FIFTY YEARS LATER

WHAT DO WE KNOW ABOUT THE GREAT CRASH?

ALAN REYNOLDS

THE GREAT CRASH of October 1929 marked a fundamental break in U.S. history, a drastic change in basic attitudes and institutions that define the role of citizen and state. Within about three years, stock prices were down to one-tenth of what they had been, real gross national product (GNP) had fallen by a third, industrial production was cut in half, and unemployment had hit a fourth of the labor force. Meanwhile, the public mind was affected as much as the economy, with the people turning to the government for security.

The terror of the Great Crash has been the failure to explain it. People were left with the feeling that massive economic contractions could occur at any moment, without warning, without cause. That fear has been exploited ever since as the major justification for virtually unlimited federal intervention in economic affairs.

From the obvious fact that it did not last, many conclude that the prosperity of the Twenties was in some sense phony or unreal. Actually, it was an enormously vibrant and creative decade. Real production per person increased by a whopping 42 per cent from 1921 to 1929. Life expectancy at birth rose by 5.6 years. There were more applications for patents in 1929 than in any year until 1965. From 1923 to 1929, unemployment averaged 3.3 per cent and inflation less than 1 per cent.

For reasons that range from puritanical to bolshevist, nearly everyone seems eager to blame the Thirties on the previous decade, rather than on policy blunders within the Thirties themselves. The Roaring Twenties are widely caricatured as a period of boomy self-indulgence, the extravagant sins of which required the penance of the Great Depression. The message is that progress should never again be really enjoyed; instead, rapid movement in living standards and stock values should be regarded as a symptom of incipient decay. To be doing well is to court disaster.

Some of these voodoo notions were recently revived by Business Week (September 3). They will be cited below not to chastise that journal (one of my favorites), but to highlight illusions so popular that they are still universally treated as facts:

- Low Wages. "Despite huge gains in productivity," writes Business Week, "wages actually fell for part or all of the 1920s." Actually, wage rates fell significantly only in 1921-22, when consumer prices also fell by more than 16 per cent. From 1922 to 1929, wage rates in manufacturing rose 17.3 per cent in real terms. In a period of comparable length, 1970 to 1977, real wage rates in manufacturing rose only 8.3 per cent.

- Excess Profits. From the incorrect assumption of falling wages, Business Week concludes that there was a "shift to profits... which pitched much of the income gain to high-saving high-income groups." The result was supposedly more savings than could profitably be used in expanding business investment "especially in 1928-29 as money from the 'shift to profits' sought productive uses. The surplus funds flowed into stock market speculation."

Business Week somehow argues that there was both too much and too little business investment: "business investment lagged through the late 1920s", but "capacity had been expanding at rates that could no longer be maintained." In fact, business fixed investment in 1929 was a robust 11.8 per cent of GNP—a figure unmatched since.

Corporate profits, before taxes, averaged 8.2 per cent of national income in 1920-29—well below the 9.7 per cent share of the previous decade or the 14.1 per cent profit share in 1940-49. Conversely, the share of national income going to employee compensation averaged over 60 per cent in the Twenties, up from around 55 per cent in the previous two decades. There was no "shift to profits."

- Excess Poverty. "Almost 60 per cent of all of America's families," says Business Week, "earned less than the $2,000 a year needed in 1929 to buy the basic necessities." The cost of living today is about six times what it was in 1929, so that an income of $2,000 per "family" (which term actually includes single individuals) is comparable to $12,000 now—still well above any meaningful concept of basic necessities.

If most people couldn't afford to buy anything in 1929, why did personal-consumption spending amount to three-fourths of national income? Mr. Reynolds is vice president and economist of the First National Bank of Chicago and editor of The First Chicago World Report.
fouths of GNP in 1929, compared with 64 per cent last year? "Underconsumption" theories of the crash can't be reconciled with the evidence.

**Excess Affluence.** "From 1919 to 1929," writes Business Week, "the share of disposable income received by persons in the top 1 per cent of the income distribution rose to 18.9 per cent from 12.2 per cent." The drop in the rate of federal income tax was cut from 73 per cent in 1919-21 to 24 per cent by 1929, so more disposable (after-tax) income was reported in high-income brackets. That doesn't mean the middle class got a significantly smaller share.

