

## CHAPTER 2

# *Anatomy of a Typical Crisis*

### History vs. Economics

For historians each event is unique. Economics, however, maintains that forces in society and nature behave in repetitive ways. History is particular; economics is general. In the chapters that follow, we shall set out various phases of speculative manias leading to crisis and collapse, with a wealth of historical explanation. In this chapter we are interested in the underlying economic model of a general financial crisis.

Note that we are not presenting here a model of the business cycle. The business cycle involves a full revolution of the economic wheel, while boom and bust deal only with that portion of the cycle covering the final upswing and the initial downturn. Nor are we concerned with the periodicity of both cycles and crises. Such a discussion would broaden the subject to different kinds of cycles: the Kitchin cycle of thirty-nine months, based on the rhythm of fluctuations in business inventories; the Juglar cycle of seven or eight years, related to

business investment in plant and equipment; the Kuznets cycle of twenty years, from population changes from generation to generation and the resultant rise and fall in the construction of housing; and possibly the more dubious and elusive Kondratieff cycle, set off by major inventions such as the railroad and the automobile.<sup>1</sup> Along with other observers, we note the spacing of crises ten years apart in the first half of the nineteenth century (1816, 1826, 1837, 1847, 1857, 1866) before the timing became more ragged. We make no attempt to explain this rhythm, beyond suggesting that some time must elapse after one speculative mania that ends in crisis before investors have sufficiently recovered from their losses and disillusionment to be willing to take a flyer again.

### The Model

We start with the model of Hyman Minsky, a man with a reputation among monetary theorists for being particularly pessimistic, even lugubrious, in his emphasis on the fragility of the monetary system and its propensity to disaster.<sup>2</sup> Although Minsky is a monetary theorist rather than an economic historian, his model lends itself effectively to the interpretation of economic and financial history. Indeed, in its emphasis on the instability of the credit system, it is a lineal descendent of a model, set out with personal variations, by a host of classical economists including John Stuart Mill, Alfred Marshall, Knut Wicksell, and Irving Fisher.

According to Minsky, events leading up to a crisis start with a "displacement," some exogenous, outside shock to the macroeconomic system. The nature of this displacement varies from one speculative boom to another. It may be the outbreak or end of a war, a bumper harvest or crop failure, the widespread adoption of an invention with pervasive effects—

canals, railroads, the automobile—some political event or surprising financial success, or a debt conversion that precipitously lowers interest rates. But whatever the source of the displacement, if it is sufficiently large and pervasive, it will alter the economic outlook by changing profit opportunities in at least one important sector of the economy. Displacement brings opportunities for profit in some new or existing lines, and closes out others. As a result, business firms and individuals with savings or credit seek to take advantage of the former and retreat from the latter. If the new opportunities dominate those that lose, investment and production pick up. A boom is under way.

In Minsky's model, the boom is fed by an expansion of bank credit which enlarges the total money supply. Banks typically can expand money, whether by the issue of bank notes under earlier institutional arrangements, or by lending in the form of additions to bank deposits. Bank credit is, or at least has been, notoriously unstable, and the Minsky model rests squarely on that fact. This feature of the Minsky model is incorporated in what follows, but we go further. Before banks had evolved, and afterward, additional means of payment to fuel a speculative mania were available in the virtually infinitely expansible nature of personal credit. For a given banking system at a given time, monetary means of payment may be expanded not only within the existing system of banks, but also by the formation of new banks, the development of new credit instruments, and the expansion of personal credit outside of banks. Crucial questions of policy turn on how to control all these avenues of monetary expansion. But even if the instability of old and potential new banks were corrected, instability of personal credit would remain to provide means of payment to finance the boom, given a sufficiently thoroughgoing stimulus.

