2 *Why the Great Depression Was Great: Toward a New Understanding of the Interwar Economic Crisis in the United States*

MICHAEL A. BERNSTEIN

> The essential point to grasp is that in dealing with capitalism we are dealing with an evolutionary process. It may seem strange that anyone can fail to see so obvious a fact. . . . Yet that fragmentary analysis which yields the bulk of our propositions about the functioning of modern capitalism persistently neglects it.
>
> —Joseph A. Schumpeter

TO THIS day there exists no general agreement about the causes of the unprecedented duration of the depression of the 1930s in the United States. Several contemporary observers attempted to account for the Great Depression in terms of the collapse of a "mature capitalism." But after the war, their views appeared hysterical and exaggerated as the industrialized nations sustained dramatic rates of growth, and as the economics profession became increasingly preoccupied with the development of Keynesian theory and the management of the mixed economy. Nevertheless, the refusal of the depression economy to react well to the numerous and powerful potions devised for its recovery was then and remains now a puzzle for anyone involved in or concerned with the New Deal.

The protracted character of the Great Depression was the basis of a dramatic and profound change in American institutions and politics. Indeed, except for Lincoln and the Civil War, it is hard to think of another presidential administration so singularly and exclusively defined by a single great problem. At no time, from the moment FDR assumed office until, at the earliest, the outbreak of war in Europe, did the depression recede from the forefront of national politics. It

began and ended all presidential and party calculations. Like some chronic disease that, despite occasional remissions, would not go away, it mortally threatened not only the economy but the body politic. Every major piece of legislation that endures on the statute books and in popular memory—the NRA, the Wagner Act, TVA, Social Security, the Securities and Exchange Commission, mandated budget deficits—was addressed to its remedy. For eight years, the political fortunes of the Roosevelt regime crested and fell with each oscillation in the stock market or lengthening of the bread lines. The persistence of the depression scrambled political alliances and compelled New Dealers to abandon one recovery policy after another. Corporatism, state planning, trust-busting, and Keynesianism came and went and came again and still the Great Depression proved incurable. Its very intractability suggests that something more fundamental, immune to all the experimental innovations of public policy, was awry at the very core of the country's economy. This essay attempts to probe that underlying malady.

Although the American economy has suffered several financial panics in its history, none has had the legacy of the panic of 1929. It was not until the outbreak of war in Europe that industrial production reached its precrash peak levels and the unemployment rate fell below a decennial average of 18 percent. There is no greater puzzle in American economic history than the persistent failure of investment activity during the depression of the 1930s to generate a full recovery. Most economic theorists have tried to solve this puzzle by focusing on what they conceive to be a variety of mechanisms that interfered with the establishment of equilibrium in product, labor, and capital markets after the trough was reached in 1932–33. In particular, it has been argued that obstacles to the appropriate adjustment of prices and wages upset the nation's marketplace, causing unprecedented levels of idle capacity and unemployment. These obstacles have been identified as ranging from "sticky prices" administered by highly concentrated and powerful firms, to excessively high wages maintained by union pressure, political rhetoric, and the provisions of section 7a of the National Industrial Recovery Act. In short, the prevailing view is that the persistence of the slump was the direct outgrowth of distortions in price mechanisms imposed by large firms, government, and labor unions.[1]

A price-theoretic approach to understanding the interwar slump in general, and interwar unemployment in particular, has a great many adherents and a not inconsiderable amount of intellectual appeal. But it is not beyond empirical criticism and refutation. Prices

fell by almost one-third in the early thirties. The extent of so-called administered pricing in producers' and consumers' markets in interwar America has never been shown to be very large. The proportion of the American labor force that was organized in the interwar period, while high by historical standards, was not as high as in other industrialized nations where recovery obtained sooner. These facts leave one unpersuaded that price (and wage) inflexibility explains the longest depression in American economic history.

An older tradition in the literature, first formulated during the depression itself, argued that modern capitalist economies inevitably reached a stage of slow growth and ultimate stagnation. In particular, some economic theorists and historians looked on the interwar period of American economic development as the final stage of internally generated accumulation. They argued that the American economy was moribund by the 1930s, and was revived only by the impact of wars, state expenditures, and the penetration of foreign markets.[2] What the stagnation theorists focused on were those characteristics of the early-twentieth-century economy which seemed to presage an end to the endogenous growth of the system. By the interwar period the geographic expansion of the United States had ceased, and so had the dramatic rates of increase in infrastructural and heavy investment. Population growth had also slowed, along with the rate of immigration. The opportunities offered by foreign markets were reduced by increasingly protectionist policies, and an unequal distribution of income in the nation generated tendencies toward underconsumption.

The stagnation theorists were right to root the Great Depression in secular (that is, long-term) changes in the American economy.[3] But the crucial secular change was not the permanent exhaustion of capitalism's capacity for investment and accumulation—a theory obviously belied by the performance of world capitalism since 1945—but rather a new structure of consumer demand that had triggered profound shifts in the composition of investment and industrial output. By the 1920s, the structure of demand in the interwar American economy reflected a long-term transition to what might be called high-income spending behavior: from 1923 to 1929, for example, consumer spending on clothing, housing, and utilities all fell while spending on food, tobacco, household appliances, medical care, and recreation rose.[4] As a consequence, patterns of investment changed, encouraging a shift in both the composition of national output and in the distribution of employment opportunities from the old to the new sectors. But the financial crash "caught" the secular transition at a very early and vulnerable point. In 1929 and 1930, those firms lo-

cated in the dynamic sectors of the economy were simply not present in sufficient numbers to lead a general economic recovery. It was this interaction of business cycle and secular trend that accounted for the length of the Great Depression, not the cycle or the trend alone.[5] Had there been no financial disruption in 1929, the secular transition to a consumer economy would have proceeded relatively smoothly. Had the crash occurred at a later point in the long-term trend of development, when the newer industries were more fully established, the length of the disruption would have been significantly shortened. Profitable new enterprises would have been more resilient to cyclic setbacks. Their surplus funds would have been ample, and eventually they would have been able to finance their own recovery. Most important, perhaps, business expectations would have been less depressed, and net investment commitments would have increased at an earlier date.

As a direct result of a secular rise in national income, new, more affluent consumer markets emerged during the interwar period—markets that showed greater potential and faster rates of growth than others that had figured prominently in the past in total consumption expenditures. In a certain sense, this changing pattern of consumer demand was the result of the kind of behavior originally described by Ernst Engel in his now classic studies of demand. Engel found that as people grew richer, they spent proportionately less on basic foods, clothing, and housing and more on manufactures and, as they grew still more affluent, on services.[6] These shifts in consumer demand in the interwar period had important macroeconomic consequences. The new pattern of consumer demand differentially affected industries—benefiting some, harming others. The result was that an uneven growth of industrial sectors became apparent even before 1929. Certain major industries such as textiles, iron and steel, and lumber saw their markets weaken; others, notably appliances, chemicals, and processed foods, faced a new set of opportunities, but were not yet sufficiently strong to sustain a high rate of macroeconomic growth.

