

# The Great Depression of 1929-1934

by Maurice Allais

*This is the first part of a three-part series by French economist Maurice Allais, Nobel Prizewinner in Economic Science in 1988, which appeared in the French daily Le Figaro on Oct. 12, 19, and 26, 1998. (Copyright Le Figaro, no. 9812009.) Professor Allais has kindly granted EIR permission to republish his articles.*



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**Abstract:** The breadth of the 1929 crisis was the inevitable consequence of the previous unreasonable expansion of stock credits in the United States and of the extravagant rise in stock market prices that the credit expansion has permitted, if not caused.

When considering the present worldwide crisis, nothing is more instructive, in many respects, than the Great Depression of 1929-1934. As Vilfredo Pareto wrote: "It is just as certain that history never repeats itself identically, as it is that it always repeats itself in certain aspects which may be called the main ones. . . . Past and present facts lend one another mutual support . . . for understanding them reciprocally."

## The bull market and collapse

In the United States, the Dow Jones industrial index rose from 121 points on Jan. 2, 1925 to 381 on Sept. 3, 1929, i.e., a 215% rise in four years and eight months. It was back down to 230 on Oct. 30, having plunged by 40% in two months, which meant an even steeper decline for certain stocks.

The Dow Jones index did not reach its all-time low of 41.2 until July 8, 1932, after an 89% decline over three years. It only went back up to its Jan. 2, 1925 level on June 24, 1935, and to its Sept. 3, 1929 level on Nov. 16, 1954.

The fall in stock market prices from 1929 to 1932, with all its after-effects, probably represents one of the most spectacular collapses of a speculative bull market that the world has ever known.

As long as the stock exchange was going up, those who

bought, usually on credit, saw their expectations fulfilled the following day, when prices went up. And day after day, this rise would justify the bets made the day before.

The rise continued, until it occurred to some traders that the stocks were obviously overpriced, and they began to sell, or even to speculate on a price drop. No sooner had prices stopped rising, than they began to fall, and the decline then justified further decline, leading to generalized pessimism. From then on, the fall could only become greater.

## An inordinate stock market rise

On the very eve of Black Thursday (Oct. 24, 1929), when the Dow Jones was down to 299, in a 22% drop from its high point of 381 on Sept. 3, 1929, almost all the best economists, including the great American economist Irving Fisher, still thought the American stock market rise was completely warranted given the prosperous economy, the overall stability in prices, and the promising perspectives of the American economy.

However, at first sight, the 215% rise in stock prices from 1925 to 1929 seems incomprehensible with regards to the growth of the American economy, in real terms. From 1925 to 1929, in four years, the real Gross National Product only rose by 13%, manufacturing by only 21%, and the unemployment rate remained stationary, at 3%. During the same period, the nominal Gross National Product only went up by 11%, overall price levels fell by 2%, money supply (money in circulation plus bank deposits) only went up by about 11%.<sup>1</sup>

However, from January 1925 to August 1929, the circulation velocity of deposits in New York-based American banks rose by 40%. It is this increase in the circulation velocity of deposits in New York banks that allowed for the increase in prices on Wall Street.<sup>2</sup>

1. The M1 money supply (currency in circulation plus demand deposits) increased by 3.8% and M2 (M1 plus time deposits) by 10.8%. The monetary base B (notes and coin plus deposits in the Federal Reserve System) only increased by 0.9%. The differences M1-B and M2-B, corresponding to bank deposits, only rose by 5.0% and 12.8%.

2. Global expenditure is indeed equal to the money supply multiplied by the circulation velocity.

## The Depression

The wave of pessimism brought about by the 1929 stock market crash led to an approximate 20% contraction in money supply in 1929-1932, and to a 30% contraction in bank deposits.<sup>3</sup> At the same time, the Federal Reserve attempted, but in vain, to counteract this contraction by increasing the monetary base by 9%.

Speculators who had bought stocks by borrowing short-term funds were forced to borrow again at very high interest rates, or to sell at any price in order to meet their obligations. Massive withdrawals of certain deposits caused a great number of banks to go bankrupt, leading to an even greater contraction of the money supply.

This pessimism, this climate of distress, and this contraction in money supply led to a drop of the nominal Gross National Product by 44%, of the real Gross National Product by 29%, of industrial production by 40%, and of the general price index by 21%.

The unemployment rate jumped from 3.2% in 1929 to 25% in 1933, when 13 million, out of a labor force of 51

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3. In fact, M1 decreased by 21% and M2 by 23%, the differences M1-B and M2-B decreasing respectively by 31% and 28%.