Let us assume, then, that the urge to speculate is present, and is transmuted into effective demand for goods or financial assets. After a time, increased demand presses against

the capacity to produce goods or the supply of existing financial assets. Prices increase, giving rise to new profit opportunities and attracting still further firms and investors. Positive feedback develops, as new investment leads to increases in income that stimulate further investment and further income increases. At this stage we may well get what Minsky calls "euphoria." Speculation for price increases is added to investment for production and sale. If this process builds up, the result is often, though not inevitably, what Adam Smith and his contemporaries called "overtrading."

Now overtrading is by no means a clear concept. It may involve pure speculation for a price rise, an overestimate of prospective returns, or excessive "gearing."<sup>3</sup> Pure speculation, of course, involves buying for resale rather than use in the case of commodities, or for resale rather than income in the case of financial assets. Overestimation of profits comes from euphoria, affects firms engaged in the productive and distributive processes, and requires no explanation. Excessive gearing arises from cash requirements which are low relative both to the prevailing price of a good or asset and to possible changes in its price. It means buying on margin, or by installments, under circumstances in which one can sell the asset and transfer with it the obligation to make future payments. As firms or households see others making profits from speculative purchases and resales, they tend to follow. When the number of firms and households indulging in these practices grows large, bringing in segments of the population that are normally aloof from such ventures, speculation for profit leads away from normal, rational behavior to what have been described as "manias" or "bubbles." The word "mania" emphasizes the irrationality; "bubble" foreshadows the bursting.

As we shall see in the next chapter, the object of speculation may vary widely from one mania or bubble to the next. It may involve primary products, especially those imported from afar (where the exact conditions of supply and demand

are not known in detail), or goods manufactured for export to distant markets, domestic and foreign securities of various kinds, contracts to buy or sell goods or securities, land in the country or city, houses, office buildings, shopping centers, condominiums, foreign exchange. At a late stage, speculation tends to detach itself from really valuable objects and turn to delusive ones. A larger and larger group of people seeks to become rich without a real understanding of the processes involved. Not surprisingly, swindlers and catchpenny schemes flourish.

Although Minsky's model is limited to a single country, overtrading has historically tended to spread from one country to another. The conduits are many. Commodity prices may rise, and so may the prices of securities that are traded internationally. Speculation in exports, imports, or foreign securities furnishes direct links between markets of countries. By these means euphoria and overtrading in one country can be fed by capital inflows from foreign purchases of particular goods or assets. And if these capital flows lead to inflows of gold or silver, monetary expansion in the original country is enhanced, as the boom is fueled by additional supplies of money on which higher pyramids of credit can be supported. In an ideal world, of course, a gain of specie for one country would be matched by a corresponding loss for another, and the resulting expansion in the first case would be offset by the contraction in the second. In the real world, however, while the boom in the first country might gain speed from the increase in the supply of reserves, or "high-powered money," it might also rise in the second despite the loss in monetary reserves, as investors respond to rising prices and profits abroad by joining in the speculative chase. In other words, the potential contraction from the shrinkage on the monetary side might be overwhelmed by the increase in speculative interest and the rise in demand. For the two countries together, in any event, the credit system is stretched tighter.

As the speculative boom continues, interest rates, velocity

of circulation, and prices all continue to mount. At some stage, a few insiders decide to take their profits and sell out. At the top of the market there is hesitation, as new recruits to speculation are balanced by insiders who withdraw. Prices begin to level off. There may then ensue an uneasy period of "financial distress." The term comes from corporate finance, where a firm is said to be in financial distress when it must contemplate the possibility, perhaps only a remote one, that it will not be able to meet its liabilities.<sup>4</sup> For an economy as a whole, the equivalent is the awareness on the part of a considerable segment of the speculating community that a rush for liquidity—to get out of other assets and into money—may develop, with disastrous consequences for the prices of goods and securities, and leaving some speculative borrowers unable to pay off their loans. As distress persists, speculators realize, gradually or suddenly, that the market cannot go higher. It is time to withdraw. The race out of real or long-term financial assets and into money turns into a stampede.