Compounding the difficulty posed by the emergence of new consumption patterns, interwar changes in the distribution of income and the impact on the distribution of buying power occasioned by the rapid deflation after the crash in 1929 played an important role in hampering the recovery process. The lower 93 percent of the nonfarm population saw their per capita disposable income fall during the boom of the later twenties. The evidence suggests that the interwar years offered relatively limited opportunities for the rapid development of new mass markets.[7] Not until the 1940s and after was the distribution of income sufficiently broad to allow for the full emer-

gence of the markets and firms that were beginning to grow during the interwar era. Although the high-income environment of the 1920s spawned a new composition of aggregate demand—due to changes in middle-class spending behavior—it also created a demand constraint on the growth of new markets in the form of a highly skewed distribution of income. The severe cyclic reduction in disposable income after 1929 only magnified this obstacle to the transformation of the structures of economic growth.

The distribution of buying power, distorted as it was by the postcrash fall in the price level, also played a role in hampering the timely growth of the dynamic sectors. By 1932 the purchasing power of those still employed had risen greatly because of rapid deflation. Insofar as these income recipients tended to be businessmen and professionals, the demand for luxury items, high-priced durables such as large cars, and nonessential services such as entertainment and tourism, rose. Deflation did not, of course, bolster the purchasing power of those who had lost their jobs, except to the extent that they owned assets, borrowed funds, or received relief payments. Thus, a falling price level did not strengthen consumption as a whole; rather, it redirected consumer expenditures toward product markets geared mainly to high-income recipients. This shift in demand patterns intensified the difficulties of the industries most damaged by the depression. Their markets shrank as the number of inactive workers rose. In more dynamic sectors, the demand emanating from those still employed was not large enough, nor was it sufficiently dispersed among a broad spectrum of commodities, to generate a large advance in revenues and thereby a robust recovery.

The divergent growth potentials of American industries during the interwar period can be broadly discerned from the changing pattern of demand for capital goods by major manufacturing sectors. Movements in the demand for capital goods indicate which industries were expanding and which were contracting during the interwar years. As the composition of final consumer demand changed during the period, so the derived demand for investment inputs was altered. The consumption patterns of the twenties favored the emergence and expansion of certain industries and generated a slower rate of growth, if not actual contraction, for others.[8]

For example, an average of 2.1 percent of the total real expenditures on productive facilities in the American economy during the twenties was made in the processed foods sector. That average rose to 2.5 percent during the decade of depression, paralleling the change in the share of consumer spending going to processed foods.

By contrast, in the textile industry the mean was 1.54 percent during the twenties and 1.2 percent during the thirties. The same shrinkage occurred in the lumber industry, where the relevant figures are 0.8 percent in the 1920s and 0.4 percent in the 1930s. In the petroleum sector there was expansion as the average share rose from 0.6 percent in the twenties to 1 percent during the thirties. Certain relatively new industries expanded quickly during the interwar years. Aircraft production and chemicals manufacturing were two sectors where the rate of investment in new productive facilities was high. There was also a rise in investment in the manufacture of office machinery and related equipment, absorbing an average of 3.3 percent of real total domestic investment during the twenties and 3.9 percent in the thirties. In iron and steel production there was also a moderate increase in the investment share, but this expansion was limited to firms producing for appliance, food container, and other new markets. The automobile sector experienced a slight rise in its investment share, but again such expansion was limited to firms producing newer styles of cars equipped with what had previously been regarded as luxury items.

Changes in investment activity offer a broad overview of the varied experience of American industries during the 1929 downturn. A closer examination of the source of these variations requires explicit attention to the changing strength of particular markets during the interwar period. Such an investigation helps to show the actual shifts in patterns of consumer expenditure and sectoral investment. These alterations in the composition of economic activity had profound implications for the direction and speed of economic recovery in the wake of the crash. Following are brief descriptions of how certain industries could benefit from and respond positively to the secular and cyclic forces at work in the interwar economy.

Iron and Steel.

In the case of iron and steel firms, those least affected by the Great Depression produced for newer markets in lighter steels and in tin plate. The shift in markets experienced by iron and steel producers in the interwar period may be seen in table 2.1. The downward trend in railway and construction demand was due to the secular decline in population growth and the slower rate of territorial expansion. Whatever strength in markets existed was found in such sectors as food containers and miscellaneous manufacturing. Indeed, once the depression occurred, steel plate and rails fell in importance as a percentage of total industry shipments, while the rank of shipments of black plate (for tinning) rose from seventh to third, and the

TABLE 2.1
PERCENTAGE OF TOTAL STEEL OUTPUT CONSUMED BY MAJOR INDUSTRIES, 1922–1939

Industry	*1922*	*1926*	*1929*	*1939*
Railways	22	23.5	17	9.3
Construction	15	19.5	16.5	13.1
Automobiles	10	14.5	18	18.1
Oil, gas, mining	10	9.5	10.5	5.5
Export trade	7	5	5.5	6.5
Food containers	4	4	5	9.4
Machinery	NA[a]	4	3	3.8
Agriculture	4	4	5.5	1.9
Miscellaneous	28	16	19	32.4[b]

Sources: Homer B. Vanderblue and William L. Crum, *The Iron Industry in Prosperity and Depression*, 146; E. D. McCallum, *The Iron and Steel Industry in the United States*, 186; *Iron Age*, 117 (January 7, 1926), 7; Standard and Poor's, *Industry Surveys* (June 27, 1947), section 2, pp. s3–s6.

[a] Data not available.
[b] Includes pressing and stamping, and jobbers.

rank of strip steel rose from sixth to fourth. From 1925 to 1934, as plate and rail manufacturing capacity fell, sheet mill capacity rose by 44.6 percent.[9] Thus, profitable avenues of steel production shifted from heavy structural markets to fabricators' markets, consumer and producer hardware, and new alloys.