## Maurice Allais: a profile

Maurice Allais was born in Paris in 1911, and graduated from the Ecole Polytechnique, first in his class, in 1933. He began his professional career as an engineer in the national mining industry, simultaneously working on economics and history.

From April 1948 on, he devoted his time to teaching, research, and writing, working in both physics and history. Although he retired in 1980, he has continued to work actively in all these areas.

Allais is the recipient of many awards, including 14 scientific prizes. As he notes in his essay "My Life Philosophy" (which appeared in *The American Economist*, Vol. 33, No. 2, Fall 1989), "Over the past 50 years, I have never stopped reflecting and working on the problems involved in the elaboration of a unified theory of physics."

For two more of Professor Allais's contributions, "On My Experiments in Physics, 1952-1960" (an excerpt from "My Life Philosophy") and "Michelson-Morley-Miller: The Coverup; The Experiments of Dayton C. Miller (1925-1926) and the Theory of Relativity," see the Spring 1998 issue of *21st Century Science & Technology* magazine.

million, were unemployed.<sup>4</sup> The total population of the United States at the time was only about 120 million.

## Excessive indebtedness

The unfolding of the Great Depression was greatly aggravated by the overindebtedness that had developed before the 1929 crash, both inside and outside the United States.

Inside the United States, the total amount of both private and corporate debt,<sup>5</sup> corresponding in large part to bank credits, soared from 1921 to 1929. In 1929, it was about 1.6 times larger than the U.S. Gross National Product. With the drop in prices and the decrease in production during the Great Depression, the weight of these debts proved to be unbearable.

At the same time, Federal, state, and municipal debt had also soared. In 1929, Federal debt represented some 16.3% of the U.S. GNP, and state and municipal debt about 13.2% of the same.

Abroad, reparations due by Germany had been set in 1921 at \$33 billion, comparable to about 32% of the 1929 U.S. Gross National Product. The war debts of European nations to the U.S.<sup>6</sup> amounted to about \$11.6 billion, or some 11% of U.S. GNP.

Finally, private debts, granted mainly by banks and mainly to Germany, amounted to about \$14 billion in 1929, or some 13.5% of U.S. GNP.

It became clear that the war debts were unpayable. Germany could only very partially meet her obligations, and even then with borrowed funds.

The development of the Great Depression was made much worse by the weight of all these debts and by the international flows of short-term capital, due to all kinds of complex interdependencies among European economies and the American economy. In fact, all these debts had to be reduced and rescheduled over the course of the Great Depression.

## Competitive devaluations

Starting from the United States, the Great Depression spread to all of the Western world, wreaking economic collapse, unemployment, misery, and distress everywhere.

After Great Britain left the gold standard in September 1931, a chain reaction of devaluations took place. The most spectacular one occurred when the United States dropped the gold standard in April 1933.

This whole period was characterized by currency speculation, massive capital flows, competitive devaluations, and protectionist policies from different countries trying to protect themselves from outside disorders.

Finally, toward the end of 1936, exchange rates among the major currencies were not very different than they had

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4. At the time, the unemployed could only count on private charities for help.

5. Consumer credit, mortgages, and corporate liabilities.

6. Improperly considered by the United States as mere commercial debts.

been in 1930, before the cycle of devaluations began.

### Psychological and monetary factors

If the rise in stock market prices from 1925 to 1929 seems incomprehensible in comparison with the evolution of the American economy in real terms, during the same period, the drop in economic activity in real terms, from 1929 to 1932, seems as astonishing, at least at first glance. How is it possible that the collapse of stock market prices could trigger such a drop in economic activity?

In reality, these two phenomena, which at first seem somewhat paradoxical, can be perfectly explained, once psychological and monetary factors are taken into account.

A rise encourages more rises, and a decline more declines. To bet on the market going up or going down, the “fundamentals” were not considered, only the psychological assessment of what the others were going to do.

Belief in a rise led to the creation *ex nihilo* of bank means of payment, whereas the fear of a decline led to the destruction of those means of payment previously created *ex nihilo*.<sup>7</sup>

### Credit mechanism

The origin and the development of the Great Depression of 1929-1934 certainly offer the best illustration one might give of the harmful effects of credit, namely: *ex nihilo* creation of money by the banking system; fractional covering of deposits; financing long-term investments by borrowing short-term funds; financing speculation through credit; and, resulting variations in the real value of the currency and economic activity.

The breadth of the 1929 crisis was the inevitable consequence of the unreasonable expansion of stock credits which preceded it in the United States and of the extravagant rise in stock market prices which the credit expansion had permitted, if not caused.

