

## **Working Paper No. 660**

## **Financial Markets**

by

Jörg Bibow\*
Levy Economics Institute of Bard College

## March 2011

\* The author thanks John King, Roy Rotheim, and Andrea Terzi for their comments on an earlier draft.

The Levy Economics Institute Working Paper Collection presents research in progress by Levy Institute scholars and conference participants. The purpose of the series is to disseminate ideas to and elicit comments from academics and professionals.

Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan, independently funded research organization devoted to public service. Through scholarship and economic research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

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

This paper provides a brief exposition of financial markets in Post Keynesian economics.

Inspired by John Maynard Keynes's path-breaking insights into the role of liquidity and finance

in "monetary production economies," Post Keynesian economics offers a refreshing alternative

to mainstream (mis)conceptions in this area. We highlight the importance of liquidity—as

provided by the financial system—to the proper functioning of real world economies under

fundamental uncertainty, contrasting starkly with the fictitious modeling world of neo-Walrasian

exchange economies. The mainstream vision of well-behaved financial markets, channeling

saving flows from savers to investors while anchored by fundamentals, complements a notion of

money as an arbitrary numéraire and mere convenience, facilitating exchange but otherwise

"neutral." From a Post Keynesian perspective, money and finance are nonneutral but condition

and shape real economic performance. It takes public policy to anchor asset prices and secure

financial stability, with the central bank as the key public policy tool.

**Keywords:** Financial Markets; Liquidity; Uncertainty; Rate of Interest; Instability; Central

Banking

JEL Classifications: A33, B31, E44, E50

1

In mainstream economics financial markets provide the conduit through which savers channel their savings towards investment, permitting the economy to allocate resources to their best uses through time. Guiding the so-envisioned intertemporal allocation of resources, the prices of financial instruments determined in financial markets are held to properly reflect "fundamentals." As saving finances investment, on this view, unlocking the economy's supply-side potential requires fully mobilizing the economy's saving pool. As competitive markets are efficient, on this view, maximum productivity of the economy is best served by a quest for market "completeness"—the ideal of Arrow-Debreu contingent contracts spanning the whole space of states of nature, supposedly allowing an optimal spreading of risks. This vision of well-behaved financial markets anchored by fundamentals complements a notion of money as an arbitrary numéraire and mere convenience, facilitating exchange though otherwise "neutral," i.e., not determining anything "real."

The empirical finance literature is awash with puzzles challenging the "efficient market hypothesis" and related beliefs. Most important of all is the experience of recurrent financial crises severely disrupting real world economies, sharply contradicting any notion of financial markets as naturally tending towards stability and equilibrium. Yet there is remarkably little concern that mainstream economics may provide an altogether flawed depiction of the role of finance in real world economies. Financial markets are indeed at the heart of the flaw in neoclassical economics diagnosed by Keynes in the *General Theory* (Bibow 2009).

Post Keynesian economics offers a refreshing alternative that is inspired by Keynes's pathbreaking insights into the role of liquidity and finance in "monetary production economies." The starting point is that "human decisions affecting the future ... cannot depend on strict mathematical expectation, since the basis for making such calculations does not exist" (Keynes 1978: 162–3). Especially regarding investment decisions that require a look into the faraway future, Keynes emphasizes that about many relevant factors there is "no scientific basis on which to form any calculable probability whatever. We simply do not know" (Keynes 1987: 114; see also Runde 1996).

"Fundamental (or Keynesian) uncertainty" is a critical factor considering financial markets (Chick 1983; Kahn 1972; Kregel 1998). The spreading of risks becomes a complicated matter when bankruptcy is a real possibility, but an event of unquantifiable probability. Specialized financiers may be willing to attach a price to "risks" of intrinsically uncertain

magnitude, but individual nonstandardized risks are generally nonmarketable. On the other hand, given the interconnectedness among economic units woven by financial markets through debt contracts that span over time, bankruptcies may easily spread, with contagion leading to systemic harm far beyond what seemed reasonable and objective estimates of individual default risks.