The investment behavior of firms serving these markets demonstrates their relative well-being in a time of severe economic distress. For example, rolling mills continued investment during the 1930s aimed at standardizing shapes and improving the ductility of the product. The American Steel and Wire Company spent $4.7 million in 1935 on new rod mills and wire machines; National Steel, the only firm in the industry not to run a deficit in 1932, maintained an aggressive investment policy with respect to its continuous hot-strip rolling operations and was one of the few firms to maintain a flexible pricing policy throughout the depression decade. Inland Steel Company, having served heavy-product markets throughout the 1920s, altered the focus of its investment in the 1930s in order to shift "the emphasis in production from heavy steel (rails, plates, structurals) for the capital goods industries to lighter steel (sheets, strip, tin plate) for the consumer industries." It is not surprising, therefore, that of the twelve largest steel companies, Inland and National secured the highest operating profits (13.1 percent and 9.2 percent, respectively, of gross fixed assets) for the period 1936–40.[10]

With the onset of the crash, several major markets in iron and steel contracted. Automobile output fell by almost four million vehicles in the first three years of the downturn. Oil pipeline mileage built in the 1930s was 60 percent less than the 1920s total. Construction came to a halt. It was in the markets for light, flat-rolled steels (sheets, strip, and tin plate) where earnings continued to grow. These steels were used in the newer markets such as household appliances and food containers (especially cans); their percentage of total industry shipments rose from 25.8 percent to 40 percent later in the decade. By 1938 the railroads consumed only 6.1 percent of the nation's hot-rolled steel, while abandoning eleven thousand miles of track by 1939. The automobile producers were similarly affected, their consumption of steel falling by close to four million net tons from 1930 to 1932.[11] It would take the advent of World War II to reverse this decline in the heavy-products division of the industry.

Automobiles.

The automobile industry had two outstanding problems in the interwar period: the slowing in the absolute rate of growth of its market, due to a decrease in the growth rate of the population and a general decline in the income held by most of the nonfarm population, and the difficulty of stimulating demand for its product during a depression. In the first three years of the Great Depression the number of cars in use declined only 10 percent, but with the relatively large number of new vehicles on the road because of the boom of the 1920s, the amount of unused mileage per car (that is, service life) rose 37 percent. Scrap rates of used cars consequently fell. There was accordingly a dramatic shift in the age composition of the stock of cars owned. An idea of the magnitude of the problem may be gained from data on replacement sales. In 1913, three out of every four cars sold in the United States were net additions to the national total; by 1924 the ratio fell to one in every three; and by 1927 replacement sales accounted for three-fourths of total production. The inevitable result occurred in 1931, when 755,000 fewer new cars were made than the total number scrapped, replaced, or stored by owners. Some firms were so concerned about the used car problem that they attempted to ship used vehicles to foreign markets (where there was no competition) and undertook payment schemes to reward dealers for each used car scrapped. During the 1930s the industry "took greater punishment than most others because a new car was not an essential in a home where the breadwinner was out of work."[12]

It is difficult to distinguish between secular and short-run mechanisms contributing to the poor auto sales performance of the 1930s. The immediate cause, namely, the depressed purchasing power of

the population, is obvious enough. But superimposed on this were long-term developments in automobile and tire manufacture and in road building that made cars last longer. Operating costs were also falling because of improvements in fuels, lubricants, and repair techniques. All these developments lengthened the service life of cars and increased the impact of a fall in national income on the sales of new vehicles. The "increased durability of automobiles [rendered] the industry more subject to large cyclical swings and [increased] its resemblance as regards economic position to residential building."[13]

Many automobile producers responded to the depression in classic fashion, by cutting prices. This created intense problems for independent companies producing luxury cars, such as Auburn, Duesenberg, and Packard. Yet the price-cutting strategy was not overly successful. The Maxwell Company (later to become Chrysler) had already experienced such a problem when in 1923 it cut prices on all models by a hundred dollars and experienced no increase in sales. As a result, by 1932 many firms in the industry hesitated to make substantial price cuts when their impact on revenues was uncertain and, with lower volume obtaining, their effect could be catastrophic. Car manufacturers found that sales could be stimulated more by changes in the operating characteristics of their product than by lowering retail prices—prices that represented only one-third of the cost of using a car throughout its life.[14]

Many car manufacturers turned to style changes and technical innovation to increase sales volume. There were systematic attempts to provide "more car for less money." Vehicle weights increased, as did wheelbases and horsepower ratings. Many of the changes provided auxiliary instrumentation or minor additions. No real effort was made to develop a simple, cheap "depression car." Indeed, one such experiment was a market failure. The number of engine models and body types per make did not change. "The fact remains that instead of tending toward offering 'raw' transportation [during the 1930s], the cheaper cars of the period presented many features hitherto associated exclusively with the more expensive makes." As part of this nonprice response to poor sales performance, most automakers continued annual model design changes throughout the 1930s.[15] Special trade-in allowances on used cars and installment buying plans were also introduced.

In the absence of a constant or rising rate of durable goods purchases in the 1930s, automobile firms suffered relatively more than nondurable goods manufacturers.[16] The lessons of the depression were well learned. After the artificial stimulus of wartime production had played out, the industry moved into a new era of style development and technical change in the 1950s and 1960s. Moreover, until the fuel embargo of the seventies, design and technical developments focused on appearance, advertising convenience, and luxury rather than on durability or efficiency.

Food Products.

Several factors were responsible for the dynamic behavior of food producers during the thirties. Low consumer income generated by the downturn appears to have encouraged the purchase of relatively cheap and nutritious processed foods. Government expenditures for unemployment relief may have further enhanced the demand for such foods. The depression-inspired increase in the number of homemakers holding jobs also qualitatively altered the demand for food products. And there were long-term trends, involving the increase in the spread of household appliances and automotive transportation, that increased the derived demand for and access to processed food products.[17]

Short-run developments fit well with secular changes in technology (in both the plant and the home) and the rising labor force participation rate of women. It was only with improved methods of home storage and preparation that cheaper food products could be successfully marketed. In addition, the demand for appliances was directly linked with the alteration in the sexual division of labor. The increasing entrance of women into the labor force dated from the end of World War I. It was not limited to young women. While the participation rate of women twenty to twenty-four years old rose from 37.5 percent in 1920 to 45.6 percent in 1940, that of women of prime marriage age (twenty-five to forty-four years) rose even faster, from 21.7 percent to 30.5 percent. The hardship of the depression obviously encouraged greater labor force participation by women from households where the primary income earner was idle or on short time. Full-time domestic labor by women was virtually impossible in a period of massive unemployment. Consequently, demand increased for cheaper foods that could be stored and prepared more easily.[18] Food producers responded to the long-term and cyclic opportunities that the 1930s provided. These opportunities were realized by technical change, product innovation, and the development of new methods of distribution.

