Financial Crises

J. Bischoffsheim (banker): If I have 10,000 francs and spend 5,000, I have 5,000 francs to invest. If I invest 10,000, I am anticipating next year. If my neighbor makes some foolish investment, he cannot lend to me. If I am forced to sell, I cannot sell at home because all do the same. A crisis arrives.

Question: Can the whole nation act like that? France? England? Bischoffsheim: Most assuredly, yes. A system has been introduced to achieve this result. This consists of small payments at first and other payments greatly delayed. Speculation gets involved. If I have a premium, I sell, and I do not calculate whether I have to furnish the rest. Too often these speculations turn out to be otherwise than was hoped: people remain committed. One succeeds in making the second payment, the third, but the fourth and fifth arrive, and there is trouble.


Before we turn to World War I and the financial problems to which it gave rise, it may be well to draw together the threads of discussion of financial crises that have run through the previous chapters. I have produced a book on the subject, beginning, however, only with the South Sea and Mississippi Bubbles (1978b [1989]). Present treatment can serve as a summary of scattered observations in previous pages, without an attempt to speculate on the mystery of why financial crises have tended to appear at roughly ten-year intervals for the last 400 years or so.

A number of crucial questions of finance are tied up in the financial crisis. Are monetary and credit markets stable or unstable? Are causes of crises monetary, including mistakes in decisions about minting, banking, debt conversion, unexpected successes such as the Thiers rente, and the like, or are they real—war, the end of war, good and bad harvests, waves of investment based on innovations such as the canal, railroad, automobile? Could they be either? Both? Is “overtrading,” in the rhetoric of Adam Smith, usually accompanied by “negligence and profusion,” always followed by “revulsion and discredit” (1776 [1937], p. 700)? What are the mechanisms for propagating upswing and precipitating collapse? Is it possible by monetary policy, and especially by designation of a lender of last resort—some agency that takes on the public good of providing liquidity when it is especially tight—to mitigate the effects of, or even eliminate, financial crises? Or is it best to leave them alone, to let the fire burn out?

THE MODEL

The macroeconomic system receives some shock—called by Hyman Minsky, who virtually alone of modern economists is interested in financial instability, a “displacement” (1982). This displacement is that it changes expectations in favor of some range of investments. New investment move to take advantage of them. For it can happen, and historically has happened, reacting to the opportunity is excess demand for credit. This stimulus at some point the displacement moves to more pervasive credit expansion.

Time and again in these pages it is shown that the system is constrained by a tight supply of gold and silver. It has led primitive commodity monies—other forms of paper (and plastic); bank runs that bill of exchange, bank of deposit, Eurocurrencies, temporary scene. In this, money tends to events taking place elsewhere it is mined by events outside the system. Few means of payment only, it is increasing as money substitutes are used.

At some stage in the process it is that the fallacy of composition is at work. Parts, that credit positions are ex- run, and that maintenance of cash in price ahead of others. There is a sense of “We have no crap at present, or under our feet,” wrote Lord Ove 

ber 1845 (O’Brien, ed., 1845 [1919], p. 263). On other occasions it is one of whatever was the object of speculation that will switch into money, and more or less at once. There is a rush, a panic, that intervenes to make clear that it requires. In this circumstance, p

DISPLACEMENT

The displacement that gets the war going takes off old condiments for the fashioning of new. The crises’ repudiating debt caused war between Venice and Turin (Spoon, 1972, p. 55). The main
placement” (1982). This displacement can be monetary or real. What is significant is that it changes expectations in financial markets with respect to the profitability of some range of investments. New profit opportunities are opened up, and people move to take advantage of them. Each individual so moving may be rational, but it can happen, and historically has happened, that the sum total of all the people reacting to the opportunity is excessive. In the course of undertaking new investment, credit is extended. This stimulates business, and credit is extended further. At some point the displacement may lead to business euphoria, to speculation, and to more pervasive credit expansion.

Time and again in these pages it has been stressed that when the macroeconomic system is constrained by a tight supply of money, it creates more, at least for a time. Shortage of gold and silver has led to substitution of copper, pepper, salt—all more primitive commodity monies—or more sophisticated substitutes, such as various forms of paper (and plastic): bank money, bank notes, bills of exchange, especially chains of bills of exchange, bank deposits, open-book credits, credit cards, certificates of deposit, Eurocurrencies, and so on, to bring the process down to the contemporary scene. In this, money broadly defined is endogenous (that is, responsive to events taking place elsewhere in the system) rather than exogenous (that is, determined by events outside the system); or if money is defined so as to be limited to a few means of payment only, its velocity (turnover against national income) increases as money substitutes are increasingly brought into use.

At some stage in the process it becomes clear to a few, and then to more, that the fallacy of composition is at work—that the whole is rather less than the sum of the parts, that credit positions are extended beyond some limit sustainable in the long run, and that maintenance of capital gains depends on getting out of assets rising in price ahead of others. There follows a period of what may be called “distress”: “We have no crash at present, only a slight premonitory movement of the ground under our feet,” wrote Lord Overstone to his friend, G. W. Norman, on 1 November 1845 (O’Brien, ed., 1845 [1971], Vol. 1, p. 368). From time to time the distress abates. On other occasions it intensifies. More and more speculators seek to get out of whatever was the object of speculation, to reduce their distended liabilities, and switch into money; and more and more it becomes clear that not everyone can do so at once. There is a rush, a panic, and a crash—or perhaps a lender of last resort intervenes to make clear that it will furnish the market all the cash it insists it requires. In this circumstance, perhaps belatedly, panic and distress subside.

DISPLACEMENT

The displacement that gets the most attention in these pages is war, and the end of war. War both cuts off old connections in trade and finance and is likely to require the fashioning of new. The crisis of 1557 resulted from the Spanish and French kings’ repudiating debt caused by extensive and prolonged warfare (Ehrenberg, 1896 [1928], pp. 144, 306, 308, 321). That of 1570 was caused by the outbreak of war between Venice and Turkey that demolished the Dolphin Bank in Venice (Spooner, 1972, p. 55). The major financial crisis of 1619 to 1621 was associated
with the beginning of the Thirty Years’ War, which encouraged minting in
Germany and Poland, and particularly monetary adulteration (Kindleberger, 1991a).
Or there may be a lag after a war is over. World War I, as we shall see later, produced
a boom and bust in 1919–20 as German exclusion from world trade seemed to open
up a host of glorious opportunities for French, and especially British, business. Ten
years later it was found that the agricultural comeback after the European loss of
output during the fighting had been overdone on a world scale. This excessive
response took its place among other causes of the 1929 world depression.

Other real causes were good and bad crops, an upsurge in investment in an inno-
vation that built up slowly, as in canals and railways, and discoveries such as the
route to India and Columbus’s voyages to America—or cheaper transport as pro-
vided by the Suez Canal. Substantial displacements of a real sort were the 1793
Reign of Terror in France, independence of the Spanish colonies in America in the
early 1820s, and the Revolution of 1848 in France, which diverted investment from
old to new outlets.

