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THE GLOBAL ECONOMIC SYSTEM

HOW LIQUIDITY SHOCKS AFFECT FINANCIAL INSTITUTIONS AND LEAD TO ECONOMIC CRISES

The Global Economic System

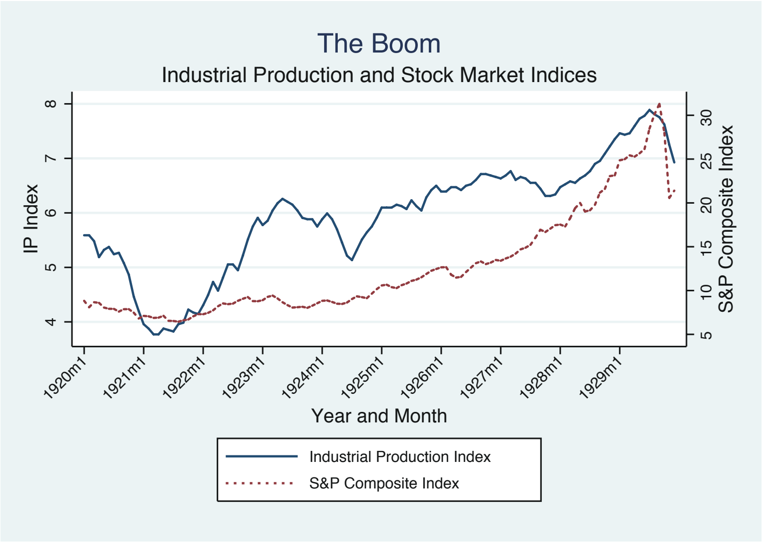
activity taking place in a country, while the unemployment rate tells us about jobs. Another indicator of the overall level of economic activity is the Federal Reserve's Industrial Production (IP) index; this index measures the level of activity in manufacturing, mining, and electric and gas utilities. It is an index set to a common base year, so that any possibly misleading price changes do not affect the number. We also examine price trends by taking a look at trends in both wholesale and consumer prices. All these measures, taken together, provide a good idea of the overall level of economic activity in the country after the liquidity shock hit.

Table 3.6 *Real Effects of Decline in Liquidity Observed Throughout the Economy*

Topic	Evidence
Decline in Activity in Sectors Requiring Funding but Considered to Have Relatively Low Liquidity	
Activity in real estate and construction	New housing starts
	Value of new building permits
	Expenditures for new construction
	Value of new construction put in place
Overall Economic Activity	
Gross Domestic Product (GDP)	Real GDP
Industrial Production	Industrial Production Index
Employment and Unemployment	
Unemployment rate	Unemployment rate
Overall Price Trends	
Inflation and Deflation	Wholesale Price Index
	Consumer Price Index

3.3 Setting the Stage for the Trigger—the Background for the Great Depression

Like many other recessions, the Great Depression was preceded by a period of economic boom. Industrial activity expanded dramatically during the 1920s. As discussed previously, the Federal Reserve's Industrial Production (IP) index provides a good indication of the level of overall economic activity, as it measures the level of activity in manufacturing, mining, and electric and gas utilities. Figure 3.5 shows the growth in this index, which is set to a common base year, during the period before the Great Depression. As shown, economic activity more than doubled between March 1921 and July 1929.



Source: Board of Governors of the Federal Reserve and Robert Shiller (http://www.econ.yale.edu/~shiller/data.htm)

Figure 3.5 *The boom*

An important part of the boom during the 1920s was growth in the automotive sector, as well as in electrical appliances, which had only recently been introduced. One factor that made such purchases affordable was the introduction of installment credit—a way in which consumers could spread out payments for a product over a longer period of time.[4] For example, the General Motors Acceptance Corporation (GMAC) started making credit for car purchases available in 1919, and total installment credit outstanding grew from $1.4 billion in 1925 to $3 billion in 1929.[5]

Another important signal of the times preceding the Great Depression comes from growth in the stock market. Figure 3.5 shows the S&P Composite Index between 1920 and 1929. The S&P Composite Index tracks the stock prices of a basket of companies from a range of industries. (This measure is currently called the S&P 500, as it includes 500 companies; historically, however, the number of companies included was not always 500.)[6] It provides a broader measure of the level of the stock market than the commonly used Dow Jones Industrial Average. It shows that the stock market grew dramatically during this decade, with much of the growth coming in 1928 and 1929, the last two years before the depression hit.

There is some debate about whether this period represented a time of "excessive" growth. Some analysts have argued that in fact this period was not one of undue pressure on resources.[7] For example, the Consumer Price Index (CPI) held relatively steady after 1923 through the end of the decade. Others, however, have suggested that excessive credit and monetary looseness led to speculation, particularly in the stock market.[8] One author of that time wrote, "The economy becomes a sick patient, sent off on a debauch, maintained on bootleg supplies, from which he will not recover for some time."[9] As one piece of information supporting this view, and again referring to Figure 3.5, U.S. stock market growth prior to 1925 generally did not exceed growth in the industrial production index. From 1925 to 1929, however, there was a distinct decoupling between the growth in stock prices and that in the Industrial Production Index. In the five-year period between September 1925 and September 1929, the S&P Composite Index grew by 240%, while the IP index only grew by 40%.

