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The Financial Instability Hypothesis*

by

Hyman P. Minsky
The Jerome Levy Economics Institute of Bard College

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Levy Economics Institute
P.O. Box 5000
Annandale-on-Hudson, NY 12504-5000
http://www.levyinstitute.org

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The financial instability hypothesis 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 seem to have the potential to spin out of control. In such processes the economic system's reactions to a movement of the economy amplify the movement--inflation feeds upon inflation and debt-deflation feeds upon debt-deflation. Government interventions aimed to contain the deterioration seem to have been inept in some of the historical crises. These historical episodes are evidence supporting the view that the economy does not always conform to the classic precepts of Smith and Walras: they implied that the economy can best be understood by assuming that it is constantly an equilibrium seeking and sustaining system.

The classic description of a debt deflation was offered by Irving Fisher (1933) and that of a self-sustaining disequilibrating processes by Charles Kindleberger (1978). Martin Wolfson (1986) not only presents a compilation of data on the emergence of financial relations conducive to financial instability, but also examines various financial crisis theories of business cycles.

As economic theory, the financial instability hypothesis is an interpretation of the substance of Keynes's "General Theory". This interpretation places the General Theory in history. As the General Theory was written in the early 1930s, the great financial and real contraction of the United States and the other

capitalist economies of that time was a part of the evidence the theory aimed to explain. The financial instability hypothesis also draws upon the credit view of money and finance by Joseph Schumpeter (1934, Ch.3) Key works for the financial instability hypothesis in the narrow sense are, of course, Hyman P. Minsky (1975, 1986).

The theoretical argument 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. The economic problem is identified following Keynes 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. The present money pays for resources that go into the production of investment output, whereas the future money is the "profits" which will accrue to the capital asset owning firms (as the capital assets are used in production). As a result of the process by which investment is financed, the control over items in the capital stock by producing units is financed by liabilities--these are commitments to pay money at dates specified or as conditions arise. For each economic unit, the liabilities on its balance sheet determine a time series of prior

payment commitments, even as the assets generate a time series of conjectured cash receipts.

This structure was well stated by Keynes (1972) :

> There is a multitude of real assets in the world which constitutes our capital wealth – buildings, stocks of commodities, goods in the course of manufacture and of transport, and so forth. The nominal owners of these assets, however, have not infrequently borrowed money (Keynes' emphasis) in order to become possessed of them. To a corresponding extent the actual owners of wealth have claims, not on real assets, but on money. A considerable part of this financing takes place through the banking system, which interposes its guarantee between its depositors who lend it money, and its borrowing customers to whom it loans money wherewith to finance the purchase of real assets. The interposition of this veil of money between the real asset and the wealth owner is an especially marked characteristic of the modern world."(p.151)

This Keynes "veil of money" is different from the Quantity Theory of money "veil of money." The Quantity Theory "veil of money" has the trading exchanges in commodity markets be of goods for money and money for goods: therefore, the exchanges are really of goods for goods. The Keynes veil implies that money is connected with financing through time. A part of the financing of the economy can be structured as dated payment commitments in which banks are the central player. The money flows are first from depositors to banks and from banks to firms: then, at some later dates, from firms to banks and from banks to their depositors. Initially, the exchanges are for the financing of investment, and subsequently, the exchanges fulfill the prior commitments which are stated in the financing contract.

In a Keynes "veil of money" world, the flow of money to firms is a response to expectations of future profits, and the

flow of money from firms is financed by profits that are realized. In the Keynes set up, the key economic exchanges take place as a result of negotiations between generic bankers and generic businessmen. The documents "on the table" in such negotiations detail the costs and profit expectations of the businessmen: businessmen interpret the numbers and the expectations as enthusiasts, bankers as skeptics.

Thus, in a capitalist economy the past, the present, and the future are linked not only by capital assets and labor force characteristics but also by financial relations. The key financial relationships link the creation and the ownership of capital assets to the structure of financial relations and changes in this structure. Institutional complexity may result 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 market price of existing financing contracts. Profit realizations determine whether the commitments in financial contracts are fulfilled--whether financial assets perform as the pro formas indicated by the negotiations.

In the modern world, analyses 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 (by the way of their ability to borrow on

credit cards for big ticket consumer goods such as automobiles, house purchases, and to carry financial assets), governments (with their large floating and funded debts), and international units (as a result of the internationalization of finance) have liability structures which the current performance of the economy either validates or invalidates.

An increasing complexity of the financial structure, in connection with 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 eras. 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 down side 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, the key determinant of system behavior remains the level of profits. The financial instability hypothesis incorporates the Kalecki (1965)-Levy (1983) 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 equal aggregate investment. In a more complex (though still highly abstract) structure, aggregate profits equal

aggregate investment plus the government deficit. Expectations of profits depend upon investment in the future, and realized profits are determined by investment: thus, whether or not liabilities are validated depends upon investment. Investment takes place now because businessmen and their bankers expect investment to take place in the future.

The financial instability hypothesis, therefore, is a theory of the impact of debt on system behavior and also incorporates the manner in which 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, bankers 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: hence, changes in this money's supply have a linear proportional relation to a well defined price level.

Three distinct 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: (e.g. 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. In contrast, 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 transits from financial relations that make for a stable system to financial relations that make for an unstable system.

In particular, over a protracted period of good times, capitalist economies tend to move from a financial structure dominated by hedge finance units to a structure in which there is large weight to units engaged in speculative and Ponzi finance. Furthermore, if an economy with a sizeable body of speculative financial units is in an inflationary state, and the authorities attempt to exorcise inflation by monetary constraint, then speculative units will become Ponzi units and the net worth of previously Ponzi units will quickly evaporate. Consequently, units with cash flow shortfalls will be forced to try to make position by selling out position. This is likely to lead to a collapse of asset values.

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 (i) the internal dynamics of capitalist economies, and (ii) the system of interventions and regulations that are designed to keep the economy operating within reasonable bounds.

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