

## **The Great Depression**

The Great Depression was by far the most severe economic downturn in the history of the United States. It began in 1929 and ended in 1940, with the trough in 1933.

## **Production and Unemployment**

From the peak to the trough, real GNP declined by almost  $1/3$ . Real gross investment fell almost to zero, and real consumption fell by 20%.

Unemployment was as high as 25%, and stayed high until 1941.

Confidence was low. Businesses would not hire and invest, because aggregate demand was low. Low national product mean low national income, so households had low consumption demand.

## Prices and Wages

Nominal wages and prices fell about  $1/3$ , so the average real wage was unchanged.

This observation does *not* imply that real wages did not fall. Unemployment was greater among the unskilled than among the skilled. Hence the real wage of each worker might fall, and yet the *average* real wage would be unchanged.

## **World Depression**

The Great Depression was international, but was most severe in the United States, Canada, Germany, and Hungary.

Some attribute Hitler's rise to power to the resulting dissatisfaction in Germany.

## **Recession or Depression?**

In 1929 a recession started, and a puzzle is why the recession became the Great Depression.

## Stock Market Crash

During the stock market bubble of 1929, stock prices doubled from January to September.

The stock market crashed in October, losing 50% of its value.

As the recession deepened, the stock market continued to decline. At the bottom in 1932, stock prices were perhaps only 25% of the peak.

Economists do not attribute the Great Depression to the stock crash, however, as other large drops in stock prices failed to cause depression.

## Money Versus Spending

Temin [3] analyzes whether the cause of the Great Depression was monetary—an upward shift of the LM curve—or spending—a leftward shift of the IS curve.

