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THE GREAT DEPRESSION

The Great Depression of the 1930s was the worst economic downturn in history. The Depression was centered in the United States, but its effects were felt in almost every country of the globe. For most countries the decline in production was calamitous and accompanied by severe unemployment. Financial crises and acute deflation were also widespread.

Perhaps not surprisingly, the worst economic downturn ever experienced had a multitude of causes. A combination of declines in consumer demand, financial panics, and misguided government policies caused output to fall in the United States. The gold standard, which linked nearly all the countries of the world in a network of fixed exchange rates, both limited the American policy response and transmitted the American downturn to other countries. A variety of unique factors also contributed to the downturn in various countries.

Timing and Severity

In the United States, the Great Depression developed in a sequence of distinct phases. A quite normal recession began in the summer of 1929. Industrial production declined just 1.7 percent between the peak in economic activity in July 1929 and September 1929. In October, stock prices, which had risen dramatically in the late 1920s, fell even more dramatically in an event often referred to as the Great Crash. Panic selling began on “Black Thursday,” October 24, 1929. Between their peak in September 1929 and their 1929 low in November, American stock prices (measured using the Cowles Index) declined 33 percent. Following the Great Crash, the American downturn accelerated greatly. U.S. industrial production fell 10.7 percent between

September and December 1929, and all forms of output continued to decline throughout 1930. Even so, had the depression in the United States ended at the end of 1930, it would have been recorded as a severe contraction, not a "great" depression.

In the fall of 1930 the first of four waves of banking panics gripped the United States. A banking panic arises when many depositors lose confidence in the solvency of banks and as a result simultaneously demand that bank deposits be paid out in cash. Banks, which typically hold only a fraction of deposits as cash reserves, must liquidate loans to try to raise the required cash. This process of hasty liquidation can cause even a previously solvent bank to fail. The United States experienced widespread banking panics in the fall of 1930, the spring of 1931, the fall of 1931, and the fall of 1932. The final wave of panics continued through the winter of 1933 and culminated with the national Bank Holiday declared by Franklin Roosevelt on March 6, 1933. The Bank Holiday closed all banks in the country and only allowed them to reopen after they were deemed to be solvent by government inspectors.

Following each wave of panics, real output and prices fell precipitously. By the time the trough of the Great Depression had been reached in the United States in March of 1933, industrial production had declined 52.2 percent and real gross domestic product (GDP) had declined 29.7 percent. The wholesale price index had declined 32.8 percent. Though there is some debate about the reliability of the statistics, it is widely agreed that the unemployment rate was over 20 percent at its highest point, and may have been as much as a quarter of the labor force. To put these statistics into perspective, in the worst recession of the postwar era, 1981-82, U.S. real GDP declined just 2 percent and the unemployment rate peaked at 9.7%. In 1981-82 prices never actually declined, though the rate of price increase (inflation) slowed substantially.

The timing and severity of the Great Depression varied substantially across countries. Table 1 shows the dates of the downturn and upturn in economic activity in a number of

countries. Table 2 shows the peak-to-trough percentage decline in annual industrial production for countries where such data are available. Great Britain struggled with low growth and recession for most of the second half of the 1920s, due largely to its decision in 1925 to return to the gold standard at the overvalued prewar parity. Britain did not slip into severe depression, however, until the middle of 1930, and the peak-to-trough decline in industrial production was roughly one-third that of the United States. France also experienced a relatively short downturn in the early 1930s. The French recovery in 1933, however, was short-lived. French industrial production and prices both fell substantially between 1933 and 1936. Germany slipped into downturn early in 1928 and then recovered somewhat before turning down again in the second quarter of 1929. The decline in German industrial production was roughly equal to that in the United States. A number of countries in Latin America slipped into depression in late 1928 and early 1929, before the decline in output in the United States. While some of the countries on the periphery experienced severe depressions, other countries, such as Argentina and Brazil, experienced relatively mild downturns. The depression in Japan started relatively late and was comparatively mild.

The general price deflation evident in the United States was also present in other countries. Virtually every industrialized country (except for Japan) saw rates of wholesale price deflation of 30% or more between 1929 and 1933. The prices of primary commodities traded in world markets declined even more dramatically during this period. For example, the prices of coffee, cotton, and rubber were reduced by more than half just between September 1929 and December 1930. As a result, the terms of trade declined precipitously for primary-commodity producers.