Between real and monetary displacements were silver discoveries—Potosi in
Peru and Guanajucato and Zacatecos in Mexico, and gold in California, Australia,
the Witwatersrand, and Alaska. The crisis of 1557 is said to have been the conse-
quence of a switch of economic fuel from gold to silver as the mines of Potosi came
into operation (Braudel, 1949 [1972], p. 476). Partly real in terms of a break in
British history in India was Plassey with its monetary loot that stimulated specula-
tion in stock of the East India Company and the troubles of the Ayr Bank, which
culminated in the financial crisis of 1772.

Monetary displacements can be more narrowly technical. The recession of 1564
was acute but short following Elizabeth I’s reconeige (de Roover, 1949, p. 200).
Similar shocks to the system from reconeige occurred in 1696, 1763, and 1875 in
countries or from major debt conversion that caused holders of the debt
being retired to look for higher-yielding investments. Displacement might consist
of an unexpected financial success, such as the Baring indemnity, the Thiers rente,
or the Dawes loan of 1924.

One cannot forecast or limit the nature of shocks to the system that can start it
off in a new direction. These are called dummy variables in econometrics; they lie
outside the model.

OBJECTS OF SPECULATION

The model of financial crisis does not require that there be only one object of spec-
ulation. In fact, history shows that there are many possible such objects: securities,
as in the South Sea and Mississippi Bubbles, canal and railway manias, and both
domestic and foreign securities; imported commodities and exports of manufact-
ured goods for distant markets; new banks, insurance companies, building sites,
public land, mortgages, housing, foreign exchange, and, to bring the list to the pre-
sent time, vacation homes, shopping centers, real estate investment trusts (REITs),
loans to less developed countries (LDCs), money funds, and so on. In the sixteenth
century there were manias in lending to the king, as in the Grand Parti in Lyons in

1555; in the seventeenth century the
(p. 209).

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exchange, and even those reading:
(Böhme, 1968, p. 274).

Historically, the burden of proof
1555; in the seventeenth century the more nearly pure mania in tulips in 1636–37 (p. 209).

A mania confined to one relatively narrow object of speculation is likely to have a good chance of wearing itself out with no monetary consequences. When euphoria and speculation spread from object to object and place to place, the likelihood that the monetary system will feel tremors is substantially increased. Greed or, less pejoratively, appetite for income is highly infectious. Seeing one's neighbors or acquaintances get capital gains, if only on paper, tends to make one less careful. The South Sea Bubble was intimately tied to the Mississippi Bubble, as Carswell shows (1960, ch. 5), and it was earlier noted (p. 181) that as the climax in "Change Alley in London passed, speculators left for Hamburg and Amsterdam." In 1847 profits reaped in railroads led new groups to bid up the price of wheat, given the fortuitous circumstance of the disastrous crop of 1846 combined with the potato crop failure. People, commodities, and national markets interact to reinforce speculation and to make it depart further and further from a rational view of the prospect. When panic starts, moreover, it too is communicated from place to place as one bankruptcy triggers others in firms and banks that have lent to the first.

Milton Friedman has argued on a priori grounds that destabilizing speculation is impossible in the long run, because it involves selling when prices fall and buying when prices rise, and anyone who buys high and sells low will lose money and will not survive economically in a Darwinian sense. Since speculators continue to exist, they must buy low and sell high or indulge in stabilizing speculation (1953a). The demonstration is persuasive neither in theory nor historically. In theory it is possible to have two groups of speculators: a more or less permanent inside group that buys at the bottom and drives prices up, sells at the top, and drives them down; and a larger changing group of outsiders, such as servant girls and greengrocers or, in the idiom of the 1929 stock market crash, waiters and bootblacks, who come into the market late and buy at the top, catch on late to the need to mark down values, and sell at the bottom. They lose money, withdraw to the sidelines, and earn a living again as greengrocers or whatever, saving a pittance or a nest egg so that they, or someone like them, can come back into the market next time. In the Mississippi Bubble, a historian notes, the insiders, masters of capital flight, who directly stimulate the agiotage, kept themselves aloof from the fever and realized their gains when they judged the moment to be the most favorable (Chaussinand-Nogaret, 1970, p. 129).

What is interesting is how outsiders and insiders together achieve a periodicity of financial crises roughly ten years apart, from at least 1551 to 1866, when economic theory insists that the outsiders should learn. It is particularly curious that short-term memory is so faulty when long-term memory of financial catastrophes such as the Mississippi Bubble or the German inflation of 1920–23 affects market behavior and governmental policy fifty to a hundred years later. Moreover, one can find abundant reference to old financial crisis: "the crisis of 1857 kept coming back into discussion among Hamburghers and non-Hamburghers when discussing foreign exchange, and even those reading about it would find their hair standing on end" (Böhme, 1968, p. 274).

Historically, the burden of proof runs against a theorist who says that destabiliz-
ing speculation is impossible when the record shows displacement, euphoria, distress, panic, and crisis occurring decade after decade, century after century, and noted by such classical observers as Adam Smith in the eighteenth century and Lord Overstone in the nineteenth, quoted with approval by Walter Bagehot (1852 [1978], Vol. 9, p. 273). The Overstone cycle: “quiescence, improvement, confidence, prosperity, excitement, overtrading, CONVULSION [Bagehot’s capitals], pressure, stagnation, ending again in quiescence” (ibid.). Bagehot adds: “Common sense teaches that booksellers should not speculate in hops, or bankers in turpentine; that railways should not be promoted by maiden ladies, or canals by beneficed clergymen . . . in the name of common sense, let there be common sense” (ibid., Vol. 9, p. 275). But history demonstrates that common sense in these questions is uncommon, at least at ten-year intervals.

Each individual may be rational, expecting to sell out before the collapse, but the fallacy of composition ensures that not all can be. The two groups of speculators are like early and late signers of chain letters: some win, all in the aggregate lose, if only the paper, ink, postage, and effort, offset perhaps to a degree by the amusement. And the less scrupulous at the margin between the shrewd insider and the mindless outsider finds himself subject to moral testing, failures of which have produced a rich crop of metaphors. Bleichröder said of Bethel Henry Strousberg: “The man is very clever, but his manner of undertaking new ventures in order to mend old holes is dangerous, and if he should encounter a [sudden] obstacle, his whole structure may collapse and under its ruins bury millions of gullible shareholders” (Stern, 1977a, pp. 358–9). The same metaphor is elaborated in Baron James de Rothschild’s remark about Emile Pereire: “A man who is in constant monetary straits, stops up one hole while making another and who is compelled to execute a perpetual egg dance among more or less dangerous debit balances, will, in the end, after every fresh success in averting imminent catastrophe, think himself a financial genius” (Emden, 1938, p. 145). Or, as Louis XV said of an able speculator, banker, and financial statesman, Jacques Necker, “He does have a tendency to pull the covers over to his side of the bed” (R. D. Harris, 1979, p. 238).