Important developments in the techniques of food processing dated from the end of World War I. Most involved the preparation of canned and frozen foods. By the thirties, these innovations had reached the operational stage and attenuated the impact of the 1929 downturn. Although canning output fell off from 1929 to 1931,

there was a swift recovery by 1935. In 1931, output stood at 160 million cans of foodstuffs; by the end of the decade, this figure had more than doubled. At the other end of the pipeline, retailers saw the merit of canned foods in terms of their ease of storage, reliability of supply, opportunities for advertising, and potential for customer self-service. As can shipments increased and won an ever-increasing share in the revenue of shippers, there were competitive reductions in transportation costs that further improved the canners' market. The reduction in domestic working time, which increased as the depression worsened, was compensated for by a greater reliance on canned items. This was paralleled by investment in nutrition and agricultural research (especially hybridization) and in machinery for the washing, peeling, trimming, grinding, and cutting of raw produce.[19]

Developments in frozen food processing were not as impressive as those in canning. Nevertheless, they did play a role in stimulating investment in the industry during the depression decade. Clarence Birdseye sold his patents and trademarks to the General Food Corporation in 1929 after many years of research. By 1930 the company marketed a full line of frozen poultry, meat, fish, and sixteen varieties of fruits and vegetables. Even so, the frozen foods market was initially limited by the lack of refrigeration in homes and stores, which in turn was due to technical bottlenecks and high costs.[20] Immaturity in storage technology also brought into question the quality and reliability of the product. This was especially the case with meats. The low rate of consumer acceptance also had roots in the competition of retail butchers, who provided personalized attention to customers. But there was substantial progress in expanding the frozen foods market during the thirties. In 1933, for example, only 516 stores in the country had refrigeration capacity. That number grew to approximately 15,000 by the end of the decade. As early as 1934, easily accessible freezers for use in stores were commercially developed.[21]

Associated with the dynamic impact of process and product innovation in food manufacture was the articulation of more efficient and sophisticated mechanisms of distribution. Improvements in packaging materials, cans, and glassware, called forth by the dynamism of firms in the food industry, allowed for the wider and more appealing distribution of the industry's products. Concentrated food retailing in the form of supermarkets increased enormously with the pressures of reduced demand in the thirties. The scale economies of supermarket retailing allowed for effective competition with the small grocery store; they were due, in part, to the greater reliability and variety of supplies that the large stores and chains developed.[22]

From 1935, when there were 300 supermarkets in the nation, to 1939, when there were 4,982, the average annual increase in supermarket retailing was almost 1,200 stores. Linked with this marketing development was the increased use of advertising in various media. By 1932, the food industry ranked second among all manufacturing sectors in annual expenditures on national magazine advertisements.[23]

Petroleum and Chemicals.

The petroleum industry's relative success in the 1930s was largely due to long-run developments in related markets that stimulated the demand for petroleum products and spurred technical progress and product innovation. In addition, expansion in their markets encouraged aggressive marketing by oil companies, resulting in better distribution and sometimes lower prices.

The growth of automotive transportation in the thirties, a major stimulus to the industry's depression performance, continued a trend dating back to the end of World War I. Coupled with this expansion was a steady development in the surfaced road system that served to enhance the demand for cars. In the ten years prior to the depression, highway mileage had already doubled. In the thirties, the increase was slightly more than double. In the same period, exemplifying the increasing reliance of the population on automotive transportation, the average annual consumption of gasoline per car rose from 525 to 648 gallons. One in every 5.2 people regularly traveled by car in 1929; that ratio rose to one in every 4.5 by 1941.[24]

Throughout the 1920s the automobile industry had improved its product by increasing engine compression ratios and by moving up to six-cylinder design. These developments, carrying over into the depression decade, expanded the demand for gasoline both extensively and with respect to quality. Larger engines required more fuel; enhanced compression ratios required fuel with better octane ratings. Refineries both expanded output during the thirties and continually revamped their cracking technologies to improve the quality of gasoline. Linked with this derived demand from automobile users was an increase in the need for lubricants that further improved refinery revenues.[25]

The markets in home heating, aviation, and railroading also supported the petroleum industry during the depression. The advent of the oil burner in the twenties, both in homes and in commercial establishments, generated an increased demand for refinery output. From 1929 to 1941 this trend continued as the introduction of oil heat steadily increased. The diesel locomotive created and expande

the demand for yet another distillate product. Just over 1.7 million barrels of diesel fuel were consumed in the last four years of the depression. And by the end of the decade, an entirely new sector—aviation—made its presence felt, demanding still newer refinery products for its equipment.[26]

As in the petroleum sector, firms in the chemical industry profited from new market linkages and techniques of production during the depression. Of major importance was the drive to innovate, both to cut costs and to meet the needs of downstream industries for new and better products. As a result, the focus of investment activity in this industry during the thirties was on technical innovation and product development rather than on simply seeking a rebound in standard output and sales. The bulk of the derived demand for chemical products came from the rayon and petroleum producers and, to a lesser extent, rubber, metals, and paper corporations. Radio and motion-picture production generated an increased need for chemicals. Tanners, soap boilers, paint mixers, and glassmakers also populated the chemical producers' market more heavily than ever before. Automobile firms increased their purchase of such inputs as rubber compounds and synthetic lacquers and also stimulated more metallurgical research in order to improve chassis and engines. And the depressed conditions prevailing gave added incentive to investment to improve on output recovery rates and the utilization of the wastes and by-products of reactions.[27]

In petroleum and chemical production, improvements in technology and innovation in products were intimately linked. During the thirties, efforts dating to the previous decade to achieve continuous processing came to fruition and provided a cheaper alternative to the earlier batch production of chemicals and petroleum distillates. The downturn of 1929 stimulated further efforts to reduce costs. For petroleum producers, major emphasis was placed on the development of new refining methods; in chemicals, the concern was to automate the control of reaction temperature, pressure, volume, duration, and other attributes such as pH level.[28]

Stone, Clay, and Glass Products.

Building materials and glass typically exhibit a high degree of sensitivity to movements in the business cycle because the sales of the sector depend on the (also cyclically volatile) volume of construction activity. But from the mid-1930s on, this industry performed remarkably well. Long-term developments in market opportunities, along with the impact of government policies in the short run, made this possible.