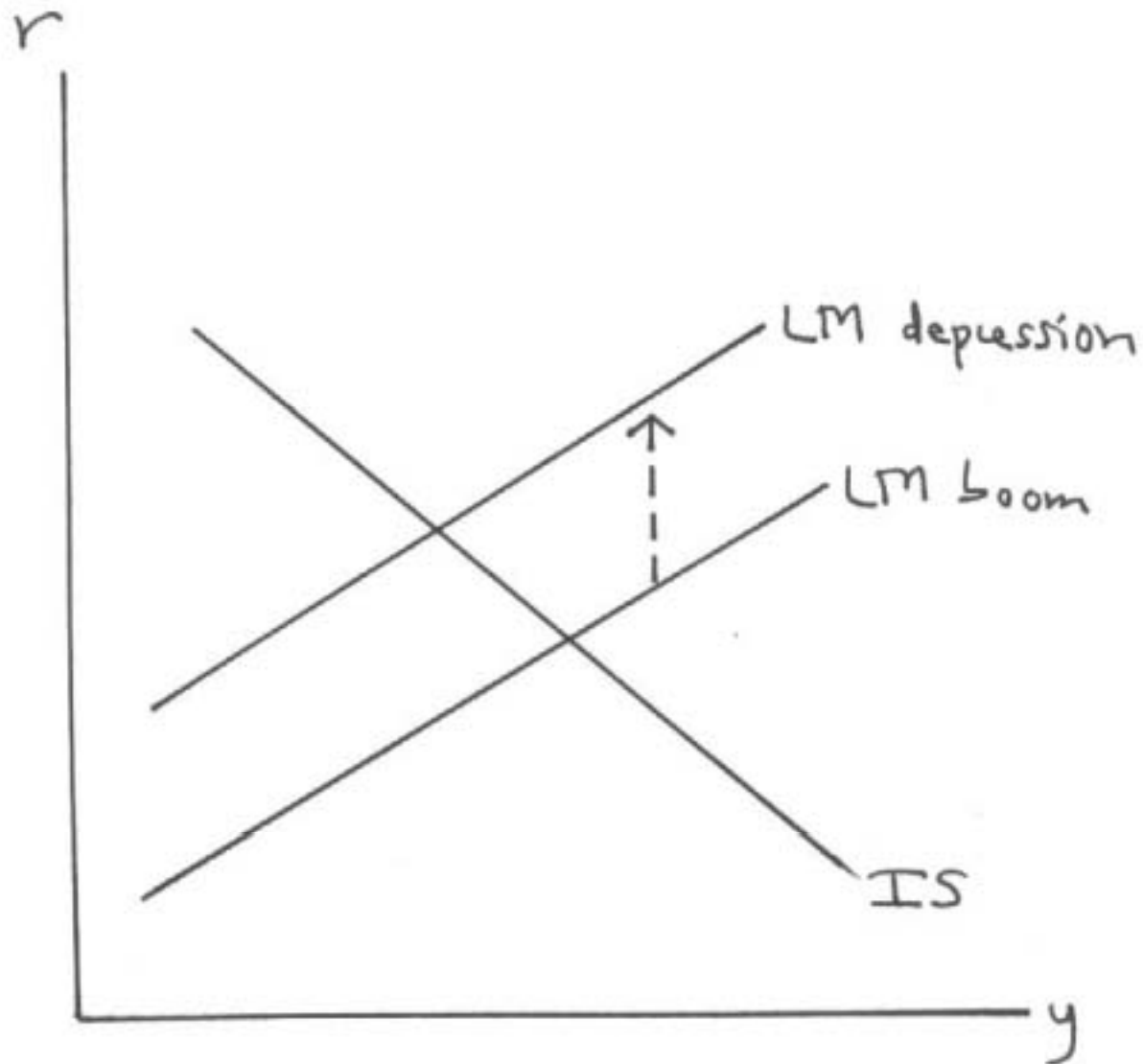
## Money Hypothesis

The money hypothesis asserts that an upward shift of the LM curve caused the Great Depression (figure 1).

Friedman and Schwartz [1] argue for the money hypothesis. The nominal money supply M2 fell by 1/3, and this decline caused the Great Depression.



Figure 1: Money Hypothesis



## Money Supply

The money supply  $M$  equals the money multiplier  $\frac{M}{B}$  times the monetary base  $B$ :

$$M = \left( \frac{M}{B} \right) B.$$

The monetary base  $B$  is the amount of money created by the Federal Reserve, the central bank.

## Monetary Policy

During the Great Depression, the monetary base went up by  $1/6$ , but the money multiplier fell by  $1/2$ . As a consequence, the money supply fell by  $1/3$ .

## **Bank Failures**

A key aspect of the Great Depression was the huge number of bank failures, especially small banks in rural areas. These failures undermined confidence in the banking system, especially because there was no government deposit insurance then.

## **Bank Holiday**

When President Roosevelt was inaugurated in March, 1933, he declared a “bank holiday,” to restore confidence. All banks closed for a week (ordinarily a bank is not permitted to close for more than three consecutive days). Government inspectors audited each bank, and many banks were terminated and never reopened.

Overall 1/3 of the banks failed during the Great Depression, mostly small banks.

## Bank Runs

The lack of confidence in banks caused many bank runs.

Depositors panicked about their accounts would converge on the bank simultaneously to demand their money back.

To try to protect against a run, banks would keep excess reserves on hand. By calmly returning money to the depositors, the banker would try to stem the panic that set off the run.

Even if a bank is sound, a bank run can ruin a bank, as most of the deposits are on loan to others.

## **Money Multiplier**

The money supply process sets the money supply. When the monetary base is increased, banks loan out most of this money. This money is then redeposited in other banks, which then loan out most of these money. This money is then redeposited in other banks, etc. The money multiplier exceeds one.

## Falling Multiplier

Two factors caused the money multiplier to fall by 1/2:

- The lack of confidence in banks caused consumers to hold more money as cash and less as deposits;
- The fear of a bank run caused banks to keep substantial excess reserves.

Both factors lowered the money multiplier. Banks loaned less, so the money multiplier fell and the money supply contracted.



## Cause or Reaction?

A key issue is whether the bank failures were an *independent cause* of the Great Depression. Friedman and Schwartz argue this position.

The spending hypothesis argues that the bank failures were just a reaction to the decline in national income and product caused by low aggregate demand. In depression, it is natural for banks to fail and for the money multiplier to shrink.

## **Passive Monetary Policy**

Friedman and Schwartz say that the passivity of the Federal Reserve was crucial. That the government has a responsibility to fight recession by restoring aggregate demand was not yet a principle of economic policymaking. The Federal Reserve discussed aggressive action, to raise the monetary base, to keep the money supply from falling, but little was done.