**THE PROPAGATION (AND COLLAPSE) OF EUPHORIA**

The spread of financial excitement can take place through one or more of a number of channels: commodity or security markets connected by arbitrage, movements of specie or capital, either short or long term, and psychological contagion (Kindleberger, 1991b). Within a single economy, a boom in one commodity or asset may spread to others, including not only stocks and bonds but commodities and even real estate. Internationally, a particularly prominent role in spreading boom and bust is filled by capital movements that build up and up and are then suddenly cut off. Capital movements linked Medina del Campo in Spain to Genoa and Lyons in one channel, to Antwerp and Lyons in another. The spread of debased money from Italy through Switzerland to the Holy Roman Empire in mosaic Germany and on to Poland and Britain produced the hyperinflation and collapse of the *Kipper- und Wipperzeit*. The British crisis of 1621 had additional contributory factors, such as the overvaluation of sterling against silver relative to gold at the mint, while inflation and collapse can be seen to have spread from London after the Prussian victory over New York when German and Austrian states abruptly took pro-cyclical fashion. Collapse on the continent: in September (Kindleberger, 1990a).

Complex patterns of crisis have been identified. The capital flows from France to Spain and back are particularly intricate as it can be seen that the price of cotton in Egypt, Greece, and so on, with Prussia as the primary component, but only days after their *forzoso* in Italy (1 May 1866), the O. M. 11 May. British opinion, apart from the panic, but really a sequel of 1864”, (1919) [character]. The judgment is difficult to be involved in shipping to Greece, but bills by which Turkey had been finan- ced by the Spanish merchant firm, Pinto Perez, was the Paris connection (King, 1936, pp. 24–5). England in imitation of the Crédit Maritime and suggested a source of speculative French banker normally resident in Paris, reporting that the finance compa- ny in Italy, Prussia, Austria, and Italy, all well but only momentarily (Landes, 1854, 1878 came close to) a financial crisis. The Bank of England (Collins, 1914) lends for a time spread liquid to the United States, London (Kindleberger, 1985).

Most of the time, however, it is a process of crisis. R.C.O. Matthews wrote of the 1836–39 crisis that it was “futile to denounce country causal primacy in the cycles” (1929). The statement can be generalized to 1866, 1888–93, 1907, and 1929.

**DISTRESS**

*Distress* is a term borrowed from the period following initial awareness of the financial crisis. During this period, not able to meet its obligations (M
the overvaluation of sterling against German monies and the undervaluation of silver relative to gold at the mint, which drove it abroad. In various ways, however, inflation and collapse can be seen to spread, unevenly from place to place. Euphoria in Berlin after the Prussian victory over France reverberated to Vienna and then to New York when German and Austrian investors bought American railroad bonds in procyclical fashion. Collapse on 1 May 1873 halted the outflow to the United States abruptly and communicated the crash from Europe in May to New York in September (Kindleberger, 1990a).

Complex patterns of crisis have been communicated by abrupt cutbacks in capital flows from France to Spain and Italy in 1866 and again in 1907. The 1866 design is particularly intricate as it combined the end of the Civil War with strongly depressing effects on the price of cotton in Europe and negative impacts on India, Egypt, Greece, and so on, with Prussian mobilization for war against Austria. In the midst of this, but only days after the stock market crisis in Berlin and the corso forzoso in Italy (1 May 1866), the Overend, Gurney crash occurred in England on 11 May. British opinion, apart from Hawtrey, who called it “apparently isolated but really a sequel of 1864” (1919 [1927], p. 177), regarded the crisis as local in character. The judgment is difficult to accept, especially as Overend, Gurney had been involved in shipping to Greece, connected with a system of accommodation bills by which Turkey had been financing the Crimean War, and committed to the Spanish merchant firm, Pinto Perez, which went bankrupt on 7 April through the Paris connection (King, 1936, pp. 242, 247-49). Finance companies created in England in imitation of the Crédit Mobilier further contributed to the 1866 collapse and suggested a source of speculative expansion (Cottrell, 1988). Alfred André, a French banker normally resident in Alexandria, spent a week in London after 11 May, reporting that the finance companies had been ruined, that business was paralyzed in Italy, Prussia, Austria, and Russia, and that France was standing up pretty well but only momentarily (Landes, 1958, p. 287). The bankruptcy of the City of Glasgow Bank in 1878 came close to affecting London but was adroitly fended off by the Bank of England (Collins, 1989). The Baring crisis of 1890 that shut down British lending for a time spread liquidation to Australia, South Africa, southern Latin America, and the United States, which had been borrowing heavily from London (Kindleberger, 1985).

Most of the time, however, it is difficult to tell with assurance where a financial crisis originates. R.C.O. Matthews wrote of Britain and the United States in the 1836–39 crisis that it was “futile to draw any hard-and-fast line assigning to either country causal primacy in the cycle as a whole or in individual phases” (1954, p. 69). The statement can be generalized to multicountry complex cases such as 1857, 1866, 1888–93, 1907, and 1929.

DISTRESS

Distress is a term borrowed from corporate finance, where it is used to characterize the period following initial awareness by a company that in the near future it may not be able to meet its obligations (M. J. Gordon, 1971). In extension to the finan-
cial system as a whole, it represents increasing awareness of financial markets that prices are high, people are beginning to get out of securities, commodities, or whatever else the particular object of speculation has been, into money, and that one is not far from a rout, a precipitous rush from less liquid assets into cash with such slogans coming to mind as "every man for himself," "sauve qui peut," "den Letzten bettissen die Hunde" (the dogs bite the one at the rear), or again in German _Torschlußspanik_ (a panicky rush to get through the door before it closes). Distress is not so much defined as described—uneasiness, stringency, tension—and particularly with the use of meteorological metaphors—"a thundery atmosphere" (Clapham, 1945, Vol. 2, p. 257), or "one feels again the oppressive atmosphere that precedes a storm" (Rosenbaum and Sherman, 1976 [1979], p. 129).

Distress is not inevitably followed by panic and crash. Overstone's presentation of disaster in 1845 was premature by two years. Again in April 1853 four years before the crisis of 1857 he wrote to Norman: "I sincerely hope that the Income Tax may disappear in 1860—but the intervening period will give birth to many unexpected events—among them probably a Monetary and Commercial Crisis—is not this inevitable and are not the symptoms of the coming event beginning to show themselves?" (O'Brien, ed., 1853 [1971], Vol. 2, p. 571). One could mark this as a prescient forecast, but in most predictions it is an error to be prematurely right.

How long distress will stretch out before it either fades away or results in market collapse depends, first, on whether there is a lender of last resort (a subject I address below) and, second and importantly, on psychological factors on which it is impossible to generalize. In Vienna in 1873 it was known by the first of the year that the market was overextended and destined to fall, but speculators refrained from dumping securities as they looked forward to the World Exhibition that was to open in that city on 1 May expecting, or at least hoping, irrationally, that in some unexplained way the exhibition would change the underlying situation. The exhibition duly opened on 1 May, and when it was evident that nothing had changed, the stock market collapsed on 5 and 6 May (Wirth, 1890, p. 519). Acute distress in the London discount market that ended with the bankruptcy of Overend, Gurney on 11 May 1866 began in January of that year when a firm of railway contractors named Watson, Overend & Company—no connection with Overend, Gurney except for the coincidence of name—went bankrupt and called attention to difficulties of the much more illustrious homonymic discount house (King, 1936, p. 240).

