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## FINANCIAL INSTABILITY

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Economists have long been concerned with the economic fluctuations that occur more-or-less regularly in all capitalist economies. (Sherman 1991; Wolfson 1994) To be sure, there are different kinds of economic fluctuations—ranging from the Kitchin cycle (tied to inventory swings and lasting on average 39 months) to the Juglar cycle (lasting about seven or eight years and linked to investment in plant and equipment) to the Kuznets cycle of twenty years (associated with demographic changes) and finally to the Kondratieff long wave cycles attributed to major innovations (electrification, the automobile). (Kindleberger 1989) Financial factors might play only a small role in some of these fluctuations. Generally, economists studying financial instability have tended to focus on periodic financial crises that frequently coincide with the peak of the common business cycle, although financial crises (especially in recent years) can occur at other times during the cycle. Furthermore, an economy might be financially unstable but manage to avoid a financial crisis. It is best to think of financial instability as a tendency rather than as a specific event, although the typical financial crisis might be the result of unstable financial processes generated over the course of a business cycle expansion. In this essay, we will be concerned primarily with economic instability that has at its roots a financial cause, with less interest in either economic fluctuation that is largely independent of finance or in isolated financial crises that do not spill over to the economy as a whole.

A variety of explanations of the causes of financial instability have been offered. One possible cause could be a speculative “mania” in which a large number of investors develop unrealistic expectations of profits to be made, borrowing heavily to finance purchases of assets and driving their prices to absurd levels. Eventually, the mania ends, prices collapse, and bankruptcies follow. (Kindleberger 1989) The tulip mania of 1634, the South Sea bubble in 1719, or the Dot-com boom of the late 1990s might be cited as examples of speculative manias. Speculative booms often develop, and are fueled by, fraudulent schemes. Recent examples of financial crises in which fraud played a large

role include the collapse of the Albanian national pension system (1990s) as well as the American Savings and Loan fiasco (1980s). (Mayer 1990) Other explanations have tended to focus on a sudden interruption of the supply of money or credit that prevents borrowing and forces spending to decline, precipitating a cyclical downturn. The modern monetarist approach attributes financial instability and crises to policy errors by central banks. According to monetarist doctrine, when the central bank supplies too many reserves, the money supply expands too quickly, fueling a spending boom. If the central bank then over-reacts to the inflation this is believed to generate, it reduces the money supply and causes spending to collapse. (Friedman 1982) Others advance a “credit crunch” thesis according to which lenders (mostly banks) suddenly reduce the supply of loans to borrowers—either because the lenders reach some sort of institutional constraint or because the central bank adopts restrictive monetary policy (as in the monetarist story). (Wojnilower 1980; Wolfson 1994) Finally, one could add exchange rate instability and foreign indebtedness as a precipitating cause of economic instability, especially in developing nations since the breakup of the Bretton Woods system. (Huerta 1998)

Other analyses have identified processes inherent to the operation of capitalist economies. (Magdoff and Sweezy 1987) In other words, rather than looking to fundamentally irrational manias or to “exogenous shocks” emanating from monetary authorities, these approaches attribute causation to internal or endogenous factors. Karl Marx had claimed that the “anarchy of production” that is an inevitable characteristic of an unplanned economy in which decisions are made by numerous individuals in pursuit of profit is subject to “disproportionalities” of production such that some of the produced goods cannot be sold at a price high enough to realize expected profits. Key to his explanation was the recognition that production always begins with money, some of which is borrowed, used to purchase labor and the instruments of production in order to produce commodities for sale. If, however, some of the commodities cannot be sold at a sufficiently high price, loans cannot be repaid and bankruptcies occur. Creditors then may also be forced into bankruptcy when their debtors default because the creditors, themselves, will have outstanding debts they cannot service. In this way, a snowball of defaults spreads throughout the economy generating a panic as holders of financial assets

begin to worry about the soundness of their investments. Rather than waiting for debtors to default, holders of financial assets attempt to “liquidate” (sell) assets to obtain cash and other safer assets. This high demand for “liquidity” (cash and marketable assets expected to hold nominal value) causes prices of all less liquid assets to collapse, and at the same time generates reluctance to spend as all try to hoard money. Thus, the financial crisis occurs in conjunction with a collapse of aggregate demand. (Sherman 1991; Marx 1990, 1991, 1992)

Some of the elements of Marx’s analysis were adopted by Irving Fisher in his “debt deflation” theory of the Great Depression, as well as by John Maynard Keynes in his *General Theory*. While Fisher devised a theory of special conditions in which markets would not be equilibrating, in Keynes’s theory these were general conditions operating in monetary economies. Briefly, Fisher attributed the severity of the Great Depression to the collapse of asset prices and the ensuing financial crisis that resulted from an avalanche of defaults. (Fisher 1933; also Galbraith 1972) Adopting Marx’s notion that capitalist production begins with money on the expectation of ending with more money later, Keynes developed a general theory of the determination of equilibrium output and employment that explicitly incorporated expectations. (Keynes 1964) He concluded there are no automatic, self-righting forces operating in capitalist economies that would move them toward full employment of resources. Indeed, he described destabilizing “whirlwinds” of optimism and pessimism, in striking contrast to the Smithian notion of an “invisible hand” that would guide markets toward stable equilibrium. Also, like Marx, Keynes identified what he called the “fetish” for liquidity as a primary destabilizing force that erects barriers to the achievement of full employment. Most relevantly, rising liquidity preference lowers the demand for capital assets, which leads to lower production of investment goods and thus falling income and employment through the multiplier effect.

