CHAPTER 1

An Overview

The Great Depression. This fervid phrase, pregnant with emotions, evocative of a time few wish to repeat, has at least two meanings. For some, it is the horrendous debacle of 1929 into early 1933. For many others, it is the entire decade of the 1930s for which *The Grapes of Wrath* stands as a metaphor, with its Dust Bowl milieu where collective action among the downtrodden shielded them from being destroyed. Discussions with and reminiscences of those who lived through that decade illustrate this quite clearly. The oral histories in *Hard Times* (Terkel 1970) give particularly vivid examples.[1] Some deal with specific events, others concentrate on the years 1929–33, and many range over the entire decade, to the time when getting into the army at the beginning of the war was "the good life."[2] An illustrative posting in the Herbert Hoover Library captures that sense: what began as "a relatively minor downturn [in fall 1929 turned into a] decade long nightmare."[3]

Because of the likelihood of confusion as to the particular meaning of the term *the Great Depression,* some have chosen to label the experience of 1929–33 as *the Great Contraction,* reserving for the entire decade the Great Depression phrase. This convention is followed here; that is, the events of 1929–33 occur in the Great Contraction (or simply the Contraction). Then the severe depression of 1937–38 can be unambiguously referred to as a depression, or perhaps as the late-1930s depression, without confusing it with the Great Contraction.

However labeled, the Great Depression is surely one of the watershed events in the history of the United States and the world during the twentieth century, certainly *A* if not *The Defining Moment* (Bordo, Goldin, and White 1998, esp. 10–18). This comes through clearly when one talks with those who lived through that decade. Without doubt, it is the singular event in their lives, rivaled perhaps only by action in combat in World War II. Even decades later, they feel very passionately about the difficulties and anxieties of those times.

Much of course had been written about the unprecedented fall in economic activity in the Great Contraction, with questions about its causes and the reasons for its protracted decline especially prominent. But there indeed was a recovery, though long, tortuous, and uneven. That those living during the "decade long nightmare" did not realize recovery was under way may well have been due to a belief that any resurgence of economic activity was transitory, that the permanent condition of the economy was one of excess labor and output: to use a popular phrase of the times, a case of "production outstripping consumption."[4] This book is concerned with those recovery years. More to the point, the concern is with identifying the reasons, the prime causes, of the recovery. Since much postwar research has singled out the importance of the growth of the money stock as the most influential factor, it is of interest to inquire whether those living in the 1930s similarly looked to the behavior of the quantity of money in their attempts to understand the recovery.

A major difficulty in attempting after the fact to re-create the events of a turbulent time is that those who lived through it know the outcome, as do those who are witnesses to the recounting, and so the great uncertainties, apprehensions, and anxieties that were central to the earlier situation are absent. To try to re-create the experience decades later is even more difficult. This quite likely is the case when the events in question are particularly dire. The actual outcomes in many cases are not anywhere close to the ones thought most likely during the turbulent times in question. Hence it becomes impossible for people who did not actually experience those events to re-create the past feelings, thoughts, anxieties, and apprehensions, especially when they were traumatic, difficult times.

For instance, the servicemen who talk of combat action in World War II are the ones who survived. Further, they may well have had very satisfactory, rewarding lives afterward. When they speak of their combat experiences, listeners know that whatever is said, those "re-creating" the battles survived; they were not killed. Furthermore, those hearing the retelling know something of the later fortunes of those recounting their experiences, and the later circumstances may well have been relatively satisfactory, which further distances the reality of the "re-created" events to listeners.[5]

And so it is with those who lived through the Depression. The pervasive gloom and doom felt throughout the decade did not materialize.

True, the war showed that the economy was not stuck in a permanent depression. With the end of the war, the economy prospered, rather than sinking again into what many at the time believed would be a reversion to a permanent state of depressed activity, as was thought most likely in the 1930s.

Juxtaposed against the attention given the Contraction, professional interest in the subsequent recovery pales. Yet it is a fascinating episode, one the following chapters describe, discuss, and seek to understand as they consider the effects of various influences on the path of recovery. One of the principal fascinations comes from seeing an economy that was operating more than a third below its potential in 1933 move back to trend, to its full potential, nine years later. Real output and industrial production increased at what in normal conditions are extraordinarily high rates.