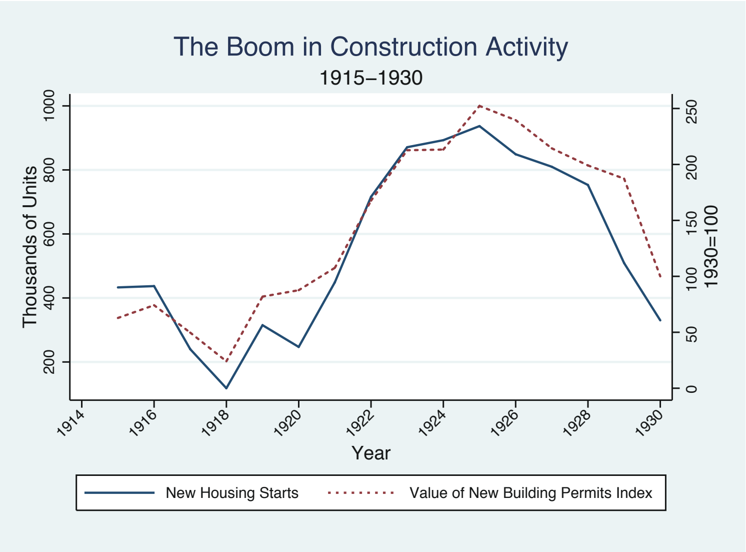
In addition to the expansion of consumer installment credit, other financial innovations of the time also likely played a role in generating the boom.[10] As one example, an *investment trust* is a way in which a group of smaller investors can join their funds to buy a more diversified set of stocks than they would be able to buy on their own.[11] Since together they have a larger total amount than each would on her own, the trust could buy, say, shares in 500 companies, as opposed to shares in 100 companies. This broader portfolio allowed the investors to be less vulnerable to changes in any one of the individual stocks that they were holding. However, these investment trusts may have fueled excessive speculation with their use of margin buying. Basically, an investment trust would borrow money to add to the contributions of each of the individuals and then use the total pool to buy stocks. With this borrowing, any declines in the value of the portfolio held by the trust meant that any losses represented an even bigger part of an individual investor's initial investment, since he now faced not only the declines in the value of the stocks purchased with the initial investment, but also the declines on the value of the stocks purchased with the money that had been borrowed to add to the pool. While the stock market was booming, however, the additional leverage often rewarded investors well.[12]

This margin buying in the stock market also contributed to the bubble.[13] At that time, investors could purchase shares with only 20¢ down on $1.00 worth of stock. The remaining 80¢ would be borrowed from brokers. The shares that they purchased using the borrowed money would be used to secure the loan being used to purchase the stock.[14] This type of loan is called a *margin loan*, and buying stock in this fashion is called *margin buying*.

With the market rising strongly, returns from dividends alone were sufficient to cover the interest that an investor owed on the margin loans, and this strategy rewarded investors well, since they enjoyed the gains from the increase in the price of stocks purchased with the borrowed money. This led investors to demand even more credit to keep taking advantage of the rising market.[15] The influx of new capital into the market further stimulated market speculation, completing the feedback loop that caused a bubble to form.

In addition to the bubble in the stock market, there was also a boom in real estate. Figure 3.6 shows construction activity between 1915 and 1930. Clearly, this sector experienced tremendous growth during the first half of the 1920s. The number of new housing starts skyrocketed from 118,000 in 1918 to 937,000 in 1925 (right axis). As shown in Figure 3.7, prices also climbed through 1925. As with the stock market, the real estate boom was fueled by borrowing. Figure 3.8 shows mortgages on one- to four-family houses, which grew substantially between 1925 and 1928. Figure 3.8 also shows overall loans by commercial banks for real estate. Here, we also see tremendous growth throughout the 1920s, indicating the increasing exposure of the commercial banking sector to changes in the real estate market.

At the time, Federal Reserve officials were concerned about signs of excessive credit in the economy. In the last six months of 1927, total bank loans and investments rose more than 3½%. There had also been rapid increases in stock prices and in brokers' loans, which are loans to brokers used to buy stocks. As discussed by Chandler (1971), at a meeting in January 1928, the resolutions of the Open Market Investment Committee (OMIC) of the Federal Reserve included the following statement: "The Committee program should now work towards somewhat firmer money conditions as far as necessary to check unduly rapid further increases in the volume of credit."[16] Indeed, the Fed began to tighten monetary policy in 1928, in part to curb the use of credit for speculation in stocks.[17]



Source: *Historical Statistics of the United States, Colonial Times to 1970*

Figure 3.6 *The boom in construction*

Source: Robert Shiller (http://www.econ.yale.edu/~shiller/data.htm)

Figure 3.7 *The boom in real estate*