Financial crises and banking panics occurred in many, but not all, countries. Payment difficulties at the Creditanstalt, Austria's largest bank, in May 1931 set off a string of financial

crises that enveloped much of Europe and were a key factor forcing Britain to abandon the gold standard. Among the countries hardest hit by bank failures and volatile financial markets were Germany, Hungary, and Czechoslovakia. Other countries, such as Canada and Great Britain, experienced essentially no financial crises. Domestic banking crises were also rare in Latin America. However, a number of Latin American countries, such as Brazil and Chile, defaulted on their foreign debts.

The recovery from the Great Depression began in March of 1933 in the United States. Output grew rapidly in the 1930s: real GDP rose more than 8% per year between 1933 and 1937. Despite this rapid growth, output had fallen so deeply in the early years of the 1930s that it remained substantially below its long-run trend level throughout this period. In 1937-38 the United States suffered another severe downturn. After mid-1938 the United States grew even more rapidly than in the mid-1930s, and output finally returned to its long-run trend level in 1942.

Recovery in the rest of the world varied greatly. Britain began to recover relatively early; output rose substantially following Britain's abandonment of the gold standard in September 1931. A number of Latin American countries also began to recover in early 1932. Germany and a number of small European countries began to recover at about the same time as the United States in early 1933. France, which experienced severe depression relatively late, did not firmly enter the recovery phrase until 1938.

Causes of the Great Depression

The fundamental cause of the Great Depression in the United States was a decline in spending (sometimes referred to as aggregate demand). The decline in spending led to a decline in production as firms and stores noticed an unintended rise in inventories. The source of the

contraction in spending in the United Sates varied over the course of the Depression and cumulated into a monumental decline in aggregate demand.

The initial decline in output in the summer of 1929 is widely acknowledged to have been the result of tight monetary policy. The 1920s had been a prosperous decade, but not an exceptional boom: prices had been nearly constant and there had been mild recessions in both 1924 and 1927. The one obvious area of excess was the stock market. Stock prices had risen by more than a factor of four between the low in 1921 and the peak in 1929. In 1927 and 1928, the Federal Reserve had raised interest rates in hopes of slowing the rapid rise in stock prices. These higher interest rates depressed interest-sensitive spending such as construction and purchases of automobiles, which in turn led to reduced production.

The Great Crash of the stock market dealt another blow to consumer and business spending. While the amount of wealth destroyed by the decline in stock prices was relatively small, spending on durable goods fell precipitously following the Crash. A likely explanation is that the financial crisis generated much uncertainty, which in turn led consumers and firms to put off purchases of durable goods.

The unchecked banking panics of 1931 and 1932 and the resulting fall in the American money supply bear ultimate responsibility for the collapses of aggregate demand after 1930. By their nature, banking panics are largely irrational, inexplicable events. But, economic historians believe that substantial increases in farm debt in the 1920s, together with American policies that encouraged small, undiversified banks, provided an environment where such panics could ignite and flourish. The banking panics in the United States took a severe toll on American financial markets. By 1933, one fifth of the banks in existence at the start of 1930 had failed. As a result of a drastic rise in the currency-to-deposit ratio caused by the panics, the money supply in the United States declined 38 percent between October 1929 and April 1933.

Perhaps the clearest evidence of the key role of monetary collapse in the American Great Depression is provided by a simple picture. Figure 1 shows the money supply and real output over the period 1920 to 1940. Both series decline precipitously in the early 1930s. The decline in the money supply depressed spending in a number of ways. Even though prevailing nominal interest rates were low, the effective or real interest rate rose to extraordinarily high levels. This is true because extensive deflation made the purchasing power of money to be paid back in the future very high. Such high real interest rates depressed both consumer and firm spending. The pessimism and loss of confidence engendered by the panics also surely depressed spending. Furthermore, the failure of so many banks disrupted lending, and hence reduced both the supply of and the demand for investment funds.

Why the Federal Reserve did not intervene to stem the banking panics is one of the remaining debates on the economic history of the Great Depression. Milton Friedman and Anna Schwartz, in their classic study A Monetary History of the United States, stress the incompetence of American monetary policymakers. They argue that the absence of a firm leader committed to financial stability allowed competing interests within the Federal Reserve to compromise on a policy of inaction. Barry Eichengreen, on the other hand, argues that the American adherence to the gold standard prevented monetary expansion to counter the panics. Aggressive Federal Reserve policy could have led to a loss of credibility in the U.S. commitment to the gold standard, and hence devastating withdrawals of gold from the United States. In this view, without Congressional action abandoning the gold standard, the Federal Reserve had no choice but to allow the panics to continue and to tighten further, as it did in September 1931, when investors feared a U.S. devaluation.