Correspondingly, the unemployment rate decreased from over 25 percent of the labor force in 1933 to just under 10 percent in 1941.[6] The following year's sharp decline to half that level is however quite understandable as a product of the command economy due to the United States' full involvement in World War II.

In the oral history of Studs Terkel (1970) and in listening to those who lived through the decade, the stock market crash is prominent, both as a shock to confidence and as a forerunner of things to come. One also reads about the crash as being of little consequence in small towns. A persistent theme is job loss and tensions faced by "eatin or not eatin," even to the point of wandering off "in despair because they couldn't support their families" (1970, 346). In the same vein, the notion appears that the economic system broke down—"that it quit" (1970, 309)—and was fundamentally in need of major restructuring. The understandable attraction of planning, indeed socialism or at least a third way, comes through in many of the thoughts.[7]

Interestingly, there seems to be little recognition of a recovery after spring 1933, though the presence of Roosevelt as a savior of the system is a recurring, even pervasive theme. However, that may be more hindsight than the actual perception of those living through those hard times. To see Roosevelt as fundamental to the recovery is a widespread view, one to which the vanquished Alf Landon, FDR's 1936 opponent, subscribes (1970, 336). Indeed, the economy did bottom in March 1933, having experienced more than a 50 percent decline in industrial production from August 1929. Wholesale prices were over a third lower.[8]

The realization that the economy was recovering must understandably have been long in coming, particularly the idea that the rebound was not transitory (except for those who followed such statistics). For many, the perception most likely was of continued gloom and doom. It certainly would not have been one of renewed optimism.

Even professional economists would have been somewhat leery about forecasting a recovery in spring 1933, or for that matter anytime that year. It was after all less than a year earlier that the economy appeared to have turned around, as industrial production increased 13 percent between July and October 1932, only to fall by March 1933 close to where it had been in July. Wholesale prices also exhibited a slight increase between July and September 1932.[9] The fact that the price decline to mid-1932 was arrested was perhaps reason for some optimism, particularly in light of the price behavior a decade earlier, during which the sharp 1920–21 depression saw prices fall over 40 percent as industrial production declined a third, after which output rose up to the dawn of the Great Contraction with prices remaining essentially stable.[10]

But the nascent recovery proved stillborn as the economy then deteriorated dramatically through spring 1933 when the recovery finally began. But the recovery was long, uneven, and painstakingly slow. This reflected adjustment to the depth of the Contraction's decline and importantly to the extremely sharp 1937–38 depression. From the nadir of the Contraction in the spring, the economy began recovering but only for a few months. By late summer 1933, industrial production was again declining, as was real GNP (gross national product). The following year, this roller coaster ride was repeated as the economy backed off its summer highs, retreating a bit before beginning in earnest a sustained recovery in the last months of 1934. With a record of dashed hopes—recovery becoming recession, recession seeming to turn into recovery, then again becoming recession—it is little wonder that the realization that recovery was under way was long in coming.[11]

The case of James Harvey Rogers, Sterling Professor of Economics at Yale and one of the most prominent monetary economists of the decade, is enlightening in this regard.[12] Though initially optimistic about recovery as a result of the mid-1932 turnabout in prices and industrial output, he soon became disillusioned. In his groping for an understanding of why there appeared to be no recovery, he hit on the idea of a "gap" between the distributors and the users of credit—

lenders and borrowers. In contemporary terms, the gap could be interpreted as a credit crunch. This gap was regarded as a failure of the capitalistic system. He maintained, as a result, "that at least temporarily our economic equilibrium is broken" (1933b, 127). This pessimism was to grow to the point where he foresaw "the capitalistic system which has been with us less than two hundred years" moving rapidly into "state capitalism . . . a system under which the economic powers, instead of remaining in the hands of private individuals, pass more and more completely into the hands of the government," this at the bottom of the 1937–38 depression (1938, 5–6).

