

4-20-1994

## The Debt Deflation Theory of Great Depressions

Hyman P. Minsky Ph.D.

Follow this and additional works at: [http://digitalcommons.bard.edu/hm\\_archive](http://digitalcommons.bard.edu/hm_archive)

---

### Recommended Citation

Minsky, Hyman P. Ph.D., "The Debt Deflation Theory of Great Depressions" (1994). *Hyman P. Minsky Archive*. Paper 159.  
[http://digitalcommons.bard.edu/hm\\_archive/159](http://digitalcommons.bard.edu/hm_archive/159)

This Open Access is brought to you for free and open access by the Levy Economics Institute of Bard College at Bard Digital Commons. It has been accepted for inclusion in Hyman P. Minsky Archive by an authorized administrator of Bard Digital Commons. For more information, please contact [digitalcommons@bard.edu](mailto:digitalcommons@bard.edu).

## The Debt Deflation Theory of Great Depressions

Hyman P. Minsky  
Distinguished Scholar.  
The Jerome Levy Economics Institute  
Annandale on Hudson, NY 12504

Prepared for the Encyclopedia of Business Cycles

.....

The debt deflation theory of great depressions has both empirical and theoretical aspects. The readily observed empirical aspect is that from time to time capitalist economies exhibit inflations and debt deflations which have the potential to spin out of control.<sup>1</sup>

In such processes the economic system's reactions to a movement of the economy amplify the movement - inflation feeds upon inflation and debt-deflation feed upon debt-deflation. These historical episodes are evidence supporting the view that a capitalist economy does not always conform to the precepts laid down by Smith and Walras that market economies are an equilibrium seeking and sustaining systems. In some of the historical crises

---

1. The experience of the American Economy in 1988-1992 can be interpreted as an aborted debt deflation, where the *bailouts* of depositors in Savings and Loans and Banks by first the Deposit Insurance Funds and then the Federal Treasury prevented the pass through of financial institution losses on portfolios to the liability holders of these institutions.

government interventions aimed to contain inflations and debt deflations have been inept. Ineptness is to be expected if the economic theory that is used as the basis for interventions finds no place for non-equilibrating behavior of markets.

Irving Fisher, The Debt Deflation Theory of Great Depressions<sup>2</sup> is the classic description of a debt deflation process and Charles Kindleberger Manias, Panics and Crashes.<sup>3</sup> describes the stages of a self sustaining disequilibrating processes. Martin Wolfson, Financial Crises<sup>4</sup> examines various financial crisis theories of business cycles and presents a compilation of data on the emergence of financial relations conducive to financial instability.

Fisher's debt deflation theory was a description of the interactions that take place during a debt deflation, it was not a theory of how the actions of bankers, business men and households as owners and managers of portfolios generated the process. Fisher emphasized over-indebtedness as the initial condition for a debt deflation without explaining how this initial condition was generated, what was a measure of excess indebtedness and where the excess debt was.

---

2 Fisher, Irving. 1933. "The Debt Deflation Theory of Great Depressions." *Econometrica* 1:337-57

3. Kindleberger, Charles 1978. *Manias, Panics and Crashes* New York, Basic Books

4 Wolfson, Martin H. 1986. *Financial Crises*. Armonk New York, M.E. Sharpe Inc.

Albert G. Hart, in *The Twentieth Century Fund's, Debts and Recovery*, gathered the evidence for overindebtedness acting as a barrier to a complete recovery from the depths of the great contraction of 1929-33.<sup>5</sup>

Fisher's argument was couched in pre Keynesian language. It casually assumed that the quantity theory of money was valid. Hyman Minsky restated the debt deflation theory of Fisher in modern Post Keynesian language.<sup>6</sup> . Minsky's interpretation is not dependent on assuming a close mechanical link between the money supply and wages and prices: money is more directly linked to asset prices than to either output prices or money wages. In his financial instability interpretation of Keynesian theory, Minsky developed a theory which closely integrated liability structures with system behavior. This filled the lacunae in the Fisherian debt deflation interpretation of great depressions: Fisher's debt-deflation theory of great Depressions is a special case of the Keynes-Minsky financial instability hypothesis.

As economic theory the financial instability hypothesis is an interpretation of Keynes's The General Theory of Employment Interest and Money.<sup>7,8</sup> The theoretical argument

5. The Twentieth Century Fund, *Debts and Recovery* 1937. Albert G Hart is credited as "

6. Hyman P. Minsky 1982, "Debt Deflation Processes in Today's Institutional Environment", *Banca Nazionale Del Lavoro Quarterly Review*, Number 143 (December 1982)

7 Keynes, John Maynard, 1936 *The General Theory of Employment, Interest, and Money*. New York: Harcourt Brace.

8 The financial instability hypothesis also draws upon the credit view of money and finance Joseph Schumpeter used

of the Financial Instability Hypothesis starts from the characterization of the economy as a capitalist economy with expensive capital assets and a complex sophisticated financial system. Following Keynes the economic problem is identified as the "capital development of the economy" rather than the Knightian "allocation of given resources among alternative employments". The focus is on an accumulating capitalist economy that moves through real calendar time.

The capital development of a capitalist economy is accompanied by exchanges of present money for future money and the widespread acceptance of contingent liabilities, especially by financial institutions. The present money pays for the production of investment output, whereas the future money is the "profits" that will accrue as capital assets are used in production: the contingent liabilities of financial institutions leads to a broader acceptance of liability instruments than would otherwise be true. In a capitalist economy liabilities which are commitments to pay money at dates specified or as conditions arise finance the control over the capital stock. For every economic unit the liabilities on its balance sheet determines a time series of prior deterministic or conditional payment commitments, even as the assets generate a time series of conjectured cash receipts.