## Weaknesses of the Money Hypothesis

There are two key weaknesses of the money hypothesis:

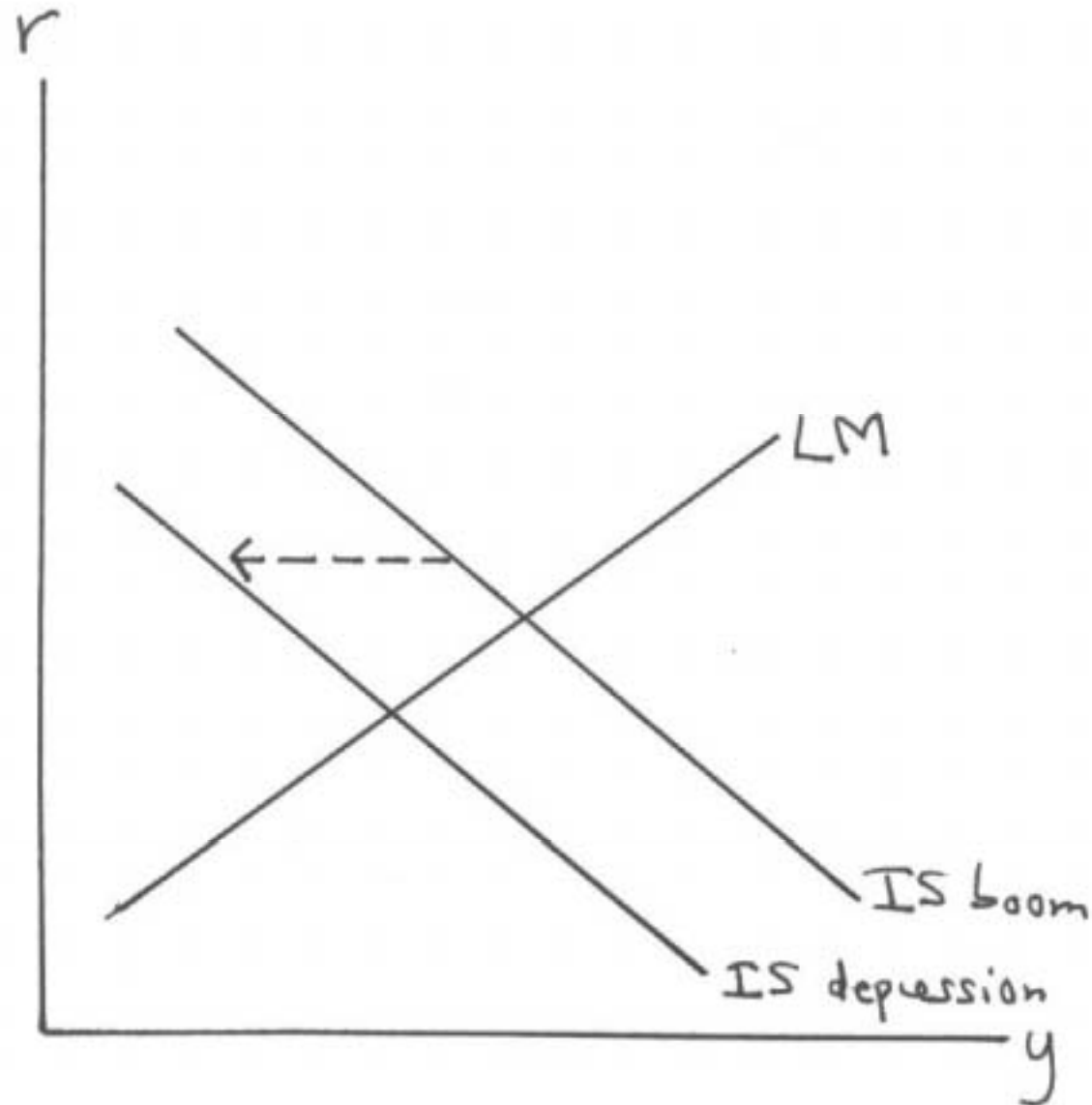
- Although the *nominal* money supply fell, the *real* money supply was unchanged, as prices fell the same as money;
- The interest rate was very low, near zero on short-term Treasury debt.

## Spending Hypothesis

The spending hypothesis asserts that a leftward shift of the IS curve caused the Great Depression (figure 2). Autonomous aggregate demand fell substantially, and the multiplier effect reduced the national income and product greatly.

Temin [3] argues this position.

Figure 2: Spending Hypothesis



## **Investment**

Although gross real investment did fall near zero, this collapse is insufficient to explain the Great Depression, as investment always falls sharply in recession.

## **Passive Fiscal Policy**

The federal government did create several “make-work” programs to hire the unemployed.

Overall fiscal policy was passive. The increase in government purchases of goods and services was slim, and there was no significant tax cut.