**Farm Depression.** Business Week speaks of "sharply lower prices for farmers, while the goods they bought were rising in cost." But net income of farm operators (per farm) rose 4.5 per cent in 1928, 2.3 per cent in 1929. Prices received for both livestock and crops were up in 1928 and 1929; the "parity ratio" of farm costs to prices rose in both years and (as 1929 was higher in 1929 than in any year from 1934 to the present. Farm prices and incomes were, of course, even higher during the inflationary boom of World War I, but so was the cost of living. Farm debt declined from 1923 to 1927, and then leveled off.

**Housing Depression.** "A consumption boom," claims Business Week, "dispelled the steepness of the housing depres-

**T**he conventional wisdom, of course, is that the Crash of '29 was initiated by a wild speculative mania, creating a "bubble" that had to burst. Yet an enormous body of evidence has since shown that the stock market was extraordinarily efficient—that stock prices quickly reflect the best available information. The efficiency of financial markets suggests that the stock market could not have been e[...]

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**Imports**

**Exports**

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**November 9, 1979**
The stock market crash was caused
by the increasing
likelihood that the Smoot-Hawley
tariff would pass

were springing up. Production of autos, crude oil, and elec-
tricity more than doubled from 1920 to 1929.

If the Dow-Jones index of industrial stock prices is ad-
justed for the postwar inflation, the highest point on Sep-
tember 3, 1929 (1,212 in 1975 dollars) was no higher than
the peak in 1900 (1,252) and well below the peak in 1966
(1,859). As of 1929, stock prices had doubled in a little
over two years in this country, but they doubled in half
that time in France, and did almost that well in Canada
and Japan. Yet we do not speak of the crazy stock market
boom of France in the late Twenties, nor of the insane
speculative bubble of 1960 in this country.

If the stock prices were not way out of line with genuine
business opportunities in September of 1929, as both theory
and evidence suggest, then what could have happened to
change the prospects so suddenly and dramatically? The
answer was provided by Jude Wanniski in *The Way the
World Works*: the stock market crash was caused by the
increasing likelihood that the Smoot-Hawley tariff would pass.

Many scholars have long agreed that the tariff had disas-
trous effects, but most of them have felt that it could not
have caused the stock market collapse of October 1929,
since the tariff was not signed into law until the following
June. Today we know that market participants do not wait
for a major law to pass, but instead try to anticipate
whether or not it will pass and what its effects will be.

Consider the following sequence of events:

The Smoot-Hawley tariff passes the House on May 28,
1929. Stock prices in New York (1929 = 100) drop from
196 in March to 191 in June. On June 19, Republicans on
the Senate Finance Committee met to rewrite the bill.
Hoover was present, as the market continued falling.

On March 24, 1930, the Senate passes the Smoot-Hawley
tariff, 222 to 153. Debate now centers on whether or not
President Hoover will veto. Still, stocks drop 11 points,
to 160, in May. On June 17, 1930, despite the vigorous
protests of a thousand economists, Hoover signs the bill into
law, noting that it filleth a campaign promise he had made,
and stocks drop to 110 in July.

The *Commercial and Financial Chronicle* dated June 21,
1930 led off with the major events of the week—the
signing by the President of the Smoot-Hawley tariff bill
and "a renewed violent collapse of the stock market." With-
out ever quite linking the two events, the *Chronicle* did
observe that "if the foreigner cannot sell his goods to us
he cannot obtain the wherewithal to buy our goods." Other
securities noted that international stocks were particularly
hard hit, that 35 nations had vigorously protested the tariff
and threatened retaliation, and that Canada and other na-
tions had already hiked their own tariffs "in view of the
likelihood of such legislation in the United States."

IT MAY BE hard to realize how international trade could
have so much impact on the domestic economy. For years,
in explaining income movements in the T.statistics, attention
has instead been focused on federal spending and deficits.
Yet on the face of it, trade was far more important: exports
fell from $7 billion in 1929 to $2.5 billion in 1932, federal
spending was only $2.6 billion in 1929 and $3.2 billion in
1932. In 1929, exports accounted for nearly 7 per cent
of our national production, and a much larger share of the
production of goods (as opposed to services). Trade also
accounted for 15 to 17 per cent of farm income in 1926-29,
and farm exports were slashed to a third of their 1929 level
by 1933. Even these numbers, however, underestimate the significance
of trade. Critical portions of the U.S. production process
can be crippled by a high tax on imported materials. Other
key industries are heavily dependent on exports. Disruptions
in trade patterns then ripple throughout the economy.
A tariff on lined paper hurt the U.S. paint industry, a tariff on
stainless steel hurt a tariff on canvas cloth, a tariff on
machine tools, electrical equipment, and so on. Over eight hun-
dred things used in making automobiles were taxed by
Smoot-Hawley. These were the hundred U.S. plants employ-
ing sixty thousand people to make cheap clothing out of
imported wool rags; the tariff on wool rags rose by 140 per
cent.