For the glass division, secular developments were particularly important. High import tariffs, along with the inflated wages that they encouraged, aided the early development of modern glassmaking from 1880 to 1920. By 1915, the nation met its own glass needs and created a surplus for export for the first time. The rise of the automobile industry after 1900 bolstered the market for plate glass that had previously been limited to construction needs. And although Prohibition and the demise of gas lighting lowered the demand for bottles, globes, and chimneys, other markets were developed that provided further opportunities for growth.[29]

From the turn of the century, the industry embarked on an era of development based on new processes and products. Perhaps most important for this growth between 1890 and 1920 was the tenfold rise in the demand for glass in food packaging. Glass became the favored choice of food processors because of its relatively low price, its superiority in holding vacuum seals, its sanitary properties, and its virtues as a display device to aid sales. Further, its unique flexibility with respect to coloring, size, and shape allowed for distinctive trademark designs. The Pure Food and Drug Act of 1906 enhanced the public's confidence in the quality of prepackaged foods, and the act's insistence on specified weight tolerances (to avoid fraud) increased the demand for uniform glass containers.[30]

During the depression, the glass industry benefited from the continued growth of new markets for its output. The spread of electrification stimulated the demand for refrigerated foods, many of which were packaged in glass, and for electric bulbs—a wholly new product. During the thirties, increases in the demand for lighting and packaging glassware were mostly uninterrupted. From mid-decade on, electrification (both private and New Deal inspired) was a crucial aspect of this development, because of both its direct effect on the demand for light bulbs and its indirect effect (given the spread of refrigeration) on the demand for glass food containers.

The surprisingly strong performance of the building materials division in the latter half of the thirties reflected government expenditures on residential and public-facility construction. The Works Progress Administration alone built or renovated 2,500 hospitals, 5,900 school buildings, 1,000 airfields, and 13,000 recreation sites.[31]

It appears, therefore, that the relative success of this industry was due to a combination of factors. The development of new consumer markets provided a secular stimulus to the glass division. Government stabilization and relief policies during the depression aided the building materials producers. Both secular mechanisms and the in-

tervention of government lent this industry a dynamism that served it well during the crisis of the thirties.

The changing composition of consumer and investment demand, combined with the cyclic problems of the early thirties, generated a severe structural unemployment problem. The limited size of the dynamic sectors made the absorption of the unemployed exceedingly difficult. The net result was a continuation of the unpropitious demand conditions facing the economy as a whole. Any large increase in employment had to come from a general revival of all sectors.

A comparison of net investment data for the 1930s with the interwar ranking of industries with respect to their share of national employment and value of output provides further demonstration of the uneven development of major industries that interfered with recovery. In table 2.2, the evidence shows that sectors where net investment recovered relatively quickly after the trough of 1932 had low shares of national employment and national value-product. Conversely, those industries that in the interwar period accounted for large shares of employment and output engaged in little if any net expansion in the immediate wake of the crash. Notable examples of the former are food products, tobacco products, chemicals, and petroleum products—precisely those sectors most stimulated by the new patterns of consumer spending at the time. Of the latter, the best demonstrations are afforded by textile mill products, lumber products, primary metal industries, and transportation equipment.

Thus, a massive structural unemployment problem emerged during the thirties that in the absence of an exogenous shock like war would have taken some time to solve. But this problem, which began to emerge prior to 1929, was not derived from interferences with the price mechanism of labor markets. Rather, it was one of mobilizing the necessary capital, information, and confidence to retrain and reallocate the labor force in conformity with prevailing employment trends and opportunities. Indeed, there had been a steady decline since the early twenties in the percentage of national employment accounted for by the manufacturing and construction sectors. The same decline took place in agriculture and mining. In the service industries, such as transportation, trade, finance, selected services, and government operations, there was a rise.[32] Even if there had been no financial crash in 1929, these trends show that structural unemployment would have been a recurrent problem in the interwar period.

The Great Depression must be viewed as an event triggered by random historical and institutional circumstances, but prolonged by the timing of the process of long-term industrial development in the

TABLE 2.2
DATA ON INDUSTRIAL RECOVERY IN THE 1930s

	Net investment in equipment as percentage of 1929 level			*Share of national employment by rank*			*Share of national value-product by rank*		
Industry	*1937*	*1938*	*1939*	*1931*	*1933*	*1935*	*1931*	*1933*	*1935*
Chemicals and allied products	369.9	256.6	401	32	27	25	20	18	14
Stone, clay and glass products	850.3	422.9	306.3	29[a]	30[a]	24[a]	46[a]	40[a]	41[a]
Petroleum and coal products	131.9	50.1	21.2	23	22	21	8	2	4
Tobacco products	130.2	85.6	159.6	19	54[b]	67[b]	10	11	10
Food and kindred products	178.2	61.2	115.7	18[c]	13[c]	14[c]	1[c]	1[c]	2[c]
Nonelectrical machinery	96.9	58.5	148.9	NA[d]	NA	NA	NA	NA	NA
Apparel and other textile products	32.6	Neg.[e]	114.4	15[f]	12[f]	18[f]	19[f]	20[f]	19[f]
Rubber and plastic products	22.2	14.8	74	30	28	32	27	27	22
Transportation equipment	34.7	8	53.2	12	18	8	2	4	1
Paper and allied products	27.4	8.6	29.5	20	19	17	14	13	12
Primary metal industries	38.6	Neg.	Neg.	4	2	1	5	3	3
Fabricated metal products	18.7	25.3	100.2	NA	NA	NA	NA	NA	NA
Printing and publishing	Neg.	Neg.	Neg.	16	15	13	4	5	7
Leather and leather products	19	Neg.	3.6	36	35	38	36	34	35
Lumber and wood products	Neg.	Neg.	Neg.	5	7	3	25	23	18
Textile mill products	Neg.	Neg.	Neg.	3	3	3	3	3	3

Sources: U.S. Bureau of the Census, *Census of Manufactures*, relevant years; U.S. Bureau of Labor Statistics, *Capital Stock Estimates for Input-Output Industries: Methods and Data*, Bulletin 2034, 1979; U.S. Internal Revenue Service, *Statistics of Income*, relevant years; L. Chawner, "Capital Expenditures for Manufacturing Plant and Equipment—1915 to 1940," *Survey of Current Business* (March, 1941); L. Chawner, "Capital Expenditures in Selected Manufacturing Industries," *Survey of Current Business* (May, 1941); L. Chawner, "Capital Expenditures in Selected Manufacturing Industries—Part II," *Survey of Current Business* (December, 1941). I am indebted to Charles Bowman of the U.S. Department of Labor and John Musgrave of the U.S. Department of Commerce for providing me with some unpublished data used in this table.

[a] Glass products only.
[b] Cigarettes only.
[c] Meat packing only.
[d] Data not available.
[e] Neg. indicates net disinvestment in relevant year.
[f] Men's clothing only.

United States—in particular, by a transition in the structure of consumer and investment demand in the interwar period. The financial machinery of the American economy, caught in heavy deflation, was not equal to the task of pushing open the doors to the patterns of growth characteristic of the postwar era.