Euphoria and speculative excess are characterized by a rush out of money, including credit that the system monetized on the way up, into securities, commodities, land, or whatever else, bidding up their prices. After distress of long or short duration, the process is reversed, and the movement starts out of real assets or securities into money. The precipitant varies from case to case, with no generalization possible. The 1857 crisis started in New York with revelation of the embezzlement of most of the capital of $2 million of the Ohio Life & Trust Company of New York by a clerk. The bank had borrowed from other New York banks, and they from Britain (Gibbons, 1859, pp. 244–53; Evans, 1859 [1969], pp. 63–65). Railroad securities fell in price; banks failed in Philadelphia, Baltimore, Liverpool, and Glasgow. Collapse spread to Scandinavia and thence to Hamburg. Just as rising prices encourage borrowing, more purchases, and still higher prices, so fall-

ing prices spread bankruptcy. Involuntary sacrifice of good assets.

Modern economic theory tends to analyze a change in price produces a gain onaniously results in offsetting loss—prices and price levels is "money real values. This fails to take account viewpoint, price increases atraction, respectively, and produce lead to bankruptcy, moreover, thin cumulating fashion with results the while one group gains and another loss is not likely to be simultaneous or major. On both accounts, the results financial crisis merchants and pro-

scious of losses and cut their speci-
sious gains in real income and in increasing the value of real balance and real income effects of falling prices to be overwhelmed by the primary failure.

**DEALING WITH CRISIS**

A few hard-line believers in efficient markets themselves. When banks, firms, and individuals hold a security, it is at its price right; that is, if no one will be available at some price for the security, it will be sold to the buyer at that price. Banks, firms, and individuals hold securities, and the buying and selling of securities is a process of determination of prices. If the price of a security is determined at a level that is too high, the security will be sold to the buyer at that price. If the price of a security is determined at a level that is too low, the security will not be sold to the buyer at that price.

Both currency and banking systems are often too frequent. The idea is that banks and other financial institutions are needed to ensure that the flow of money is smooth and that there is a constant supply of money for transactions. However, if too many banks and other financial institutions are established, the money supply will be too large and the interest rate will be too low. This will lead to inflation and economic instability. The idea is that banks and other financial institutions are needed to ensure that the flow of money is smooth and that there is a constant supply of money for transactions. However, if too many banks and other financial institutions are established, the money supply will be too large and the interest rate will be too low. This will lead to inflation and economic instability.
ing prices spread bankruptcy. Investors, firms, and banks seek liquidity even at the sacrifice of good assets.

Modern economic theory tends to ignore price changes on the ground that while a change in price produces a gain or loss for one set of economic actors, it simultaneously results in offsetting loss or gain for another. On this score, to worry about prices and price levels is "money illusion," mistaking nominal money values for real values. This fails to take account of dynamic effects of two kinds. From a monetary viewpoint, price increases and decreases stimulate bank expansion and contraction, respectively, and produce macroeconomic change. When price declines lead to bankruptcy, moreover, that bankruptcy spreads through the system in cumulating fashion with results that are not offset elsewhere. In the second place, while one group gains and another loses from price changes, awareness of gain and loss is not likely to be simultaneous or to fall on groups that are identical in behavior. On both accounts, the results of price changes are unlikely to be offsetting. In financial crisis merchants and producers whose prices are falling are painfully conscious of losses and cut their spending well before consumers have become conscious of gains in real income and increase their spending. The effect of falling prices in increasing the value of real balances is also slow to take hold. The real balances and real income effects of falling prices are therefore second-order matters, likely to be overwhelmed by the primary effect of spreading firm bankruptcy and bank failure.

DEALING WITH CRISIS

A few hard-line believers in efficient markets contend that financial crises can cure themselves. When banks, firms, and households need liquidity, the market can provide it if the price is right; that is, if the interest rate goes high enough, some quantity will be available at some price for the most exigent demanders. When the Bank of England raised the discount rate to 10 percent in the crisis of 1847, a fast sloop was sent down the channel after a schooner that had left for America a day or two before with a shipment of gold, with instructions to change course and bring the specie back to England (Andréadès, 1909, p. 334).

Both currency and banking schools in England thought that the market looked too often to the bank for assistance in time of stress, and Lord Overstone, leader of the former, maintained that such support was not necessary: "The resources of the financial system are so great that, even in times of the utmost stringency, large loans are to be had by those offering a sufficient rate of interest" (Morgan, 1943, p. 133). On other occasions, however, Lord Overstone expressed a different conviction: "There is an old Eastern proverb which says you may stop with a bodkin [a dagger or pin to hold up hair] a fountain, which if suffered to flow will sweep away whole cities in its course" (from Tracts, p. 23, quoted by O'Brien in 1971, Vol. 1, p. 95). This was an aberrant view; for the most part Overstone held firmly that paper money should fluctuate like metallic, with equal inelasticity, and that there was no cure for panics (ibid., p. 92).

History records frequent examples of interest rates getting up to ½ percent a day,
which have been transformed into rates of 185 percent a year, but wrongly since the loans are for a few days only. In the United States in crises, loans have been contracted at 3, 4, and 5 percent a day. Most testimony insists, however, that on these occasions no money is available. Unless the Bank of England is lending, one cannot get money even on consols, the proverbial liquid asset that “you can sell on Sunday” (Bagehot, 1873 [1978], Vol. 9, p. 77; 1866 [1978], Vol. 10, p. 99). The problem is created in part by knowledge that the amount of money available is limited. Sir G. C. Lewis, chancellor of the exchequer, said in a speech on 4 December 1857: “Whenever you impose a limit, there is no question that the existence of that limit . . . in moments of crisis must increase the alarm” (Evans, 1859 [1969], p. 203). For Bagehot, writing on the same crisis, the effect of the limit was shown by “the instantaneous rapidity with which the currency is repaired by its removal” (1858 [1978], Vol. 10, p. 68).

LENDER OF LAST RESORT IN CRISIS

Whether there is a theoretical rationale for letting the market find its way out of a panic or not, the historical fact is that panics that have been met most successfully almost invariably found some source of cash to ease the liquidation of assets before prices fell to ruinous levels. An important question is who has responsibility to provide that cash. There can be stalemate in crisis, generally brief, while large banks, central bank, Treasury, and other bodies debate over which of their number has the responsibility to provide the public good of needed liquidity.

Other techniques have been applied, mostly without success. In 1720 either the Sword Blade Bank or the Bank of England—the record is confused as to which but probably not both—redeemed bank notes, for which convertibility was sought, in sixpences counted out with deliberation (Carswell, 1960, p. 185; Andrédès, 1909, p. 428). The technique was employed again—this time unambiguously—by the Bank of England in 1745 when Bonnie Prince Charlie was advancing into England from Scotland, with the time gained from stalling used to obtain a thousand signatures from merchants agreeing to accept bank notes and forgo insistence on coin (Andréades, 1909, p. 151). It was also used on a number of occasions in Scotland (Cameron et al., 1967, p. 68). Again, in France in a run on Bons Grasselin, sight obligations payable in money or copper issued by an owner of building sites in Nantes of that name, payment was made only in sous. As a young clerk to M. Grasselin, Ouvrard was impressed when the trick worked and saved his employer from bankruptcy (Liesse, 1908, p. 7).

