non-reporting private economy of the South may one day develop into a resilient and robust economy where risky investment is embraced as a private function rather than one left as a residual for government?

Conclusion

The disparate development in the relations between banking and industry in the countries under review leads me to the eclectic or wishy-washy position between the upholders of the Coase theorem, that institutions adapt to underlying demand and supply conditions, and the polar view of institutionalists that the historical development of institutions determines outcomes.

In Britain banks clung for the most part to short-term finance, the capital market to long-term, after flirtatious interruptions in the 1860s and in 1919-20, afterwards regretted, and a Macmillan gap only partly filled by the creation of two private and one semi-private finance houses in the 1930s (Thomas, 1978, p. 119). There was no reform. In Germany, the system was subject to cataclysmic shock, but refounded virtually intact. The same outcome was recorded in Austria, except for the continued concentration of banks and continued government ownership of the major bank. France prepared reforms, but hesitancy in

putting them through left them virtually meaningless. Spain kept itself outside the main trends, but in 1941 adopted an INI, in imitation of Italy's IRI, but as a positive rather than a reactive policy choice.

The sharpest contrast is between the United States and Italy. Alike in adopting a number of reforms — notably the separation of deposit from investment banking, — they differed in that their principal bail-out institutions, — IRI in Italy and the RFC in the United States — were given very different life expectancies. IRI is now immortal. The RFC has long ago gone to its reward. The Banco di Roma celebrates its centennial in congratulating the country at the happy outcome of the Bank Reform of 1936. In the United States, a Republican administration gets ready to rip out the reforms of the 1930s and return banking to the freedom of its pre-Andrew Jackson days, minus unit banking.

I conclude it would be difficult for any economist to have predicted these outcomes, however effectively we can explain them afterwards. If this strikes the positive economist as heresy, so much the worse.

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