1418 NATIONAL REVIEW
Foreign countries were flattened by higher U.S. tariffs on things like olive oil (Italy), sugar and cigars (Cuba), silk (Japan), wheat and butter (Canada). The impoverishment of foreign producers reduced their purchases of, say, U.S. cotton, thus bankrupting both farmers and the farmers’ banks. It should be obvious that an effective limit on imports also reduces exports. Without the dollars obtained by selling here, the foreign countries had to sell our goods (or to repay their debts). From 1929 to 1932, U.S. imports from Germany fell by $181 million, U.S. exports to Germany fell by $277 million. Americans also had little use for foreign currency, since foreign goods were subject to prohibitive tariffs, so the dollar was artificially costly in terms of other currencies. That too depressed our exports, which turned out to be particularly devastating to farmers—the group that was supposed to benefit from the tariffs.

The market suffered continual policy assaults after 1930. In early April of 1932, the Commercial and Financial Chronicle reports “the market fell into a complete collapse... owing to the approval by the House of Representatives of an increased tax on stock sales.” The Dow bottomed on July 8, when (as the Chronicle of the following day reported) there had been some good news—the Tariff Commission had trimmed 18 tariffs, and a House subcommittee was looking into ways to cut taxes by eliminating duplication with states. On Tuesday, September 19, candidate Roosevelt called the tariff “the road to ruin” and pledged to negotiate reductions in tariffs as soon as he took office. The following Saturday, the Chronicle was astounded that the “market again sharply reversed its course, and on Wednesday prices suddenly surged upward in a most sensational fashion.”

The overwhelming issue after Smoot-Hawley was accelerating deflation—a general decline in prices or increase in the purchasing power of money. As measured by the broad GNP deflator, prices fell by 3.3 per cent in 1930, 9.1 per cent in 1931, 11.2 per cent in 1932, and 2.1 per cent in 1933. A check roast that sold for 31 cents a pound in 1929 went for 16 cents in 1933. Many enduring myths about the early Depression simply reflect failure to adjust for the rising value of the dollar. It is still said, for example, that there must have been as much money as people wanted to borrow since interest rates were so low. Short-term business loans in major cities went for 4.7 per cent in 1932; a Manhattan mortgage could be obtained at 3.8 per cent. Since prices were falling by 11 per cent a year, however, those rates were roughly 16 to 17 per cent in real terms—equivalent to nominal rates of 30 per cent at today’s rate of inflation. Actually, the fact that the dollar was rising in value against goods is a sure sign that people wanted to hold more money than there was, and were willing to dump goods to get it.

The initial trigger of deflation was the collapse of over five thousand banks, at the rate of about three hundred banks a month after October 1930. Perfectly sound foreign loans turned bad as foreign exporters were shut out of our market. Broker loans turned bad as foreign and domestic stockholders, and those lending against that collateral, re-
considered the earnings potential of firms in a shrunken world market. Above all, farm loans turned bad as farm export potential and prices faced collapse as a result of the deliberate impoverishment of foreign customers. As Professor Allan Meltzer has emphasized, rural banks were hit particularly hard by Smoot-Hawley.

Failure of a few banks soon toppled others, as people rushed to pull their money out. Banks couldn’t convert all their loans and securities into cash quickly enough without bankrupting their borrowers or losing money by selling bonds cheap. The Federal Reserve, set up to prevent bank runs, did almost nothing in the way of supplying the banks with more reserves or lending them money against securities. Instead, it cut the discount rate by two percentage points in early 1932.

Between August 1929 and March 1933, some 36 per cent of the nation’s money simply disappeared. That was, of course, the startling discovery Milton Friedman and Anna Schwartz made in 1963, in their Monetary History of the U.S. It was not widely noticed at the time. The October 1934 letter from National City Bank of New York reported that “at no time since 1929 has the stock of money been less than in that year.” That statement makes sense only if one doesn’t count deposits in banks as money.