More usual and somewhat more successful devices are (1) to guarantee the liabilities of the bank or banks in trouble; (2) to close all banks in a bank holiday; (3) to issue Exchequer bills to merchants in trouble on the security of stocks of merchandise, which bills they then discount with the Bank of England or with banks that can rediscount them. The last, in effect, makes the Treasury the lender of last resort rather than the central bank. Guarantee of bank and firm liabilities was used in Hamburg in 1857, without complete success, again in the Baring crisis of 1890, and by the Goldiskontobank in Community of liabilities in July 1931.

Thomas Joplin, the Newcastle tory and proponent of the panic of 1825; “A great demand for it in periods of panic, and for money to put into circulation; the word in original) (n.d., after 1832, p. 21). Joplin saw: “There are times when they cannot be adhered to with any directness, but are expressed with almost identical words of lender of last resort:

laying down a hard and fast rule is dangerous. It can be laid down as that which the Bank of England being variable, those of the defini- tiona is very inconvenient. . . . The practical rule is simple. (Bagehot, 1873 [1978], Vo...

Bagehot articulated the lender-of-last-resort concept in his commentary version was contained in 1848:

[It is] the great defect of a metallic currency to any sudden demand . . . [the power] . . . when the fact of an extensive sudden[ ition, but decided advantage in introducing circulation. (Ibid., 1848 [1978], Vol. 9, p. 240).

Bagehot himself stated that “the crisis which restrictions upon the Bank were laid down by Ricardo (ibid., Vol. 10, p. 240). T. S. Ashton believed the practice was the role of lender of last resort during 1767, 1773, 1778, 1782, 1785, 1787, and in practice preceded theory (ibid., p. 1). However, that the bank did not make a practice of certain very short-term maturities was some pro-rata propor...
and by the goldiskontobank in Germany with a Haftungsgemeinschaft (community of liabilities) in July 1931.

Thomas Joplin, the Newcastle timber merchant and banking reformer, said apropos of the panic of 1825; "A demand for money in ordinary times, and a demand for it in periods of panic, are diametrically different. The one demand is for money to put into circulation; the other for money to be taken out of it" (italics in original) (n.d., after 1832, p. 21). It follows that rules for the issuance of money differ between ordinary times, which can be called "trend," and financial crisis, as Joplin saw; "There are times when rules and precedents cannot be broken; others when they cannot be adhered to with safety" (ibid., p. 29). The same thought was expressed with almost identical wording by Bagehot, the rationalizer of the doctrine of lender of last resort:

laying down a hard and fast rule is dangerous . . . no certain or fixed proportion of its liabilities can be laid down as that which the Bank [of England] ought to keep . . . the forces of the enemy being variable, those of the defense cannot always be the same . . . I admit this conclusion is very inconvenient . . . The practical difficulties of life cannot often be met by very simple rules. (Bagehot, 1873 [1978], Vol. 9, pp. 207–8)

Bagehot articulated the lender-of-last-resort rule in Lombard Street in 1873. A rudimentary version was contained in his first published article, which appeared in 1848:

[It is] the great defect of a metallic circulation that the quantity of it cannot be readily suited to any sudden demand . . . [the power] should only be used in rare and exceptional cases, but when the fact of an extensive sudden [italics in original] demand is proved, we see no objection, but decided advantage in introducing this new element (a paper money) into a metallic circulation. (Ibid., 1848 [1978], Vol. 9, p. 267)

Bagehot himself stated that "the orthodox doctrine . . . that there is a period of panic at which restrictions upon the issue of legal tender must be removed" had been laid down by Ricardo (ibid., Vol. 11, p. 149). The ascription is dubious, and if any one at the beginning of the century should be given the credit, it would be Sir Francis Baring who called the Bank of England "a bankers' bank" and used the expression le dernier resort (the last resort) in connection with it in 1797, or to Henry Thornton who noted in 1802 that the Bank of England had learned to lend freely in the case of an internal drain (Hayek, 1962, pp. 38–39).

E. V. Morgan contends that the Bank of England was only gradually assuming the role of lender of last resort during the first half of the nineteenth century (1943, p. 240). T. S. Ashton believed the practice went back to the eighteenth, with the bank allowing its discounts of bills to rise in 1734, 1748, 1758–59, 1762, 1764, 1767, 1773, 1778, 1782, 1785, 1793, and 1797 (1959, p. 112). He insists that the practice preceded theory (ibid., p. 111). The practice was not sufficiently developed, however, that the bank did not make frequent mistakes, such as limiting discounts to certain very short-term maturities of bankers' acceptances or restricting discounts to some pro-rata proportion of the monies sought. These limitations typi-
cally worsened the crisis, to support the rationalization of Bagehot a century later that one must lend freely, if at a penalty rate. Moreover, it was not firmly established in the eighteenth century what institution in Britain bore responsibility for supporting the market in crisis—the Bank of England through discounting, or the Exchequer through issues of Exchequer bills as in 1793, 1797, and 1810. As late as 1825 the bank wanted the Treasury to be the lender of last resort with Exchequer bills, but the Treasury insisted that it be the bank. With the help of swapping silver against gold coin with France and the discovery of boxes of £1 and £2 notes left over from the period of suspension between 1797 and 1819, the bank just managed to get by without suspending gold payments again.

In France the governor of the Bank of France, Jacques Laffitte, loaned freely in the crisis of 1818, an intuitive lender of last resort. Thereafter, the Bank of France forgot the lesson. In the 1828 crisis in textiles in Alsace, it first limited discounts to 6 million francs and then refused to accept any paper with Mulhouse or Basle signatures. Instead of alleviating distress, these actions spread panic. At the last minute a syndicate of twenty-six Paris banks came to the rescue with a credit of 5 million francs, and Basle furnished 1.3 million more (Lévy-Leboyer, 1964, pp. 470–71). The episode had very much an ad hoc quality. In 1830 after the July Revolution, a receiver-general in the provinces, having loaned 2 million francs to an honest but imprudent bank, thought to refuse a further loan but decided against stenting on the ground that its refusal would have brought down the bank and spread “grave perturbation in the countryside” (Ministère des Finances et al., 1867, Vol. 3, p. 411). The action of the Bank of France in refusing aid to the provincial banks of issue in the crisis of 1847–48—in fact pushing them under in order to take over a monopoly of the note issue—has been recounted in Chapter 6 (pp. 107–8).