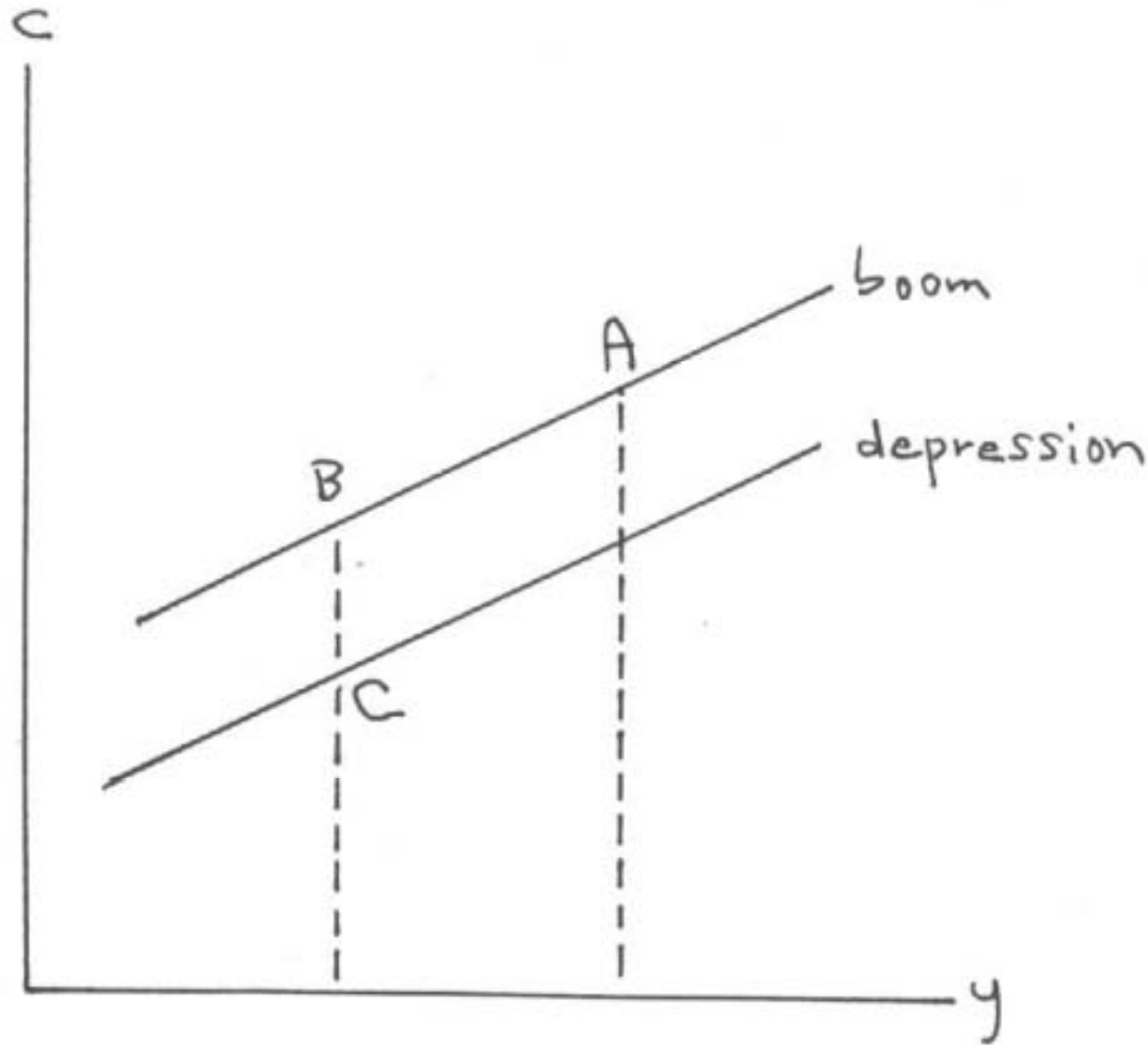
## Consumption

According to Keynes, the cause of depression is a drop in investment, plus a negative multiplier effect on consumption. The economy moves *along* the consumption function (point A to point B in figure 3).

Doing an econometric study, Temin argues that, in addition, the consumption function shifted *down* (point B to point C in figure 3) This shift then caused a further negative multiplier effect, so this shift explains the Great Depression.



Figure 3: Consumption Function Shift



## **Expectations**

Pessimism about income and demand was certainly a crucial factor in the Great Depression.

# References

- [1] Milton Friedman and Anna J. Schwartz. *A Monetary History of the United States, 1867-1960*. Princeton University Press, Princeton, NJ, 1963. HG538F86.
- [2] Duane B. Oyen. *Business Fluctuations and Forecasting*, chapter 12, The Great Depression, pages 315–353. Dearborn Financial Publishing, 1991. HB3711093 1991.
- [3] Peter Temin. *Did Monetary Forces Cause the Great Depression?* Norton, New York, 1976. HB3717 1929T45.