In fact, when banks collapsed, their deposits ceased to be money. When people don’t have as much money, they can’t spend it as fast. With a fall in total spending (nominal GNP), either prices or quantities bought who had to come down. The U.S. Government activity resisted the downward adjustment of prices, particularly the price of labor, with the predictable result that more of the decline was reflected in productivity than was the case in Europe.

Deflation had serious effects. For one thing, the real burden of debt rose sharply. Promises to pay a certain number of dollars in the future naturally lead to widespread bankruptcies and defaults when the flow of dollar incomes is much less than expected. And the other expenses that may be fixed by long-term contracts, such as commitments to pay a certain price for future delivery, or wage contracts with labor unions. When spending and prices fall, such contract expenses may wipe out any margin for profit, resulting in layoffs or plant closings.

There was (and still is) a widespread confusion of wage rates per hour with total income actually received by workers. As Business Week puts it, “a reduction in wages lowers a worker’s living standard, raises his savings rate, reduces even further the total demand for goods in the economy.” This is exactly like saying that Chrysler should not pay its workers to sell the cars because the company would make more profit at a higher price.

If wage rates are kept up while prices are falling, labor costs soon wipe out any profit margin. The firm must at least lay off workers and possibly shut down. It is little comfort then to know that if jobs were available they would pay a lower wage rate. Pricing workers out of a job does not raise their income and aggregate demand. The higher wage rate simply cannot be paid, because consumers cannot or will not pay a price high enough to cover the cost.

Consumer prices fell 25 per cent by 1933 wholesale prices fell 31 per cent. “Wages,” says Business Week, “suffered even sharper cut.” That simply is not true. Hourly wages of production workers in manufacturing declined significant-

ly only in 1932, although consumer prices were falling sharply. As a result, real wage rates in manufacturing rose by 4.3 per cent from 1929 to 1933 (and by another 26.6 per cent from 1933 to 1937). In union building trades, wage rates rose even in nominal terms from 1929 to 1931—in the face of total collapse of construction. Even by 1933, real wage rates in union building trades were 15.3 per cent higher than in 1929. Real wage rates in coal mining were essen-
tially unchanged from 1929 to 1933, but then rose 63.4 per cent by 1939.

In a 1931 article in Essays in Persuasion, Lord Keynes showed that he understood the consequences quite well: “The fall in prices relative to costs,” wrote Keynes, “together with the psychological effect of high taxation, has destroyed the necessary incentive to production.” There is, he added, “no possible means of curing unemployment except by re-

storing to employers a proper margin of profit.”

President Hoover jawboned vigorously on behalf of keep-
ing nominal wage rates up while prices were falling—that is, on behalf of rising unemployment. It apparently worked until 1932, at least within the most visible industries. Real wage rates rose in manufacturing and construction; employ-

ment plummeted.

Then we were hit with the National Recovery Act (NRA) from June 1933 to May 1935. With industry producing less than half of what it had produced in 1929, President Roose-

velt somehow decided that we had to prevent “foolish over-

production.” The NRA certainly did that, by preventing many prices and wage rates from adjusting to the shrunken money supply. With less production, came less employment.

Real GNP had increased 12 per cent from the third quarter of 1932 to the second quarter of 1933; with NRA, production dropped almost 10 per cent in two quarters and stumbled along with little progress until the program ended.

Industrial production was higher when the NRA started than when it ended.

A s if things weren’t bad enough, in 1932 the Hoover Ad-

ministration put through the biggest percentage increase in tax rates in our history. A family earning $10,000 with four exemptions paid $40 in 1929, $416 in 1932. Roosevelt hiked taxes again in 1935 and almost routinely thereafter. By 1938, the corporate income tax rate had gone from 11 to 19 per cent, top estate tax rates from 20 to 70 per cent, and top income tax rates from 24 to 79 per cent; in addition, new taxes had been levied on gifts and on jobs (payrolls).

Since productive effort and investment depend largely on after-tax rewards, tax policy was well designed to encourage stagnation.

There was nonetheless a brief respite and recovery until 1937, when additional destructive policies created a sharp recession within a depression. Real GNP soared by 13.4 per cent in 1936. But minimum wage rates were enacted in 1937, and the Wagner Act, strengthening unions, was de-

clared constitutional. There were more strikes in 1937 (4,720) than in any year between 1925 and 1967. Monetary policy was substantially tightened in 1937, with sharp in-

creases in the discount rate and reserve requirements, and
total spending (nominal GNP) fell by 6.4 per cent in 1938. With wage rates again being pushed up and prices again falling, real wage rates and unemployment shot up, the stock market fell.