It is in the presence of fundamental uncertainty that liquidity attains a special attractiveness by offering some degree of safety and flexibility to the individual who fears price volatility of alternative assets and prefers keeping options open for the time being. Liquid assets may, therefore, trade at a premium over alternative assets. This is despite the fact that staying liquid is not an option for society as a whole, since society as a whole is permanently committed to any real investment once it is made. The General Theory focuses on the issue of satisfying "liquidity preference" through financial markets and how this affects the economy in attaining full employment. The point is that waste of resources through underutilization results from any widespread urge to abstain from real investment commitments. How society chooses to deal with fundamental uncertainty is thus a crucial public policy matter. Financial markets may contribute to the spreading of risks, but coping with important uninsurable risks is an altogether different kind of challenge. Keynes emphasizes that public policy is crucial: "Unemployment develops, that is to say, because people want the moon; men cannot be employed when the object of desire (i.e., money) is something which cannot be produced and the demand for which cannot be readily chocked off. There is no remedy but to persuade the public that green cheese is practically the same thing and to have a green cheese factory (i.e., a central bank) under public control" (Keynes 1978: 235).

As this quotation pinpoints, on a scale of liquidity, money represents "liquidity par excellence," offering a fully known nominal value to its holder at any time. At the same time, it is the command over money and finance that equips entrepreneurs and entrepreneurial investors with the power to issue orders for production and investment. The contracts involved in recruiting labor services and obtaining the finance to pay for them are commitments to make future payments in terms of money, featuring money as a unit of account. The financial system intermediates between those who have a choice in holding their wealth in the form of money or other financial instruments and those who wish to acquire money in order to initiate production and/or the acquisition and management of assets. The financial system creates and channels the liquidity that is the precondition for economic activity and growth. In the fictitious exchange

economy of mainstream economics any commodity may serve as "numéraire" and finance cannot play any substantial role when expected future income is included in the budget constraint upon which intertemporal optimization is set to operate. By contrast, in monetary production economies, both the money of account function and the property of money as liquidity *par excellence* are central to the functioning of the financial system and economy at large (Pasinetti 2007). In this twofold way, then, "the importance of money essentially flows from its being a link between the present and the future" (Keynes 1978: 293). Other financial assets meet liquidity needs to some degree.

Regarding financial intermediation, there is an obvious attraction in being in a position to acquire higher-yielding assets by issuing lower-yielding liabilities, including monetary financial instruments that are substitutes for money issued by the sovereign. Specialized financial institutions may be engaged in various kinds of intermediation services aiming at profit maximization. In general, if unrestrained, the forces of competition and innovation may flourish, perhaps excessively so, in the creation, issuance, and trading of financial instruments designed to transfer monetary units and associated risks. Financial stability presupposes sustainable business models of financial intermediation and arbitrage activities. The lure of short-term profit in an industry that literally deals in bridging an uncertain future has produced a history of finance that is scattered with fraud, instability, and crises. Regulation of financial instruments and supervision of financial intermediaries are thus essential public policy functions.

The private sector has largely captured the profitable business of issuing liquidity par excellence, supported by public safety nets. Bank deposits dominate notes and coins in the portfolios of the general public, with peace of mind provided by government-guaranteed deposit insurance. And banks themselves economize their liquidity and normally hold deposits at the central bank only at whatever minimum may be required of them, assured that systemic liquidity is underwritten by the central bank as "lender of last resort." As a "dealer in money and debts" (Keynes 1978: 205), the central bank has the power to swiftly adapt the size and composition of its balance sheet. Extending the scope of debt-management techniques as applied to the public debt, typically providing an important collateral asset and the benchmark against which private risks are priced, monetary policy represents the most powerful public tool for applying immediate influence over financial conditions (Goodhart 1995).