Hyman Minsky, arguably the foremost twentieth century theorist on the topic of financial instability, extended Keynes’s analysis with two primary contributions. (Minsky 1975, 1986) First, Minsky developed what he labeled “a financial theory of investment and an

investment theory of the cycle”, attempting to join the approaches of those who emphasized financial factors and those who emphasized real factors as causes of the cycle by noting that the two are joined in a firm’s balance sheet. (Papadimitriou and Wray 1998) As in Keynes’s approach, fluctuations of investment drive the business cycle. However, Minsky explicitly examined investment finance in a modern capitalist economy, arguing that each economic unit takes positions in assets (including, but not restricted to, real physical assets) that are expected to generate income flows by issuing liabilities that commit the unit to debt service payment flows. Because the future income flows cannot be known with certainty (while the schedule of debt payments is more-or-less known), each economic unit operates with margins of safety, collateral, net worth, and a portfolio of safe, liquid assets to be drawn upon if the future should turn out to be worse than expected. The margins of safety, in turn, are established by custom, experience, and rough rules of thumb. If things go at least as well as expected, these margins of safety will prove in retrospect to have been larger than what was required, leading to revisions of operating rules. Thus, a “run of good times” in which income flows are more than ample to meet contracted payment commitments will lead to reductions of margins of safety. Minsky developed a classification scheme for balance sheet positions that adopted increasingly smaller margins of safety: hedge (expected income flows sufficient to meet principal and interest payments), speculative (near-term expected income flows only sufficient to pay interest), and Ponzi (expected income flows not even sufficient to pay interest, hence, funds would have to be borrowed merely to pay interest).

This leads directly to Minsky’s second contribution, the financial instability hypothesis. Over time, the economy naturally evolves from one with a “robust” financial structure in which hedge positions dominate, toward a “fragile” financial structure dominated by speculative and even Ponzi positions. This transition occurs over the course of an expansion as increasingly risky positions are validated by the booming economy that renders the built-in margins of error superfluous—encouraging adoption of riskier positions. Eventually, either financing costs rise or income comes in below expectations, leading to defaults on payment commitments. As in the Marx-Fisher analyses,

bankruptcies snowball through the economy. This reduces spending and raises planned margins of safety. The recession proceeds until balance sheets are “simplified” through defaults and conservative financial practices that reduce debt leverage ratios.

Central to Minsky’s exposition is his recognition that development of the “big bank” (central bank) and the “big government” (government spending large relative to GDP) helps to moderate cyclical fluctuation. The central bank helps to attenuate defaults and bankruptcies by acting as a lender of last resort; countercyclical budget deficits and surpluses help to stabilize income flows. The problem, according to Minsky, is that successful stabilization through the big bank and the big government creates moral hazard problems because economic units will build into their expectations the supposition that intervention will prevent “it” (another great depression) from happening again. Thus, risk-taking is rewarded and systemic fragility grows through time, increasing the frequency and severity of financial crises even as depression is avoided. While there may be no ultimate solution, Minsky believed that informed and evolving regulation and supervision of financial markets is a necessary complement to big bank and big government intervention. Like Keynes, Minsky dismissed the belief that reliance upon an invisible hand would eliminate financial instability, indeed, he was convinced that an unregulated, small government capitalist economy would be prone to great depressions and the sort of debt deflation process analyzed by Irving Fisher.

#### Bibliography

- Fisher, I. (1933), ‘The Debt-Deflation Theory of Great Depressions’, Econometrica, 1, October: pp. 337-57.
- Friedman, M. (1982), Capitalism and Freedom, Chicago and London: The University of Chicago Press.
- Galbraith, J. (1972), The Great Crash, Boston: Houghton-Mifflin.
- Keynes, J. (1964), The General Theory of Employment, Interest, and Money, New York and London: Harcourt Brace Jovanovich.
- Kindleberger, C. (1989) Manias, Panics, and Crashes: A history of financial crises, New York: Basic Books, Inc.

- Huerta, A. (1998), La Globalizacion, Causa de la Crisis Asiatica Y Mexicana, Mexico: Editorial Diana.
- Magdoff, H. and P. Sweezy. (1987) Stagnation and the Financial Explosion, New York: Monthly Review Press.
- Marx, K. (1990), Capital: Volume 1, London: Penguin Classics.
- (1991), Capital: Volume 3, London: Penguin Classics.
- (1992), Capital: Volume 2, London: Penguin Classics.
- Mayer, M. (1990), The Greatest-Ever Bank Robbery: the collapse of the savings and loan industry, New York: Charles Scribner's Sons.
- Minsky, H. (1975), John Maynard Keynes, New York: Columbia University Press.
- (1986), Stabilizing an Unstable Economy, New Haven and London; Yale University Press.
- Papadimitriou, D. and L.R. Wray (1998), 'The Economic Contributions of Hyman Minsky: varieties of capitalism and institutional reform', Review of Political Economy 10, No. 2, pp. 199-225.
- Sherman, H. (1991), The Business Cycle: Growth and crisis under capitalism, Princeton, New Jersey: Princeton University Press.
- Wojnilower, A. (1980), 'The Central Role of Credit Crunches in Recent Financial History', Brookings Papers on Economic Activity, No. 2: 277-326.
- Wolfson, M. (1994), Financial Crises: Understanding the postwar U.S. experience, Armonk, New York and London: M.E. Sharpe.