---

in The Theory of Economic Development, especially Chapter 3.  
1934, Schumpeter, Joseph A. *Theory of Economic  
Development*. Cambridge, Mass. Harvard University Press

Therefor, in a capitalist economy the past, the present and the future are linked not only by the characteristics of its capital assets and labor force but also by financial relations. The key financial relations link the creation and the ownership of capital assets to the structure of financial relations and changes in this structure. Institutional complexity results in several layers of intermediation between the ultimate owners of the communities wealth and the units that control and operate the communities wealth.

Expectations of business profits determine both the flow of financing contracts to business and the price in the market of existing financing contracts. Profit realizations determine whether the commitments in financial contracts are fulfilled; whether financial assets perform as the pro formas of the negotiations indicated they would.

In the modern world the analysis of financial relations and their implications for system behavior cannot be restricted to the liability structure of businesses and the cash flows they entail. Households are able to borrow for automobiles and house purchases, on credit cards, and to carry financial assets. Governments have large floating and funded debts. As a result of the internationalization of finance an economy's balance of trade is linked to the need to validate payment commitments. A dominant characteristic of modern capitalist economies are the liability structures

which are either validated or not validated by the current performance and expected future performance of the economy.

An increasing complexity of the financial structure and a greater involvement of governments as refinancing agents for financial institutions as well as ordinary business firms, both of which are marked characteristics of the modern world, may make the system behave differently than in earlier era's. In particular the much greater participation of national governments in assuring that finance does not degenerate as in the 1929-1933 period means that the downside vulnerability of aggregate profit flows has been much diminished. However the same interventions may well induce a greater degree of upside, i.e. inflationary, bias to the economy.

In spite of the greater complexity of financial relations than was true in the past, the key determinant of system behavior remains the level of profits. The debt deflation theory of great depressions as well as the more general financial instability hypothesis incorporates the Kalecki-Levy<sup>9</sup> view of profits, in which the structure of aggregate demand determines profits. In the skeletal model, with highly simplified consumption behavior by receivers of profit incomes and wages, in each period aggregate profits equals aggregate investment. In more complex, though still

---

9 1965, Kalecki, Michal . *Theory of Economic Dynamics*. London: Allen and Unwin

1983 Levy S. Jay and David A. *Profits And The Future of American Society*. New York, Harper and Row

1986, Minsky, Hyman P. Op cit.

highly abstract structure, aggregate profits equals aggregate investment plus the government deficit. As expectations of profits depends upon investment in the future and as realized profits are determined by investment, whether or not liabilities are validated depends upon investment. Investment takes place now because business men and their bankers expect investment to take place in the future.

The financial instability hypothesis therefor is a theory of the impact of debt on system behavior and the way debt is validated. In contrast to the orthodox Quantity Theory of money the financial instability hypothesis takes banking seriously as a profit seeking activity. Banks seek profits by financing activity and bankers, like all entrepreneurs in a capitalist economy, are aware that innovation assures profits. Thus bankers, using the term generically for all intermediaries in finance, whether they be brokers or dealers, are merchants of debt who strive to innovate in the assets they acquire and the liabilities they market. This innovative characteristic of banking and finance invalidates the fundamental presupposition of the orthodox quantity theory of money to the effect that there is an unchanging "money" item whose velocity of circulation is sufficiently close to being constant so that changes in this money's supply has a linear proportional relation to a well defined price level.



Three income-debt relations for economic units, which are labeled as hedge, speculative and Ponzi finance, can be identified.

Hedge financing units are those which can fulfill all of their contractual payment obligations by their cash flows: the greater the weight of equity financing in the liability structure the greater the likelihood that the unit is a hedge financing unit. Speculative finance units are units that can meet their payment commitments on "income account" on their liabilities even as they cannot repay the principle out of income cash flows. Such units need to "roll over" their liabilities: i.e. issue new debt to meet commitments on maturing debt. Governments with floating debts, corporations with floating issues of commercial paper and banks are typically hedge units.

For Ponzi units the cash flows from operations are not sufficient to fulfill either the repayment of principle or the interest due on outstanding debts by their cash flows from operations. Such units can sell assets or borrow. Borrowing to pay interest or selling assets to pay interest and even dividends on common stock lowers the equity of a unit even as it increases liabilities and the prior commitment of future incomes. A unit that Ponzi finances lowers the margin of safety that it offers the holders of its debts.

It can be shown that if hedge financing dominates then the economy may well be an equilibrium seeking and

containing system and the greater the weight of speculative and Ponzi finance the greater the likelihood that the economy is a deviation amplifying system. The first theorem of the financial instability hypothesis is that the economy has financing regimes under which it is stable and financing regimes in which it is unstable. The second theorem of the financial instability hypothesis is that over periods of prolonged prosperity the economy transit from the financial relations that make for a stable system to financial relations that make for an unstable system: debt deflation and overindebtedness are natural outgrowths of the way attitudes towards risk taking are affected by runs of success in a world where the evolutionary properties of the system make it unclear whether the world now behaves as it did in the past.

The financial instability hypothesis is a model of a capitalist economy which does not rely upon exogenous shocks to generate business cycles of varying severity: the hypothesis holds that business cycles of history are compounded out of the internal dynamics of capitalist economies and the system of interventions and regulations that are designed to keep the economy operating within reasonable bounds. As such it incorporates the debt deflation theory of great depressions as a part of the interactive process that characterizes a modern capitalist economy.