While there is debate about the role the gold standard played in limiting American policy, there is no question that it was a key factor in the worldwide depression, especially in the

transmission of the American decline to the rest of the world. Under the gold standard the values of the currencies of virtually every country in the world were fixed in terms of gold, and hence relative to every other currency. Under this system, imbalances in trade or asset flows gave rise to international gold flows. For example, in the mid-1920s intense international demand for American stocks led to large inflows of gold to the United States. Likewise, a decision by France to return to the gold standard after World War I at a low price for the franc led to trade surpluses and substantial gold inflows.

Britain had chosen to return to the gold standard after World War I at the prewar parity. Because of wartime inflation, this decision implied that the pound was overvalued. This overvaluation led to trade deficits and substantial gold outflows after 1925. As a result, the British money supply fell and interest rates rose. These developments depressed British spending and caused the United Kingdom to slip into recession even before the dramatic decline in the United States.

Once the United States began to contract severely, the tendency for gold to flow out of other countries and toward the United States intensified. This is true because deflation in the United States made American goods particularly desirable to foreigners, while low income reduced Americans' demand for foreign products. To counteract the resulting tendency toward an American trade surplus and foreign gold outflows, central banks throughout the world raised interest rates. Maintaining the international gold standard, in essence, required a massive monetary contraction throughout the world to match that in the United States. The result was a decline in output throughout the world that also nearly matched that in the United States.

Some scholars stress the importance of other international linkages. Foreign lending to Germany and Latin America had expanded greatly in the mid-1920s. U.S. lending abroad then fell in 1928 and 1929 as a result of monetary contraction in the United States and increased

preference for American assets. This contraction in foreign lending may have led to further credit contractions and declines in output in these countries. In Germany, the legacy of the hyperinflation of the early 1920s is widely believed to have prevented the monetary authorities from undertaking monetary expansion to counteract these effects. The effects of reduced foreign lending may explain why Germany, Argentina, and Brazil turned down before the Great Depression began in the United States.

The Smoot-Hawley tariff and the worldwide rise in protectionist trade policies were another complicating factor. The Smoot-Hawley tariff was passed in the United States in 1930 in an attempt to raise farm incomes by reducing foreign competition in agricultural products. Other countries followed suit, both in retaliation and in an attempt to correct trade imbalances by brute force. Specialists now believe that these policies had relatively little impact on the large industrial producers. The decline in world trade was largely the result of falling incomes, not the cause. Charles Kindleberger argues that these policies may have contributed to the extreme decline in the world price of raw materials. This deterioration in their terms of trade caused severe balance of payments problems for primary-commodity-producing countries in Africa, Asia, and Latin America and led to contractionary policies.

Sources of Recovery

Given the key role of monetary contraction and the gold standard in causing the Great Depression, it is not surprising that devaluation and monetary expansion were the key source of recovery throughout the world. A comparison of when countries abandoned the gold standard (or devalued their currencies substantially) and when output began to grow again shows a remarkable correlation. For example, Britain, which was forced off gold in September 1931, recovered quite early, while the United States, which did not effectively devalue until 1933,

recovered substantially later. Similarly, the Latin American countries of Argentina and Brazil, which devalued in 1931, were fully recovered by 1935, while the "Gold Bloc" countries of Belgium and France, which were particularly wedded to the gold standard and slow to devalue, had industrial production in 1935 well below the 1929 level.

Devaluation, however, did not increase output directly. Rather, it allowed countries to expand their money supplies without fear of gold movements and exchange rate pressures. Countries that took greater advantage of this freedom saw greater recovery. The monetary expansion in the United States beginning in early 1933 was particularly dramatic. The American money stock increased nearly 42 percent between 1933 and 1937. This monetary expansion stemmed largely from a substantial gold inflow to the United States, caused in part by rising political tensions in Europe. Worldwide monetary expansion stimulated output by lowering interest rates and making credit more widely available. One sign that monetary expansion stimulated recovery in the United States is that consumer and business spending on interest-sensitive items such as cars, trucks, and machines rose well before consumer spending on nondurable goods and services.