Public service jobs were financed by taxes and tariffs on productive activity, and the malfunctions of the machinery of government, the inefficient relocation, adaptation, and use of skills. Unemployment rates were exaggerated by around five percentage points because a quarter of a million people in public-service employment were (with some justification) counted as not working.

In January 1939, President Roosevelt announced the end of New Deal 'reforms.' Real output rose by 7.6 per cent in that year, followed by increases of 7.7 and 16.1 per cent in 1940 and 1941.

It is often said that the federal deficits of World War II pulled us out of the Depression, but that is misleading. Deficit spending was not significant until 1942, and it peaked in 1945 when measured real growth was less than half of what it was in 1941. Unemployment rates obviously looked much better, because the armed forces in 1945 were as numerous as the unemployed in 1934. Living standards, however, declined in the war. Consumption of durable goods fell 45 per cent from 1941 to 1945, and was no higher per person in 1944 than in 1932-33. The nation's real stock of capital fell 5 per cent from 1939 to 1944.

Measures of inflation were wildly understated during the war, because they failed to account for black markets and subsidies. As a result, real output and income figures were exaggerated by understating true costs. Even so, measured real earnings of workers did not rise at all from 1943 to 1948.

After-tax real profits, however, doubled from 1939 to 1944 and then doubled again by 1948. The improvement that undoubtedly did occur in business conditions was due to lowering real wage rates through wage controls and inflation. The profit share of National Income was 4.9 per cent in 1939-39, 14.1 per cent in 1940-41.

Inflation also helped to reduce the bite of Smoot-Hawley tariffs by about half. Tariffs were also cut explicitly, though gradually, after Secretary of State Cordell Hull pushed through the Reciprocal Trade Act of 1934. Average tariffs on dutiable imports fell from almost 60 per cent in 1931 to 22 per cent in 1944-53, and the list of dutiable imports also shrank. Further tariff reductions followed the establishment of the General Agreement on Tariffs and Trade in 1947, and the Kennedy Round of tariff cuts in 1962-67. As a result, world trade expanded by 8.2 per cent a year from 1956 to 1970, pulling most of the world's economies through efficient specialization and exchange.

What happened during World War II is that we undertook the depressing squeeze on profit margins and world trade, largely by inflating our way out of legislated costs. The Great Crash happen again? In one sense, it already has. Pioneers Lawrence Fisher and James Lorie calculate that the real after-tax return on stocks was minus 6.6 per cent a year from 1929 to 1933; from 1972 to 1976, the annual real return to stockholders was about the same—minus 6.2 per cent. The duration of the Depression, however, was caused by more than 'just' the stock market collapse. Protectionism is certainly still a threat, though it now takes more subtle form such as 'voluntary' quotas. It is no coincidence that world trade has grown only half as fast in recent years as it did in the Sixties. Destructive rates of taxation are quite possible too, though they now occur through the effect of inflation in creating illusory profits, interest earnings, and capital gains to be taxed, and in pushing individuals into higher brackets. Least likely to be repeated is a massive collapse of the money supply. Deposit insurance does seem to keep bank runs from spreading, and the Federal Reserve has mastered the art of inflating.

There are some structural changes that probably prevent massive unemployment. For one thing, the service sector now accounts for nearly two-thirds of all employment. Spending on services (being harder to postpone) is not subject to the sharp swings that can hit construction and durable goods manufacturing.

The cost commonly cited reasons for optimism are less plausible. The hope that improved economic management will protect us is now contradicted by the third recession in a decade combined with the worst inflation in peacetime history. The old idea that unemployment benefits provide automatic stabilizers likewise clashes with growing evidence that such benefits lengthen unemployment and encourage activities leading to unemployment.

Perhaps the best reason to expect that a Great Depression will never again occur is that a small but growing band of scholars are finally beginning to grasp what caused it—namely, tariffs, taxes, monetary mismanagement, and political manipulation of wage rates and prices. Once the tail is placed on the right donkey, we at least know what to watch out for.

In 1939 FDR announced the end of New Deal 'reforms.' Real output rose 7.6 per cent that year, followed by increases of 7.7 and 16.1 per cent in 1940 and 1941.