The specific signal that precipitates the crisis may be the failure of a bank or firm stretched too tight, the revelation of a swindle or defalcation by someone who sought to escape distress by dishonest means, or a fall in the price of the primary object of speculation as it, at first alone, is seen to be overpriced. In any case, the rush is on. Prices decline. Bankruptcies increase. Liquidation sometimes is orderly, but more frequently degenerates into panic as the realization spreads that there is only so much money, and not enough to enable everyone to sell out at the top. The word for this stage—again, not from Minsky—is "revulsion." Revulsion against commodities or securities leads banks to cease lending on the collateral of such assets. In the early nineteenth century this condition was known as "discredit." "Overtrading," "revulsion," "discredit"—all these terms have a musty, old-fashioned flavor. They are imprecise, but they do convey a graphic picture.

Revulsion and discredit may go so far as to lead to panic (or

as the Germans put it, *Torschlusspanik*, door-shut-panic), with people crowding to get through the door before it slams shut. The panic feeds on itself, as did the speculation, until one or more of three things happen: (1) prices fall so low that people are again tempted to move back into less liquid assets; (2) trade is cut off by setting limits on price declines, shutting down exchanges, or otherwise closing trading; or (3) a lender of last resort succeeds in convincing the market that money will be made available in sufficient volume to meet the demand for cash. Confidence may be restored even if a large volume of money is not issued against other assets; the mere knowledge that one can get money is frequently sufficient to eliminate the desire.

Whether or not there should be a lender of last resort is a matter of some debate. Those who oppose the function argue that it encourages speculation in the first place. Supporters worry more about the current crisis than about forestalling some future one. There is also a question of the place for an international lender of last resort. In domestic crises, government or the central bank (when there is one) has responsibility. At the international level, there is neither a world government nor any world bank adequately equipped to serve as a lender of last resort, although some would contend that the International Monetary Fund since Bretton Woods in 1944 is capable of discharging the role.

Dilemmas, debates, doubts, questions abound. We shall have more to say about these questions later on.

### The Validity of the Model

The general validity of the Minsky model will be established in detail in the chapters that follow. At this stage we simply want to argue against two contrary positions. The first main-

tains either that each crisis is unique, a product of a unique set of circumstances, or that there are such wide differences among economic crises as a class that they should be broken down into various species, each with its own particular features. The second position is that while the Minsky model may have been true of some earlier time, today things are different. This argument cites structural changes in the institutional underpinnings of the economy, including the rise of the corporation, the emergence of big labor unions and big government, modern banking, speedier communications, etc., etc. These changes, it is alleged, make a model of crises based on the instability of credit uninteresting except to antiquarians.

The issue cannot of course be resolved to the satisfaction of everyone. Truth is multidimensional, and on issues of this kind, differences of approach to truth can be justified on the basis of taste or depth of perception. The argument here is that the basic pattern of displacement, overtrading, monetary expansion, revulsion, and discredit, generalized in modern terms by the use of the Minsky model, describes the nature of capitalistic economies well enough to direct our attention to crucial problems of economic policy.

Take first the contrary view that each crisis is unique, a product of a series of historical accidents. This has been said about 1848 and about 1929,<sup>5</sup> and is implied by the series of historical accounts of separate crises referred to throughout the text below. There is much to support the view. Individual features of any one crisis will differ from those of another: the nature of the displacement, the object or objects of speculation, the form of credit expansion, the ingenuity of the swindlers, the nature of the incident that touches off revulsion. But if one may borrow a French phrase, the more something changes, the more it remains the same. Details proliferate; structure abides. Our interest in this chapter is structure; details engage us below.

More compelling is the suggestion that the genus "crises"

should be divided into species labeled commercial, industrial, monetary, banking, fiscal, financial (in the sense of financial markets), and so on, or into groups called local, regional, national, and international. Taxonomies along such lines abound. Although there is something to be said for such classification, we reject it for two reasons. In the first place, we are concerned primarily with international financial crises involving a number of critical elements—speculation, monetary expansion, a rise in the prices of assets followed by a sharp fall, and a rush into money. Crises that fall outside these dimensions do not, on the whole, concern us, and there are enough within the category to suggest that the broad genus is worthy of study. Second, this book is sufficiently occupied with general features; to penetrate to deeper levels would overburden the analysis by burying it in detail.