Elsewhere on the Continent, for domestic crises, there was less free discounting by central banks than formation of special funds to buttress weak institutions. In Austria, for example, in the crisis of 1873, a fund of 20 million gulden to be loaned on solid securities was assembled, with 3 million from the government, 5 from the Austrian National Bank, 2 from the Creditanstalt—the three largest institutions in the country—and the remainder widely distributed. It proved inadequate, and bank regulations, which fixed the amount of the note issue, were suspended but with a limit for the excess of 200 million gulden. That also failed to do the trick, and after the Bodenkreditanstalt had been saved, the deflation and liquidation were allowed to stretch on in the decade (März, 1968, pp. 178–81; 1982, p. 189). Hamburg’s Garantie-Diskontovereen (Guaranty Discount Union) of 10 million marks banco in the 1857 crisis was exhausted in three days, and the crisis was not resolved until help finally came from Austria (Rosenberg, 1934, pp. 128–29). These efforts suffered because they involved fixed amounts, which could be seen in advance to be less than assuredly adequate.

Chapter 5 (pp. 92–94) dealt with suspensions of the Bank Act of 1844 in the crises of 1847, 1857, and 1866, how lifting the limit stopped runs in the first and last cases before the limit had, in fact, been exceeded, and indicated that the excess recorded in 1857 was small. It will be remembered that the question arose whether it would be useful to provide an automatic device for suspension of the bank act, and that was rejected. The lender-of-last-resort role is riddled with this sort of ambiguity,

verging on duplicity. One must pro that get into trouble, in order to get and then rescue them when, and if and may spread. Existence of a lender of hazard that exists in insurance: if after a loss due to fire or accident, if the chances of fire or accident. More the lender of last resort has no cont experience builds expectations, w

A further ambiguity resides in central bank presumably seeks to good paper. The dilemma is that it becomes bad. The lender of last resort or prisoner’s dilemma, or game-t know with certainty what the other to do, and yet each must act with

Lending to sound houses introduces resort lending, which inevitably gism, and prejudice. When the Bank of France forced them out of the Crédit Mobilier of Protestant and Jewish hautes bourgeoisie Catholic banker Bontoux in 1887–88, to those of the Comptoir d’Escompte six years later, the establishment took care of its

THE INTERNATIONAL LENDERS

Thus far the lender-of-last-resort

Since it has been established that country to country, however, the nations. Since World War II, the roles of the International Bank for Recon- struction and Development, the International Monetary Fund, and the historical question of one can recognize, an economic but can exist simultaneously for a time, was supplanted by Antwerp and to Amsterdam, to London, and

The reigning center at a given lender of last resort to other countries has spilled over national boundaries. England in the second year of
verging on duplicity. One must promise not to rescue banks and merchant houses that get into trouble, in order to force them to take responsibility for their behavior, and then rescue them when, and if, they do get into trouble, for otherwise trouble may spread. Existence of a lender of last resort creates much the same sort of moral hazard that exists in insurance: if the insured knows he is going to be made whole after a loss due to fire or accident, he is likely to be less careful and thereby increase the chances of fire or accident. Moral hazard is not quite so strong in banking, for the lender of last resort has no contract to bail out bad banking. Over time, however, experience builds expectations, which have nearly the force of contract.

A further ambiguity resides in the fact that if it is obliged to lend in crisis, the central bank presumably seeks to follow rules of helping only sound houses with good paper. The dilemma is that if it holds off too long, what had been good paper becomes bad. The lender of last resort and the money market are locked in a sort of prisoner's dilemma, or game-theory relationship, in which each would like to know with certainty what the other was going to do before it chose what it is going to do, and yet each must act without that knowledge.

Lending to sound houses introduces a note of discretion and judgment into last-resort lending, which inevitably gives rise to questions of insider-outsider, favoritism, and prejudice. When the Bank of France refused to lend to the Pereires and forced them out of the Crédit Mobilier in 1868 or when the Paris banking syndicate of Protestant and Jewish haute banques and deposit banks limited their help to the Catholic banker Bontoux in 1882, but came abundantly to the rescue of the Comtoir d'Escompte six years later, there are bound to be questions raised as to whether the establishment took care of its own and rejected the outsiders and pushy upstarts.

THE INTERNATIONAL LENDER OF LAST RESORT

Thus far the lender-of-last-resort discussion has been confined to domestic crises. Since it has been established that speculative booms and crises are propagated from country to country, however, the question arises as to a lender of last resort between nations. Since World War II, the United Nations has established such institutions as the International Bank for Reconstruction and Development (IBRD, or World Bank) and the International Monetary Fund (IMF) to discharge that role, more or less. The historical question presents itself, however, as to what happened before 1913 and, for subsequent chapters, between 1918 and 1945.

Fernand Braudel hypothesizes that the world economy occupies a given geographical space and always has a pole or center represented by one dominant city or city-state, an economic but not necessarily a political capital. Two centers can exist simultaneously for a time, but in due course one supplants another, as Venice was supplanted by Antwerp and the center moved thereafter successively to Genoa, to Amsterdam, to London, and about 1929 to New York (1977, pp. 80-86).

The reigning center at a given time presumably has a responsibility to act as lender of last resort to other countries in financial crisis when trouble threatens to spill over national boundaries. Thus the Dutch came to the rescue of the Bank of England in the second year of its existence, 1695, by rolling over protested bills,
albeit charging the healthy discount rate of 10 percent (Barbour, 1950 [1966], p. 125). Outside the periphery-center relationship there may be side rescues, as in the Silberzug (train with 10 million marks banco of silver coin sent by Austria to help out Hamburg in the crisis of 1857, after London, Paris, and Berlin had refused to help), or the ¾ billion bond issue floated in France for the czar in 1906. But who helps the center when it gets into trouble? In words that used to be known to every schoolboy, quæ custodiet custositan?

In the discussion of bimetallism in Chapter 4 (pp. 66–67) a series of cases came up in which the two leading financial centers cooperated in stringency. In 1825, when Britain was in trouble, the Bank of France swapped gold for silver. In 1836–39, the Bank of England drew £800,000 in bills on Paris in 1836 and £2 million again in 1839, plus £900,000 more, partly against silver, on the Bank of Hamburg. In late 1846 and early 1847, the Bank of France borrowed 25 million francs (£1 million) from London and sold 50 million worth of rentes to the Russian government. In 1860 and 1861, when silver was undervalued in bimetallic France after the gold discoveries of California and Australia, the Bank of France arranged swaps of silver for gold with the Bank of England, the State Bank of Russia, and an Italian source: 50 million francs for the Bank of England, 31 million for Russia, and 9 million for Italy. The bank wanted to be able to pay out gold if its notes were turned in for coin, not silver, for fear that depositors would start a run on silver for export and sale abroad. It borrowed an additional £2 million (50 million francs) from the London market, drawn in gold—half through Rothschilds and the other half divided among five private bankers. The State Bank of Russia had initiated its arrangement because it wanted the silver for coining. Fending off a potential run successfully was said to have ended a “war of the banks,” presumably referring to a lack of cooperation earlier between the Bank of England and the Bank of France (Plessis, 1856, pp. 241–46). In the crisis of 1890 the Bank of England asked the Russian State Bank not to draw on its deposit with the bank for the time being but, on the contrary, to lend it £800,000 in gold; it also drew £3 million in gold on the Bank of France—all this to meet the Baring crisis. In 1907 the Bank of France bought sterling bills with gold shipped to London to help the Bank of England meet a drain from New York, this time to the extent of 80 million francs and without having been asked.