From fall 1934, the economy continued its movement back toward trend until mid-1937, at which point it deteriorated sharply; for instance, industrial production fell 33 percent in twelve months.[13] Whether that 1937–38 depression was regarded at the time as an event unto itself or simply another manifestation of the terrible times is difficult to tell. Perhaps it was more a matter of personal situation as well as the selectivity of memory decades later. For instance, Robert E. Wood, the retired president and chairman of Sears, Roebuck, saw that "things began to pick up around '34 or '35 [but] it was '36 before they began to pick up strong . . . to recover on a big scale" (Terkel 1970, 442–43). For him, there apparently was no 1937–38 depression. Raymond Moley, of Roosevelt's Brains Trust, regarded that depression as a "slight recession" (251), whereas David Kennedy, later president of Continental Illinois National Bank and secretary of the Treasury under President Nixon, saw a "very, very serious recession in '37" (274).

As the depression bottomed in late spring 1938, the economy resumed its move back to trend. The prosperity that the 1920s saw as the economy's natural right was again coming. Whether the war was a return to prosperity, a manifestation of that natural right, is considered in the next chapter. By the usual measures of economic performance, the economy had returned to trend sometime in 1942. Yet this was a war economy, one in which shortages, conscription, and price controls were present. Various economic data and measures of aggregate performance during the recovery from the Great Contraction are considered in chapter 2, where monthly information on prices, interest rates, gold, bank assets, the quantity of money, the federal deficit, and Federal Reserve Credit, to name a few, are presented in graph form. The chapter also considers questions about returning to trend and the international experience.

There are two noteworthy features of the data. First is the use of information that was published and thus was available for analysis and discussion in the 1930s. To a large extent, these are essentially real-time data, that is, data that are not subjected to revision. This is the information on which economists living in that decade would have relied. Second, based on the data then available, a money supply series is constructed to link recovery to movements in the stock of money, a framework that employs the only extant macroeconomic model of that time, the quantity theory of money.

The third chapter arrays support for the view that the recovery was due to the growth of the money stock. This is done first by examining the burgeoning postwar evidence. The chapter then considers the relation between the money stock series, as it could have been constructed in the 1930s, and prices and output. The intent is to show that an analysis of recovery that relied on the behavior of the quantity of money would have concluded that the recovery and the late-1930s depression were due to movements in the money stock, as would be predicted on the basis of the quantity theory. In other words, the intent is to show that the conclusions of the postwar analyses could in large part have been anticipated in the 1930s.

A development of particular interest deals with the first two years of revival from the late-1930s depression. It is then that industrial production increased rapidly as the quantity of money grew. But, surprisingly, prices did not rise; they in fact fell. How is that to be understood, particularly in quantity theoretic terms, if a demand shock theory is the foundation on which an understanding of the recovery is based?

Given the ready availability of data for a quantity-theoretic interpretation, how did economists interpret the recovery, how long did it take before they were convinced that it was firmly under way, and who (and how many) looked to the behavior of the money stock as one of the main causes of the recovery? What was to be made of the 1937–38 depression, certainly a major unexpected disruption? For instance, it "was all it took to change [Alvin] Hansen's mind. The Great Depression was no mere business cycle. It was the end of an era" (Mehrling 1997, 119). Based on that, Hansen altered radically his orientation from skeptic to apostle/disciple of the Keynesian lack-of-aggregate-demand paradigm with its correlative emphasis on the requirements for and necessity of fiscal actions.

Chapter 4 considers whether economists living in the 1930s saw recovery as driven by increases in the stock of money. It looks at their investigations to try to understand how each viewed what was happening, and why. Before that examination, however, the recognition lag is addressed, as is the issue of the standing of the quantity theory in the 1930s. Attention is paid to those familiar with a monetary aggregate, either through compiling such a series individually or through use of publicly available data. One of the more interesting investigations relates to Milton Friedman's views in 1940, as reflected in a business cycles course he taught almost a decade before he and Anna Schwartz initiated their influential study of monetary forces (Hammond 1996, 46–58). The chapter also discusses the attention given to the rising amounts of excess reserves in the banking system and to gold, especially since the United States was not on the gold standard for virtually the entire recovery period.