Fiscal policy played a relatively small role in stimulating recovery in the United States. Indeed, the Revenue Act of 1932 increased American tax rates greatly in an attempt to balance the federal budget, and by doing so dealt another contractionary blow to aggregate demand. Franklin Roosevelt's "New Deal" initiated in early 1933 included a number of new federal programs aimed at generating recovery. For example, the Works Progress Administration (WPA) hired unemployed workers to work on government building projects, and the Agricultural Adjustment Act (AAA) gave large payments to farmers. However, the actual increases in government spending and the government budget deficit were small relative to the size of the economy. This is especially true when one includes state government budget deficits,

which actually declined at the same time that the federal deficit rose. As a result, the new spending programs had little direct expansionary effect. Whether they may nevertheless have had positive effects on consumer and business sentiment is an open question.

Fiscal expansion was used somewhat more forcefully in some European countries. Germany, for example, had high and steadily increasing budget deficits after 1932. These resulted from a rise in spending related to unemployment relief and rearmament. Great Britain, which had not used fiscal expansion to a noticeable extent early in the recovery, also increased military spending dramatically after 1937. In the United States military spending was not large enough to have an appreciable effect on total spending and output until 1942. France, which had raised taxes in the mid-1930s in an effort to defend the gold standard, ran large budget deficits starting in 1936. The expansionary effect of these deficits, however, was counteracted somewhat by a legislated reduction in the number of hours in the French work week from 46 to 40, which raised costs and depressed production.

Impact of the Great Depression

The most obvious impact of the Great Depression was human suffering. In a short period of time world output and standards of living took a precipitous drop. As much as a quarter of the labor force in industrialized countries was unable to find work in the early 1930s. While conditions began to improve by the mid-1930s, total recovery was not accomplished until the end of the decade.

The Depression and the policy response also changed the world's economy in crucial ways. The Great Depression hastened, if not caused, the end of the international gold standard. A system of fixed exchange rates was reinstated after World War II under the Bretton Woods system. But the economies of the world never embraced the Bretton Woods system with the

conviction and fervor they brought to the gold standard. By 1973, fixed exchange rates were abandoned in favor of floating rates.

Both labor unions and the welfare state expanded substantially during the 1930s. In the United States, union membership more than doubled between 1930 and 1940. This trend was stimulated both by the severe unemployment of the 1930s and the passage of the National Labor Relations (Wagner) Act in 1935, which encouraged collective bargaining. The United States also greatly increased unemployment compensation and established the Social Security system in response to the hardships of the 1930s. Whether these changes would have eventually occurred without the Depression is an open question. Many European countries had experienced significant rises in union membership and had established government pensions before the 1930s. However both trends accelerated in Europe during the Depression.

In many countries, government regulation of the economy, especially of financial markets, increased substantially during the Great Depression. The United States, for example, established the Securities and Exchange Commission in 1934 to regulate new stock issues and stock market trading practices. The Banking Act of 1933 prohibited banks for underwriting or dealing in securities. The United Sates and many other countries also adopted deposit insurance to prevent bank runs. This particular change effectively eliminated banking panics as a cause or exacerbating factor in recessions in developed countries.

The Depression also played a crucial role in the development of countercyclical macroeconomic policy. The central role of reduced spending and monetary contraction in the Depression led John Maynard Keynes to develop his General Theory of Employment, Interest, and Money. Keynes's theory suggested that increases in government spending, tax cuts, and monetary expansion could be used to counteract depressions. This insight, combined with a growing consensus that government should try to stabilize employment, has led to much more

activist policy since the 1930s. Legislatures and central banks throughout the world now routinely attempt to prevent and moderate recessions. Whether such a change would have occurred without the Depression is again a largely unanswerable question. What is clear is that this change has made it unlikely that a decline in spending will ever be allowed to multiply and spread throughout the world as it did during the Great Depression of the 1930s.

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Impact of the Depression

Michael D. Bordo, Claudia Goldin, and Eugene N. White (eds.), The Defining Moment: The Great Depression and the American Economy in the Twentieth Century (1998), includes a series of papers by distinguished scholars on the long-run impact of the Great Depression in the United States.