These operations are discussed very little in banking literature, partly perhaps because they were felt to involve a loss of prestige on the part of the borrowing country. Viner calls the 1836 operation of the Bank of England “doubtless reluctant” and adds that the British thought it humiliating (1937, p. 273). Tooke characterized it as a “discreditable expedient,” a “circumstance of almost national humiliation” (Clapham, 1945, Vol. 2, p. 220); he was opposed to last-resort lending in all circumstances. In France, Thiers boasted of the generosity of the French toward the British but suggested that the action should not be repeated (Viner, 1937, p. 273). Sensitivity of central banks and governments at this time is also underlined by the Bank of England’s prickly negative reaction to the Prussian National Bank’s offer to help in 1873 by lending gold.

Such responses to central bank cooperation seem excessive to modern observers who are used to seeing central bank swaps as lender-of-last-resort operations as they have grown up outside the IMF, and in large part in place of IMF help, for countries with broad financial markets. As French economist and public figure, one of the strong minority in the Commission of 1867, was prepared to think along these exchanges as a form of central bank cooperation and other measures:

One of the most desirable and the simplest ways of preserving the securities of commercial and political relations of the great powers is to lead to the creation of an international bank—each of the great states is to have its own bank in London, Paris, and Berlin. (Ministère des Finances, 1867)

Chevalier was ahead of his time in recognizing the need for such an entity.

ABSENCE OF A LENDER OF LAST RESORT

Once the technique was developed, it was applied to a variety of situations, including the German and Austrian crisis of 1882 and the Russian crisis of 1883, with success. The Baring crisis of 1873 was no exception. One writer has drawn the conclusion that the industrial revolution, the commercial expansion, and the financial development of the 19th century were delayed by the absence of a lender of last resort.

It is clear, however, that absence of a lender of last resort does not lead to industrial underdevelopment. One writer has drawn the conclusion that the industrial revolution, the commercial expansion, and the financial development of the 19th century were delayed by the absence of a lender of last resort.

In Austria in 1873 the government and the Rothschilds saved the Baring firm from collapse by providing a loan of £7 million. In Russia in 1867 the government provided a similar loan of £5 million to the Baring firm. In France in 1882 the government provided a loan of £10 million to the Baring firm. In Germany in 1883 the government provided a loan of £15 million to the Baring firm. In Italy in 1895 the government provided a loan of £20 million to the Baring firm. In Spain in 1902 the government provided a loan of £30 million to the Baring firm. In Portugal in 1905 the government provided a loan of £40 million to the Baring firm. In Brazil in 1910 the government provided a loan of £50 million to the Baring firm. In Chile in 1915 the government provided a loan of £60 million to the Baring firm. In Argentina in 1920 the government provided a loan of £70 million to the Baring firm. In Venezuela in 1925 the government provided a loan of £80 million to the Baring firm. In Mexico in 1930 the government provided a loan of £90 million to the Baring firm. In Colombia in 1935 the government provided a loan of £100 million to the Baring firm. In Peru in 1940 the government provided a loan of £110 million to the Baring firm. In Ecuador in 1945 the government provided a loan of £120 million to the Baring firm. In Bolivia in 1950 the government provided a loan of £130 million to the Baring firm. In Uruguay in 1955 the government provided a loan of £140 million to the Baring firm. In Paraguay in 1960 the government provided a loan of £150 million to the Baring firm. In Brazil in 1965 the government provided a loan of £160 million to the Baring firm. In Argentina in 1970 the government provided a loan of £170 million to the Baring firm. In Chile in 1975 the government provided a loan of £180 million to the Baring firm. In Peru in 1980 the government provided a loan of £190 million to the Baring firm. In Venezuela in 1985 the government provided a loan of £200 million to the Baring firm. In Mexico in 1990 the government provided a loan of £210 million to the Baring firm. In Colombia in 1995 the government provided a loan of £220 million to the Baring firm. In Ecuador in 2000 the government provided a loan of £230 million to the Baring firm. In Bolivia in 2005 the government provided a loan of £240 million to the Baring firm. In Uruguay in 2010 the government provided a loan of £250 million to the Baring firm. In Paraguay in 2015 the government provided a loan of £260 million to the Baring firm. In Brazil in 2020 the government provided a loan of £270 million to the Baring firm. In Argentina in 2025 the government provided a loan of £280 million to the Baring firm. In Chile in 2030 the government provided a loan of £290 million to the Baring firm. In Peru in 2035 the government provided a loan of £300 million to the Baring firm. In Venezuela in 2040 the government provided a loan of £310 million to the Baring firm. In Mexico in 2045 the government provided a loan of £320 million to the Baring firm. In Colombia in 2050 the government provided a loan of £330 million to the Baring firm. In Ecuador in 2055 the government provided a loan of £340 million to the Baring firm. In Bolivia in 2060 the government provided a loan of £350 million to the Baring firm. In Uruguay in 2065 the government provided a loan of £360 million to the Baring firm. In Paraguay in 2070 the government provided a loan of £370 million to the Baring firm.
with broad financial markets. As early as 1867, however, Michel Chevalier, the French economist and public figure, Saint-Simonist adviser to Napoleon III, in a strong minority in the Commission of Inquiry into Money and Credit in Paris in 1867, was prepared to think along these lines. After recommending foreign bills of exchange as a form of central bank reserves along with gold, an un-French idea for the time and on frequent occasion in the twentieth century, he went on to suggest other measures:

One of the most desirable and the simplest is an entente with a great bank of a country and with other countries, such as has been the case on occasion between the Bank of France and the Bank of England. The bank of the country hurt by a crisis would receive aid from the principal banks of the country where affairs go better. Good relations, exchange of assistance between the great banks of different countries would have more happy effects. In states where there are not dominant banks, they could be replaced by groups of banks such as the banks of Scotland. (Ministère des Finances et al., 1867, Vol. 6, 184)

Chevalier was ahead of his time in other respects: “One does not see why the progress of commercial and political relations among the peoples of Europe should not lead to the creation of an international bank, which would have at least one seat in each of the great states” (1850 [1866], p. 653).

ABSENCE OF A LENDER OF LAST RESORT

Once the technique was developed of getting help from a sound bank or banking system in time of crisis, this was almost always done in some fashion or other. There were exceptions: the rescue operations for the South Sea Company in 1720, for the German and Austrian Maklerbanken and Baubanken in 1873, and for the Union Générale in 1882 were all distinctly limited and grudging.

One writer has drawn the conclusion that the collapse of the South Sea Bubble delayed the industrial revolution, which otherwise might have followed closely on the commercial expansion of the seventeenth century. The judgment is speculative. It is clear, however, that absence of a soft landing increases timidity in the commercial world, as evidenced by the strengthening of the Bubble Act in 1734 to forbid bargains where the vendor did not own the stock at the time, that is, short sales. London stopped growing from 1720 to 1750. The reason may have been the absence of a lender of last resort in the earlier year (Carswell, 1960, pp. 270–71).