Chapter 5 deals in detail with Irving Fisher, one of the most prominent contemporary observers of events, though his star had faded due to his turn-of-the-decade stock market predictions. He is rightfully regarded as the quintessential quantity theorist. Yet the advent of the Contraction persuaded him to rethink the role of the money stock in the movement of the economy. To that end, he formulated the debt-depression theory in which the stock of money was a passive entity subject to the whims of prospective borrowers. The "problem" of mounting excess reserves was to be dealt with by raising reserve requirements to 100 percent (Fisher 1936a). Nonetheless, through his business cycle institute he was a close follower of current developments (1930). In addition, his penchant for analysis and reform, indeed for crusades to improve the human and societal condition, makes him an understandable choice for consideration. His work is considered in light of the central question of whether he reverted to the quantity theory views he had held prior to the Contraction.

The late-1930s depression was surprisingly sharp, deep, and unexpected. It therefore was a fascinating event (making chapter 6 the longest in the book). It was characterized by dramatic declines in output and prices. At its trough a year later, interest rates were near-zero, prices were falling, Federal Reserve credit was declining as were loans by banks, and excess reserves in the banking system were extraordinarily high and mounting. The likely prognosis for the economy over the next term would certainly have been less than optimistic. Anyone viewing it at that point would have foreseen a continuation of the sharp slide that began the previous spring. Had there been a contest for the most pessimistic economic outlook, that period certainly would have been a finalist. Yet output rebounded along with an expanding stock of money, but prices continued falling, for more than two years. Excess reserves continued growing. Interest rates remained low; the rate on short-term treasury bills averaged less than 5 basis points—that is, less than five-hundredths of a percentage point—for the next three years.

The discussion deals with economists' explanations for the rebound as well as those likely responsible for the depression. It is somewhat curious, indeed ironic, that the professional literature has little to say about the revival from that deep depression, except to attribute it to fiscal policy due perhaps to the gathering war clouds or more likely to Roosevelt's conscious acceptance of it—the "critical decision to turn to spending 'for its own sake' as the main road out of the recession" (Stein 1969, 109). It, however, is this revival episode that calls into question the importance of the growth of the quantity of money, as well as fiscal actions, as the driving force(s) in the recovery. If the increasing money stock and fiscal spending were the driving forces, then prices should have increased, along with output. But prices fell, for more than two years. How is this to be interpreted? A demand shock orientation, such as is integral to monetary and fiscal impulse mechanisms, could not have prices falling and output rising. This question and the resolution of the apparent conundrum are taken up in the penultimate chapter.

Before turning to that issue, two additional recovery mechanisms are considered. One that came to be discussed at length is the influence of fiscal policy. Its role is the principal concern of chapter 7. The interest is in large part due to economists' increasing attention to Keynes's policy prescriptions, and so it is not surprising that much of the literature dates from the late 1930s.

There was a *post hoc, ergo propter hoc* element at that time. In the face of general disillusionment about the effectiveness of monetary actions stimulating recovery, it was understandable that the recovery would be associated with increasing budget deficits as a matter of cause and effect. To a large extent, the subsequent theoretical and policy literature looked favorably upon fiscal actions as the recovery vehicle.

One of the authoritative assessments of fiscal policy in the 1930s was made by E. Cary Brown (1956). His findings essentially did not identify a meaningful role for fiscal actions. Interestingly though, in a testament to the times he argued that this was not because it had been tried and found wanting but rather because it had not been tried. Subsequently, others addressed the question of the effectiveness of fiscal actions. Those results largely confirmed his.

One of the difficulties in assessing fiscal policy is the low frequency of the data collection on which the associated empirical work necessarily relies. With one exception, they are annual, which obscures timing relations. The exception is John Firestone's (1960) monthly federal budget estimates. The influences of monetary and fiscal actions are evaluated here in a model of monetary and fiscal effects on industrial production. The results provide further support for Brown's skepticism about the importance of fiscal policy in promoting recovery. They also underscore the seeming importance of the growth of the money stock.

Another recovery avenue is the credit channel, as initially hypothesized by Irving Fisher (1932) and subsequently developed by Ben Bernanke (1983). Chapter 8 discusses this along with the important role of bank examination regulators in striving not to repeat the banking debacle of the early 1930s. The likely effect of those actions is to discourage banks from lending, which was widely perceived to have occurred. The actions of bank examiners would have added regulatory weight to the banks' rising "cost of credit intermediation," which is "the cost of channeling funds from the ultimate savers/lenders into the hands of good borrowers" (Bernanke 1983, 263). Among those costs are screening and monitoring, as well as expected losses.