The problem of delayed recovery and the peculiar difficulties created by the incipient reordering of America's industrial structure in the 1930s were quickly overcome by World War II. The war provided a twofold stimulus. The more mature industries of the interwar period were brought out of their doldrums by the particular demands of making war. The new industries were pulled along by government orders, both through their contribution to a general increase in economic activity and through their particular demands on sectors such as petroleum, chemicals, electronics, and aviation. Indeed, the war itself spawned the development of other new industries, products, and processes. Thus, the 1940s helped to lay the foundation of prosperity in the 1950s and 1960s. Indeed, it has been suggested that wartime production and military procurement during the Korean conflict, cold war, and Vietnam War have been responsible for the prosperity of the American economy in the entire postwar era.[33]

By the 1970s, however, the postwar prosperity of the American economy was in jeopardy. Much like the crisis of the interwar period, the persistent instability of the seventies raised fears about the long-term viability of capitalism and made a mockery of the optimism of the "New Frontier" and the "Great Society." Indeed, in the 1970s, the performance of the American economy was somewhat similar to that of the 1930s. In both decades, the growth rate of the gross domestic product (that is, the gross national product net of output produced abroad to which residents have title) fell after several years of robust expansion. Unemployment rates reached disquieting levels, and the attendant downturns were persistent rather than transitory. At the beginning of each of these decades, profound exogenous shocks—in one case, the stock market crash; in the other, skyrocketing oil prices—triggered the difficulties that followed. And in both cases formidable political and intellectual obstacles prevented the adoption of appropriate countercyclic policies.

If in fact the 1970s seem, in economic historical terms, to be similar to the 1930s, is this the result of a simple isomorphism or is there a deeper connection? It may be that the technical requirements of making war (in the 1940s, 1950s, and 1960s) and confronting the perceived Soviet challenge in the cold war, while providing a fiscal stimulus, interfered with the kinds of innovation and economic dynamism necessary for continued growth. For example, during the

1930s the Ford Motor Company began experimenting with the development of plastic car bodies. Such research was abandoned with the inflow of war orders in 1939. The American steel industry by 1950 was ready to engage in the full-scale development of new mechanized processes and the scaling-down of capacity in anticipation of the shrinkage of wartime orders. The Korean conflict reversed this trend. It is now well documented that the strategic weapons buildup of the early sixties, along with the escalation of the space program to undertake a manned mission to the moon, slowed the rate of technological innovations in those markets in which the American economy has been challenged in recent years. And some experts say today that the Strategic Defense Initiative of the Reagan administration inappropriately distorted an entire generation of research in applied physics, engineering, and aeronautics. The "spillover" effects of military research may not be as profound or useful as proponents have suggested.[34]

Innovative effort was the key in the thirties and remains essential today to the sustained development of the capitalist economy. Although certain *industries* in a given stage of development may prosper or wane, individual *firms* may transcend the exigencies of the secular process. Some of course do not; they constitute the failures of business life. But for those enterprises willing and able to develop new products, revamp existing production technologies, and engage in newer and more aggressive forms of distribution, continued accumulation is the prize. The more firms there are in an economy that can adapt and change in these ways, the better off the aggregate economy will be at a given point in time and the faster it will grow. Wartime mobilization and procurement jeopardize the possibility of renewed productive lives for specific firms insofar as they divert attention from invention and focus it upon uniformity, regularity, and volume. To be sure, some military contracts require for their execution the fabrication of entirely new plant, equipment, and tools (the building of sophisticated aircraft and naval vessels is an obvious example). But even here, it may be that for the economy as a whole there are few resources and little energy left for innovative drive in the production of consumption goods or of capital goods used in the production of consumption goods.

Wartime stimuli and defense spending, although providing a general expansion of the national product that can aid the emergence of new industries and techniques and protect the sales of more mature sectors, may also encourage a technological conservatism that has negative long-run consequences. Had the American automobile industry developed plastic car bodies in the 1930s, had the steel indus-

try developed more mechanized processes as early as the mid-1950s, would the hardships afforded by foreign competition obtain in the U.S. economy to the same extent today? This speculation implies that America's contemporary foreign competitors, whose industries were rebuilt after war in the relative absence of military demands, may be enjoying the consequences of the "Arsenal of Democracy" of the 1940s, 1950s, and more recent decades.

How ironic it was that World War II laid the basis for a new era of government intervention in economic affairs. The fiscal experience of the war years gave confidence for the postwar use of government tax and spending policies to "tame" the business cycle. But the war had another legacy: the emergence of a military-industrial complex. Military-industrial procurement during and since the forties, while it afforded temporary support for the growth of the national economy, interfered with the more qualitative development of the economy with respect to technology, labor training, and managerial skill. A decline in productivity growth-rates and international competitiveness has been the inevitable and unfortunate outcome. The business cycles of the last two decades have as a consequence been quite difficult to subdue. What the war gave us by way of an education in policy-making has perhaps now proved less useful. For it also interrupted and deformed the continuing evolution and growth of the American economy. The Great Depression of the 1930s places this present-day misfortune in sharp relief.

Notes

1. It is beyond the scope of this essay to give a full survey of the literature to which I allude here. Some good examples of the arguments I have summarized may be found in Michael M. Weinstein, *Recovery and Redistribution under the NIRA* (New York: North-Holland, 1980); Gardiner C. Means and Adolf A. Berle, *The Modern Corporation and Private Property* (New York: Harcourt, Brace & World, 1968); and S. H. Slichter, "Corporate Price Policies as a Factor in the Recent Business Recession," *Proceedings of the Academy of Political Science* 18 (January 1939): 20–33.

2. Some very good examples of the stagnation literature are G. E. McLaughlin and R. J. Watkins, "The Problem of Industrial Growth in a Mature Economy," *American Economic Review* 29 (March 1939): supp., 1–14; A. H. Hansen, "Economic Progress and Declining Population Growth," *American Economic Review* 29 (March 1939): 1–15; J. M. Keynes, "Some Economic Consequences of a Declining Population," *Eugenics Review* 29 (April 1937): 13–17; and D. Weintraub, "Effects of Current and Prospective Technological Developments upon Capital Formation," *American Economic Review* 29 (March 1939): supp., 32. Also see M. Kalecki, "The Problem of Effective Demand with Tugan-Baranovski and Rosa Luxemburg," in his *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970* (New York: Cambridge University Press, 1971); Paul A. Baran and Paul M. Sweezy, *Monopoly Capital: An Essay on the American Economic and Social Order* (New York: Monthly Review Press, 1966), chaps. 5–7; and P. Patnaik, "A Note on External Markets and Capitalist Development," *Economic Journal* 82 (December 1972): 1316–25.