John Maynard Keynes, The General Theory of Employment, Interest, and Money (1936), is the path-breaking work of economic theory that was inspired by the Great Depression and led to the rise of stabilization policy in the postwar era.

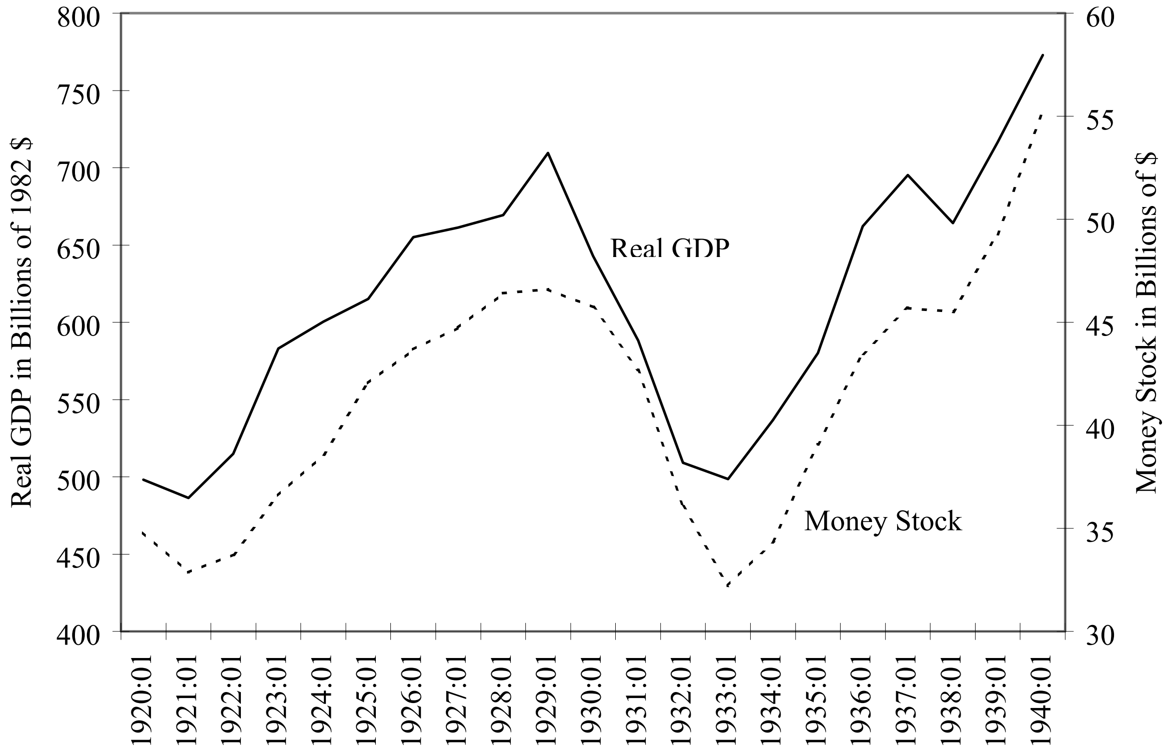
TABLE 1
Dates of the Great Depression in Various Countries
(In Quarters)

Country	Depression Began	Recovery Began
United States	1929:3	1933:2
United Kingdom	1930:1	1931:4
Germany	1928:1	1932:3
France	1930:2	1932:3
Canada	1929:2	1933:2
Switzerland	1929:4	1933:1
Czechoslovakia	1929:4	1932:3
Italy	1929:3	1933:1
Belgium	1929:3	1932:4
Netherlands	1929:4	1933:2
Sweden	1930:2	1932:3
Denmark	1930:4	1933:2
Poland	1929:1	1933:2
Argentina	1929:2	1932:1
Brazil	1928:3	1931:4
Japan	1930:1	1932:3
India	1929:4	1931:4
South Africa	1930:1	1933:1

TABLE 2
Peak-to-Trough Decline in Industrial Production in Various Countries
(Annual Data)

Country	Decline
Unites States	46.8 %
United Kingdom	16.2 %
Germany	41.8 %
France	31.3 %
Canada	42.4 %
Czechoslovakia	40.4 %
Italy	33.0 %
Belgium	30.6 %
Netherlands	37.4 %
Sweden	10.3 %
Denmark	16.5 %
Poland	46.6 %
Argentina	17.0 %
Brazil	7.0 %
Japan	8.5 %

FIGURE 1
Money and Output in the United States



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