Chapter 8 ends with an extensive empirical analysis assessing the separate contributions of the quantity of money, the credit channel, fiscal policy, and interest rates on the recovery. The credit channel is addressed through the medium of a lending series constructed from available Federal Reserve data. The series represents bank lending for commercial and industrial loans, the loan category most aligned with the credit channel because it does not include lending for purely financial purposes. One conclusion is that the growth of the quantity of money stands out as a main vehicle promoting recovery. Interestingly, the movement of real interest rates, which is largely due to changes in the price level, is also of importance.

To this point, the evidence from the research reported in the professional literature and that adduced here strongly supports the view that the recovery was principally due to the growing money stock, so much so that it seems incontrovertible. That evidence derives from a variety of investigations, some dealing with data available in the recovery period, while other inquiries employed tabular, graphic, literary, and empirical modes. As such, it appears quite robust. Yet, there are a few caveats to unequivocal acceptance.

One is that the money stock's growth was not due to actions by the Federal Reserve. In fact, the credit it extended to banks was essentially unchanged for much of the period. The two principal factors that "financed" the growth of money were the devaluation of the dollar in the recovery's first nine months and then the continued inflow of gold due to the growing uncertainties in the world, principally Europe. Would the pace of recovery have been much slower had neither of those fortuitous events occurred?

Of more consequence is the conundrum raised by the two-plus years of revival from the late-1930s depression. The stock of money increased rapidly, as did output, but prices fell. How can we explain that? This is addressed in the penultimate chapter. In brief, the resolution relies on two mechanisms, separate but operating simultaneously. One is the quantity theory of money in which the demand-for-money dimension has the place of prominence, in contrast to the usual emphasis on the behavior of the money stock. The other mechanism is what is called endogenous propagation, the notion that inherent in the economic system are mechanisms that move the economy toward its trend level of growth. An approximate synonym for endogenous propagation is mean-reversion, though the latter is the result of the operation of the former. It is the forces of endogenous propagation—the mechanisms, incentives, opportunities, and apprehensions of a market system operating below its trend rate—that underlie mean-reversion.

The argument developed in chapter 9 relies on some earlier suggestions of a natural tendency to rebound, principally econometric work. The argument then concentrates on the particulars of the seemingly anomalous behavior of prices, output, and the stock of money in the revival from the late-1930s depression, a period that occupies almost a fourth of the entire recovery time.

One of the attractions of studying the 1930s is that it was far from normal; it truly is an outlier, and this pathology is one of its fascinations. Such times are opportune for observing behavior and developments that are masked in normal times when the range of variation is quite small. The typical strategy of conventional theory stresses the role of policy variables and their influences on the direction of the economy's target variables. The influence of seemingly exogenous developments, though not ignored, tends to be treated by the use of a portmanteau variable, such as a "food and fuel" shock. The analysis then typically turns to the role of policy actions that seem most suitable for dealing with such a shock.

The revival represents an exceptional opportunity to study an outlier. The evolution of output with falling prices provides evidence on the importance of endogenous propagation as a mechanism of recovery. It is impossible to say whether it is the principal one, since it is characteristically masked by the behavior of policy variables, but there is little doubt as to its importance. That is the main theme of this book's penultimate chapter.

The final chapter steps back and discusses the findings on this extraordinary period in the economic life of the United States. Its emphasis is on the economics of the decade. In what may be a surprising turn, virtually nothing is said about the political environment and the importance of the New Deal, the stock-in-trade of so much of the writing about the recovery. The book is an essay on the economics of the recovery, not a history of the social and political evolution of the decade. It deals with the macroeconomic forces that were at play in returning an economy that was over a third below its capacity rate to its trend output level over the course of nine and a quarter years, a period of 111 months during which output and prices increased and declined, sometimes in concert and other times along antithetical trajectories.

The next chapter presents graphical depictions of the evolution of the various economic variables of interest, and it is to that material that the essay now turns.