3. Examinations have been made of the instability of the interwar years in terms of long-term development factors, but they have been concerned with economies other than that of the United States. Ingvar Svennilson undertook such an investigation of the Western European nations in his *Growth and Stagnation in the European Economy* (Geneva: United Nations Economic Commission for Europe, 1954). The experience of the Canadian economy during the Great Depression was studied in these terms by A. E. Safarian, *The Canadian Economy in the Great Depression* (Toronto: University of Toronto Press, 1959). Erik Dahmen did the same in his classic study of Swedish industry between the world wars, *Entrepreneurial Activity and the Development of Swedish Industry: 1919–1939*, trans. A. Leijonhufvud (Homewood, Ill.: Richard D. Irwin, 1970). With the possible exception of Joseph A. Schumpeter's *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process* (New York: McGraw-Hill, 1939), only one study by an American economist has explicitly called for the analysis of economic fluctuations in the United States in a long-term historical perspective that emphasizes qualitative as well as quantitative evidence, and that is R. A. Gordon's "Business Cycles in the Interwar Period: The 'Quantitative-Historical' Approach," *American Economic Review* 39 (May 1949): 47–63. Also see the intriguing article by R. R. Keller, "Factor Income Distribution in the United States during the 1920s: A Reexamination of Fact and Theory," *Journal of Economic History* 33 (March 1973): 252–73.

4. See J. Frederic Dewhurst and Associates, *America's Needs and Resources* (New York: Twentieth Century Fund, 1947), 80–82; and William H. Lough, *High-Level Consumption* (New York: McGraw-Hill, 1935), app. A. Also see U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1970*, pt. 1, series G470–494 (Washington, D.C.: U.S. Government Printing Office, 1975), p. 320.

5. See Lewis Kimmel, *The Availability of Bank Credit: 1933–1938* (New York: National Industrial Conference Board, 1939); and B. S. Bernanke, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review* 73 (June 1983): 257–76.

6. See G. J. Stigler, "The Early History of Empirical Studies of Consumer Behavior," *Journal of Political Economy* 62 (April 1954): 95–113. Engel first published his findings in 1857 in his "Die Productions und Consumtionsverhaltnisse des Konigreichs Sachsen," reprinted in *International Statistical Institute Bulletin* 9, no. 1, supp. 1.

7. On the fate of the 93 percent of the nonfarm population, see C. F. Holt, "Who Benefited from the Prosperity of the Twenties?" *Explorations in*

Economic History 14 (July 1977): 277–89; see also F. Stricker, "Affluence for Whom?—Another Look at Prosperity and the Working Class in the 1920s," *Labor History* 24 (Winter 1983): 5–33. Simon Kuznets estimated that the share of income received by the top 5 percent of recipients rose from 25.76 percent to 32.12 percent in 1932. Thereafter, the share hovered at around 28 percent, until the 1940s, when it fell below 20 percent. Raymond Goldsmith estimates the same share to be 30 percent throughout the first half of the thirties and argues that it fell to 20.9 percent in 1947 and to just below 20 percent by 1962. See Jeffrey G. Williamson and Peter H. Lindert, *American Inequality: A Macroeconomic History* (New York: Academic Press, 1980), 315–16; and Simon Kuznets, *Shares of Upper Income Groups in Income and Savings* (New York: National Bureau of Economic Research, 1953), 637. Robert J. Lampman, in his *Changes in the Share of Wealth Held by Top Wealth-Holders, 1922–56*, NBER Occasional Paper no. 71 (New York: National Bureau of Economic Research, 1960), discusses increasing income inequality in the United States prior to 1929. In a sample of thirty-three large and middle-sized American cities for the years 1929–33, Horst Mendershausen shows that the absolute dispersion of incomes fell, while the relative dispersion (i.e., inequality) of incomes rose. See his *Changes in Income Distribution during the Great Depression*, vol. 7 of *Studies in Income and Wealth* (New York: National Bureau of Economic Research, 1946).

8. The evidence for the following discussion is compiled and reported in J. Frederic Dewhurst and Associates, *America's Needs and Resources*, app. 21.

9. See Carroll R. Daugherty et al., *The Economics of the Iron and Steel Industry* (New York: McGraw-Hill, 1937), 1: 53–54, 320, 364–65, 447; and C. H. Hession, "The Metal Container Industry," in W. Adams, ed., *The Structure of American Industry* (New York: Macmillan, 1961), 430–67. Nonintegrated steel producers, according to Daugherty and his associates, tended to improve their economic position in the 1930s owing to the fact that the markets in which they excelled (finished, rolled products) were far better off than those in which the large integrated producers were dominant (rails and structural shapes).

10. William T. Hogan, *Economic History of the Iron and Steel Industry in the United States* (Lexington, Mass.: D. C. Heath, 1971), vol. 3, pts. 4–5, 1148, 1201, 1244, 1246, 1267; and Gertrude C. Schroeder, *The Growth of Major Steel Companies, 1900–1950* (Baltimore: Johns Hopkins University Press, 1953), 175.

11. Hogan, *Economic History of the Iron and Steel Industry*, vol. 3, pts. 4–5, 1119–20, 1297–99, 1306–67.

12. John W. Scoville, *Behavior of the Automobile Industry in Depression* (n.p. 1935), 3 (quotation), 19–27; Arthur Pound, *The Turning Wheel: The Story of General Motors through Twenty-Five Years, 1908–1933* (Garden City, N.Y.: Doubleday, Doran, 1934), 373–74; Philip H. Smith, *Wheels within Wheels: A Short History of American Motor Car Manufacturing* (New York: Funk & Wagnalls, 1968), 96, 115; Harold A. Baker, *Marketing and Consumption Trends in the Automobile Industry, 1929–1933* (Chicago, 1938), 196–97; and General Motors Corporation, *The Dynamics of Automobile Demand* (New York: General Motors Corporation, 1939), 8.

13. See Scoville, *Behavior of the Automobile Industry*, 13–14; and General Motors Corporation, *The Dynamics of Automobile Demand*, 69–70, 88. From just over $1 billion in 1926, the national expenditure for car parts, tires, and the like fell almost 41 percent to $592 million in 1933. This decline was not entirely cyclic.

14. See Baker, *Marketing and Consumption Trends*, 200; E. D. Kennedy, *The Automobile Industry: The Coming of Age of Capitalism's Favorite Child* (New York: Reynal and Hitchcock, 1941), 229; John W. Scoville, *Reasons for the Fluctuations in Automobile Production* (Ohio State University Publications, 1938), 54; General Motors Corporation, *The Dynamics of Automobile Demand*, 31, 89, 94; and Scoville, *Behavior of the Automobile Industry*, 16.