In Austria in 1873 the government, the Austrian National Bank, Creditanstalt, and the Rothschilds saved the Bodenkreditanstalt only, but “the cumulative forces of deflation were otherwise allowed to wreak havoc unchecked, ushering in thereby a period of extreme entrepreneurial caution and of more than ordinary aversion of banking toward new and untried business ventures” (März, 1968, p. 176). The 1882 collapse of the Union Générale slowed expansion in France, although the crisis was a local one, not reverberating to the Continent as a whole or beyond. How much the readiness of the hautes banques to crush their rival contributed to slow French economic growth at the end of the nineteenth century the historian of the episode
does not attempt to estimate, as his conclusions are drawn in political rather than macroeconomic terms (Bouvier, 1960, pp. 280-81).

Prior to the first lender-of-last-resort operation that I have noted—the Dutch operation on behalf of the Bank of England in 1695—were financial crises prolonged because of their absence? The same puzzling ten-year periodicity can be found before and after the age of credit banking (A. Marshall, 1924, p. 305; de Roover, 1949, p. 200). Commenting on the periodicity of the sixteenth century, characterized by wars, reprisals, and other disturbances, de Roover says that the depression of 1586–88 was “particularly severe” and that the most severe was that starting in 1620, which lasted four or five years (ibid., p. 201). Other crises singled out for attention include that of 1557 caused by bad harvest in 1556, the Dutch need to export specie to the Baltic to purchase grain (Friis, 1953), and the resumption of war after 1552 that led to expansion of credit, especially in Lyons and Antwerp, with subsequent ruin to those markets when kings defaulted (Ehrenberg, 1896 [1928], p. 307).

It is virtually impossible, however, to compare financial crises before and after about 1700. Earlier crises lacked a lender of last resort, to be sure, but they also lacked a number of important aspects of the elastic credit mechanism that had given rise to subsequent expansions. Apart from bills of exchange, money was metallic and hence inelastic except for debasement, with no bank notes or any bank lending. Need for a lender of last resort grew up with the development of other forms of bank credit than the bill of exchange, which other forms increased the instability—or perhaps one should say probably increased the instability—of the cycle. Real causes interacted with money and credit in both periods, the real causes being war, harvests, and other interruptions to trade. But while the ten-year periodicity makes it appear that similar causes were at work, it is hard to avoid the conclusion that instability of credit played a larger role, real causes a smaller one, after 1700 than before.

**DID THE PERIODIC FINANCIAL CRISIS GO AWAY?**

Many economic historians contend that financial crises somehow changed in nature late in the nineteenth century and in some views even disappeared altogether. The case is argued from the 1847, 1857, 1866 sequence and the fact that Britain escaped the 1873 crisis in central Europe with help from a highly volatile discount policy. From 1866 on there was no financial crisis in Britain, apart from the isolated collapse of the City of Glasgow Bank in 1878, until 1890 and that was exclusively British, unconnected with the Panama crisis of 1892 in France (Simon, 1971) or the gold run of 1893 in the United States rooted in the parochial Sherman Silver Purchase Act of 1890 (Lauck, 1907). The conclusion ignores the foreign bond bubble of 1913 that probably would have led to a regular financial crisis if outbreak of war had not produced a crisis of very different character (Morgan, 1952, ch. 1). It ignores as well the 1919–20 boom and bust following the end of the war with classic lines of overtrading, revulsion, and discredit, plus, in the opinion of a Danish economist, not undisputed, the absence of a lender of last resort, producing a quasi-permanent depression (Pedersen, 76).

The same general view is empties financial crisis between 1882 and 1913. The case becomes stronger if very slight recessions during the war until the first OPEC price rise is taken into account. The economist who emphasizes the increased weight of government in the private sector (1982, p. 27), Government of last resort, ready to engage in any combination of operations are at work, was far from out of here. British monetary economy (ignoring 1890) to the acquisition of the discount rate. The concept of the financial crisis model has no evidence of the fringe-bank crisis, World debt crisis, and the savings crisis.

Whatever the answer, World War II history. There were later crises, 1919–20. The whole, howe- ever, was altered. Some of the same factors with all its qualifications and arguments were larger, deeper, and d.

**SUGGESTED SUPPLEMENT**


In German

Wirth, Geschichte der Finanzwirtschaft, 1858 (1890).


The same general view is embodied in the statement that France experienced no financial crisis between 1882 and 1924 (Lévy-Leboyer, ed., 1977b, p. 30).

The case becomes stronger after World War II when there were no depressions, and very slight recessions when the rate of growth slowed down, from the end of the war until the first OPEC price rise in 1973. This experience produced from Minsky, the economist who emphasizes the instability of credit, the opinion that the vastly increased weight of government in gross national product tended to stabilize the private sector (1982, p. 27). Government in this regard has been called the borrower of last resort, ready to engage in deficit spending and often forced into it by the fall in tax receipts and rise in welfare benefits in recession or depression (McClam, 1982, p. 262). The reasoning is inapplicable to 1880–1914 when the role of government, except in war, was far smaller than today. There is something of a mystery here. British monetary economists would ascribe the absence of crisis after 1866 (ignoring 1890) to the acquisition of central banking experience and skill in manipulating the discount rate. The same could not be said of France where discount rates were left unchanged for decades on end after the 1856–65 interval of active manipulation. Perhaps the French economy was stabilized by stability in England. That the financial crisis model has not been put completely out of its misery, however, is evidenced by the fringe-bank crisis in London in 1973–74 (Reid, 1982), the Third World debt crisis, and the savings-and-loan debacle in the United States.

Whatever the answer, World War I marked a watershed in European financial history. There were later echoes to the pre-1866 past in such a financial crisis as 1919–20. On the whole, however, the structure of the financial world had irrevocably altered. Some of the same principles—the doctrine of the lender of last resort with all its qualifications and ambiguities—were still valid. But financial movements were larger, deeper, and different in nature as well as in pervasiveness.

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IV

THE INTERWAR YEARS

The financial history of Europe over the first half of the twentieth century is one of repeated crises, with a century of relative peace interrupted by two world wars. Financial markets, which had been relatively stable and developed in the late 19th century, suffered from the turmoil of war and its aftermath. The economic systems that emerged from World War I were marked by high levels of debt and instability, with the interwar period characterized by a series of financial crises.

Chapter 16 opens with the financial crisis of 1919, which marked the beginning of a period of economic disorder for almost a decade. The United States, which had been the dominant force in financial markets before the war, found itself caught up in a cycle of inflation and deflation. France, meanwhile, struggled to pay its war indemnity to Germany in 1871 and later, as the United Kingdom and the French Republic competed for dominance in the world economy. The financial aftermath of World War I also led to a reevaluation of the role of gold in international finance.

The financial history of Europe in the interwar years is marked by the struggle to recover from the devastation of World War I. The economic systems that emerged were marked by high levels of debt and instability, with the interwar period characterized by a series of financial crises.

Chapter 18 deals with the restoration of gold standards, echoing the restoration of gold in the aftermath of World War I.