A more cogent attack on the model used here comes from the late Alvin Hansen, who claimed that something closely akin to it applied satisfactorily to the world economy prior to the middle of the nineteenth century but then underwent sea-change:

Theories based on uncertainty of the market, on speculation in commodities, on "overtrading," on the excesses of bank credit, on the psychology of traders and merchants, did indeed reasonably fit the early "mercantile" or commercial phase of modern capitalism. But as the nineteenth century wore on, captains of industry . . . became the main outlets for funds seeking a profitable return through savings and investments.<sup>6</sup>

In the book from which this quotation is drawn, Hansen was setting out to explain the business cycle. Before getting to the Keynesian analysis, of which he was the foremost expositor, he wanted to clear away earlier explanations. In my judgment, he was wrong—not about the rise of the modern corporation or the importance of savings and investment, but on the corollary that these required the dismissal of the earlier views on speculation in commodities and securities and on instability in credit and prices. It is understandable that

Hansen's attention was drawn to savings and investment and the forces that lay behind them, but ignoring uncertainty, speculation, and instability does not mean that they have disappeared.

The heart of this book is that the Keynesian theory is incomplete, and not merely because it ignores the money supply. Monetarism is incomplete, too. A synthesis of Keynesianism and monetarism, such as the Hansen-Hicks IS-LM curves that bring together the saving-investment (IS) and liquidity-money (LM) relationships, remains incomplete, even when it brings in production and prices (as does the most up-to-date macroeconomic analysis), if it leaves out the instability of expectations, speculation, and credit. The Keynesian and Friedmanite schools, along with most modern macroeconomic theories that synthesize them, are perhaps not so much wrong as incomplete. At the same time, the omissions under particular circumstances may be so critical as to make both Keynesianism and monetarism misleading.

### The Model's Relevance Today

One place where the model surely applies today is foreign-exchange markets, in which prices rise and fall in wide swings, despite sizable intervention in the market by monetary authorities, and in which exchange speculation has brought large losses to some banks. Financial crisis has been avoided, but in the opinion of some observers, not by much.

Again, contemplate the enormous external debt of the developing countries, built up not only since the rise of oil prices but importantly—a widely ignored fact—in the several years before that time, as multinational banks swollen with dollars tumbled over one another in trying to uncover new foreign borrowers and practically forced money on the less-

developed countries (LDCs). Some of the chickens have already come home to roost, in defaults by Zaïre and Peru; others, such as Pertamina in Indonesia, have had close calls. In this area the world remains in "distress" as it contemplates uneasily the possibility of widespread default, euphemistically called "debt-rescheduling" and demanded by at least some LDCs, though the more important debtors have thought better of it.

The model also applies in part in the domestic sphere. The biggest economic problem, to be sure, is how to expand employment without inflation, and here the model helps no more than do pure Keynesianism or pure monetarism. But mere mention of Billie Sol Estes and Bert Lance is sufficient to indicate that speculation and expansive bankers are not relics of a distant past, and West Coast speculation in housing has raised prices to giddy heights from which sharp falls, speculator bankruptcies, and even bank failures are not impossible, though the problem is regionally limited. The real domestic concern is not over speculative upswings but over revulsion and discredit without the antecedent overtrading. A number of analysts darkly forecast persistent movements from stocks into bonds, from bonds into money, and even from money into goods.

Beyond insisting, however, that the model cannot be dismissed out of hand, as Hansen tried to do, I take no position on its present applicability to the domestic financial picture in the United States, as opposed to the international monetary sphere, where it clearly does apply. This is a work in history, not economic forecasting.