15. See Scoville, *Behavior of the Automobile Industry*, 9; Baker, *Marketing and Consumption Trends*, 195–96, 198; and H. B. Vanderblue, "Pricing Policies in the Automobile Industry," *Harvard Business Review* 17 (Summer 1939): 392. Also see Robert Paul Thomas, "An Analysis of the Pattern of Growth of the Automobile Industry: 1895–1929" (Ph.D. diss., Northwestern University, 1965).

16. See Kennedy, *The Automobile Industry*, 321–22; and General Motors Corporation, *The Dynamics of Automobile Demand*, 95.

17. As noted in U.S. Department of Agriculture, *Technology in Food Marketing* (Washington, D.C.: U.S. Government Printing Office, 1952), 9. Public recognition of the nutritional value of canned foods was enhanced by the 1930 McNary-Mapes Amendment to the Food and Drug Act of 1906 which set standards for food labeling and the listing of ingredients and additives.

18. See U.S. Department of Commerce, *Historical Statistics of the United States: Colonial Times to 1970*, pt. 1, series D26-62, pp. 131–33.

19. See E. C. Hampe and M. Wittenberg, *The Lifeline of America: Development of the Food Industry* (New York: McGraw-Hill, 1964), 118, 130–31.

20. This is not to say that innovation in refrigeration equipment was lacking. In 1930, tunnel air-blast freezers were developed in Canada, as were freezers using movable refrigerated plates. The fog freezer was developed in 1933, the immersion freezer in 1939. Thus, "despite the depression, the rise of the frozen-food industry began in the 1930s" (U.S. Department of Agriculture, *Technology in Food Marketing*, 11–13).

21. The full acceptance of frozen meat packing also had to await the development of effective wrapping materials—the most important (with respect to its technical superiority and inherent display characteristics) being cellophane by the DuPont Corporation. See Hampe and Wittenberg, *The Lifeline of America*, 154–55 and chap. 7. Also see U.S. Department of Agriculture, *Technology in Food Marketing*, 20.

22. See Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: Harvard University Press, 1977), 33–39.

23. As reported in *The National Advertising Records* (New York: Denney,

1929–34). Also see Hampe and Wittenberg, *The Lifeline of America*, 273, 316, 322–24.

24. See H. F. Williamson et al., *The American Petroleum Industry: The Age of Energy, 1899–1959* (Evanston, Ill.: Northwestern University Press, 1963), 446, 604–5, 651–55, 694. Yet another factor in the improved market conditions facing the industry was the demand from farms. The number of tractors in use increased by about 750,000 in the 1930s.

25. See ibid., 457, 605, 667–68.

26. See ibid., 448, 455, 642–43, 660, 663, 666.

27. See Williams Haynes, *American Chemical Industry* (New York: Van Nostrand, 1948–54), 4:5–6, 5:6–7, 31, 38, 297. The soil conservation and crop restriction programs of the New Deal, created by the Agricultural Adjustment Act, also increased the demand for fertilizers and other agronomic chemicals.

28. See ibid., 5:37, 226; and Williamson et al., *The American Petroleum Industry*, 374–75, 624–25. Also see John McLean and Robert Haigh, *The Growth of Integrated Oil Companies* (Norwood, Mass.: Plimpton Press, 1954), chap. 19.

29. See Warren C. Scoville, *Revolution in Glass-Making: Entrepreneurship and Technological Change in the American Industry, 1880–1920* (Cambridge: Harvard University Press, 1948), 82, 248–49, 253–55, 257–59, 261–62; Pearce Davis, *The Development of the American Glass Industry* (Cambridge: Harvard University Press, 1949), chaps. 9–10; and J. M. Hammer, "The Glass Industry," and P. A. Hughes, "The Plate Glass Industry," both in J. G. Glover and W. B. Cornell, eds., *The Development of American Industries: Their Economic Significance* (Englewood Cliffs, N.J.: Prentice-Hall, 1932).

30. See Scoville, *Revolution in Glass-Making*, 252–56; and Davis, *The Development of the American Glass Industry*, pp. viii, 220–21.

31. See William E. Leuchtenberg, *Franklin D. Roosevelt and the New Deal, 1932–1940* (New York: Harper & Row, 1963), 125–26.

32. See U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings* (June 1968), (Washington, D.C.: U.S. Government Printing Office, 1968), vol. 7, no. 1, p. 11, as cited in John P. Henderson, *Changes in the Industrial Distribution of Employment: 1919–1959*, Bulletin no. 87 (University of Illinois, Bureau of Economic and Business Research, 1959), 10.

33. See, for example, Baran and Sweezy, *Monopoly Capital*.

34. See J. C. Furnas, "Ford's Leftover Idea," *New York Times*, February 16, 1983, p. A-30; Henry W. Broude, *Steel Decisions and the National Economy* (New Haven: Yale University Press, 1963), chap. 5; and J. E. Ullmann, "The Arms Race and the Decline of U.S. Technology," *Journal of Economic Issues* 17 (June 1983): 565–74. Also see Robert W. Degrasse, Jr., *Military Expansion, Economic Decline: The Impact of Military Spending on U.S. Economic Performance* (New York: Council on Economic Priorities, 1983).

3 *The 'Labor Question'*

STEVE FRASER

I

WHEN Franklin Roosevelt first appeared on the national stage of American public life, as a youthful assistant secretary of the navy, many of his contemporaries considered the 'labor question' the primal problem confronting the Western world. Even in the United States, where socialist and labor politics had barely scratched out a beachhead, the 'labor question' nonetheless assumed this ontological status. Thus, on the eve of World War I, Louis Brandeis noted, "The labor question is and for a long time must be the paramount economic question in this country."[1] But even that was an understatement. Everyone from Woodrow Wilson to Big Bill Haywood acknowledged that the 'labor question' was not merely the supreme economic question but the constitutive moral, political, and social dilemma of the new industrial order.

From Versailles, President Wilson cabled Congress:

> The question which stands at the front of all others amidst the present great awakening is the question of labor . . . how are the men and women who do the daily labor of the world to obtain progressive improvement in the conditions of their labor, to be made happier, and to be served better by the communities and the industries which their labor sustains and advances?[2]

For a president facing a world undone by war and revolution, the 'labor question' was fraught with danger. For others, like progressive ideologue Frederick Howe, it contained an exalting revelation:

> My own class did not want such a world [a world of equality—SF]. And there was but one other class—the workers . . . Labor would not serve privilege . . . By necessity labor would serve freedom, democracy, equal opportunity for all . . . The place for the liberal was in labor's ranks . . . My political enthusiasm was now for a party of primary producers.[3]