With respect to the prosperity of the economy and price inflation until 1929, the diagnostic accepted by prevailing opinion was as general as it was affirmative. This was a New Era of general prosperity, opening up to the entire world.

However, the preceding analysis shows how cautiously one must judge an economy's prosperity, in real terms, if potential imbalances start to develop which, although at first minor in relative value, may cause profound changes in the collective psychology once they are concretized and compounded.

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7. The variation in global expenditure,  $D$ , involves two elements: The first is proportional to the relative gap between the total amount of cash held,  $M$ , and the total amount of cash wanted,  $M_d$ ; the second is equal to the relative increase in means of payment  $M$ . In a period of optimism,  $M_d$  decreases and in a period of pessimism,  $M_d$  increases. Any decrease in  $M_d$  thus corresponds to an increase of overall spending  $D$ , and any increase in  $M_d$  corresponds to a decrease in overall spending  $D$ . (M. Allais, *Monnaie et Développement. 1. L'Équation fondamentale de la dynamique monétaire* [Paris: Ecole Nationale Supérieure des Mines de Paris, 1968], p. 83.)

### Nothing fundamentally new

Essentially, the New Era, both in the United States and in the world, in the years preceding the 1929 crash, developed out of a profound ignorance of all the crises of the 19th century and of their true significance.

The crisis of 1929-1934 was in reality only a particularly dramatic repetition of the succession of crises in the 19th century,<sup>8</sup> of which the 1873-1879 crisis was probably one of the most significant.

In fact, all major crises of the 18th, 19th, and 20th centuries resulted from the excessive growth of promises to pay and their monetization.<sup>9,10</sup>

Everywhere and at all times, the same causes generate the same effects. What must happen does happen.

The most lucid economists, like Clément Juglar and Irving Fisher,<sup>11</sup> have analyzed with great insight the mechanisms of crises, how they are spawned and develop. Unfortunately, they remained unrecognized and unheeded. If their messages had been clearly received, if their analyses had been fully understood, the situation today would be much different.

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8. During the 1837 crisis, Reverend Leonard Bacon stated in his sermon of May 21: “A few months ago, the unparalleled prosperity of our country was the theme of universal gratulation. Such a development of resources, so rapid an augmentation of individual and public wealth, so great a manifestation of the spirit of enterprise, so strong and seemingly rational a confidence in the prospect of unlimited success, were never known before. But how suddenly has all this prosperity been arrested! That confidence, which in modern times, and especially in our own country, is the basis of commercial intercourse, is failing in every quarter; and all the financial interests of the country seem to be convulsed and disorganized. The merchant whose business . . . [was] conducted on safe principles . . . [finds that] loss succeeds to loss, till he shuts up his manufactory and dismisses his laborers. The speculator who dreamed himself rich, finds his fancied riches disappearing like an exhalation. . . . What more may be before us. . . . It is enough to know that this distress is hourly becoming wider and more intense. . . .” (In Irving Fisher, *Booms and Depressions* [New York: Adelphi Co., 1932]).

9. Concerning 19th-century crises, Clément Juglar wrote in 1860: “Commercial crises are the result of profound changes in the flow of credit. . . . What is credit, the simple power to buy in exchange for a promise to pay? . . . The function of a bank or a banker is to buy debts with promises to pay. . . . The very practice of credit thus leads, because of the abuses apt to be made of it, to commercial crises. Credit is the main motor, it provides the impetus; it confers an apparently unlimited power to buy through simply signing a negotiable instrument, a bill of exchange. . . . Credit is what favors the growth of business and price rises. . . . Each and every exchange of a product gives rise to a new promise to pay. . . .” (Clément Juglar, *Des crises commerciales et leur retour périodique* [Paris: Librairie Guillemin, 1860. Second Edition, 1889].)

10. I presented a synthetic analysis of the relations of cause and effect of the monetary dynamic in the introduction to the second edition of my work *Economie et intérêt*, pp. 115-174. (Editions Clément Juglar, 62, avenue de Suffren, Paris 15<sup>ème</sup>. Telephone: 01.45.67.48.06. For an extended bibliography of my analyses, see pp. 116 and 117, 154, 164-165.)

11. See in particular Irving Fisher, *Booms and Depressions* (New York: Adelphi Co., 1932); *Stamp Scrip* (New York: Adelphi Co., 1933); *Stable Money, A History of the Movement* (New York: Adelphi Co., 1934); *100% Money* (New York: Adelphi Co., 1935).