Under normal conditions monetary policy consists of setting the short-term rate of interest, the price rather than the quantity of base money, and an important price for the financial system indeed, strongly influencing the profitability of financial intermediation in particular (Dow 1997). While the "short-term rate of interest is easily controlled by the monetary authority" (Keynes 1978: 203), the challenge of monetary policy lies in guiding financial conditions more generally, and in a way that is conducive to achieving the goals of public policy. As an example, Keynes uses open market operations to illustrate the role of expectations and market conventions in determining longer-term interest rates. In practice, the interaction between the central bank and financial market players is a longstanding, two-way, and rather complex one—making monetary policy an art as well as a science. With monetary policy tactics employing both words and deeds, Keynes stresses the pivotal role of banks, which, in his view, "in general ... hold the key position in the transition from a lower to a higher level of activity" (Keynes 1987: 222). Banks (perhaps also operating as "shadow banks" if the authorities allow) can create the liquidity that the real economy requires to function and grow.

To pinpoint the flaw that Keynes identified in the "classical" system, and to illuminate how Post Keynesian and mainstream perspectives differ, note here that the determination of "the" rate of interest (rather: financial conditions) has nothing to do with equilibrium in some imaginary "capital market" balancing saving and investment flows. Instead, the rate of interest is determined by portfolio equilibrium in asset markets at any given short-term policy rate: at current prices all existing marketable financial instruments are willingly held, with a given pool of liquidity—as provided by the banking system—supporting interest rates and asset prices at their current levels. While the outcome at any given time reflects the interaction between the monetary authorities and financial market players, there is no direct and immediate way in which "fundamentals" may find their supposedly uniquely correct expression in asset prices. Under Keynesian uncertainty the idea of uniquely correct asset prices determined by fundamentals is philosophically fallacious. Tomorrow's realities supposedly reflected in uniquely correct asset prices today are yet to be determined. The point is that financial markets—however guided—are a real factor in shaping tomorrow's realities, not by channeling saving flows arising from given incomes though, but by creating and channeling liquidity, thereby determining national income and employment.

In short, money and finance condition the real economy, not the other way round. It is the financial system that grants, or declines, the command over the money units needed to meet money contracts. The price at which it does so is the money rate of interest—accordingly described by Keynes (1978: 223) as "ruling the roost" in setting the pace of capital accumulation and economic activity. While regular cash flows from the circular flow of production and spending may seem to keep the channels filled, this overlooks the fact that dated debts need to be rolled over, giving lenders the option to deny finance at their discretion. Reference to the prominence of retained earnings over external sources in financing corporate investment misses the point that fresh external finance is vital in sponsoring growth in spending, growth upon which the well-functioning of capitalism appears to depend. If growth is driven by corporate investment, the corporate sector can be expected to be in continuous need of fresh external finance: the situation that Keynes took for granted. Alternatively, apart from public "deficit spending," more temporary growth stimuli can also arise from positive trade balances and household sector credit-financed spending, with financial markets catering for correspondingly different needs in each case.

Under Keynesian uncertainty public policy is vital in anchoring financial markets. When let off the hook, endogenous processes of credit creation and asset market play may easily feed bubbles and lead to financial fragility, intrinsically entwined with powerful real economy feedback loops (Minsky 2008). Liquid financial markets serve both individual and social purposes, but the "fetish of liquidity" may also generate overtrading and underinvestment. Keynes knew from intimate experience that "markets can remain irrational for longer than you or I can remain solvent" (attributed) and that professionals may find it safer to anticipate "what average opinion expects the average opinion to be," rather than try to "defeat the dark forces of time and ignorance" (Keynes 1978: 155–6). Warning that "when the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done" (Keynes 1978: 159), he also suggested that the dynamism of monetary production economies depends on entrepreneurial animal spirits meeting some corresponding support from "spontaneous optimism" in financial markets.

## REFERENCES

- Bibow, J. 2009. *Keynes on Monetary Policy, Finance and Uncertainty*. London and New York: Routledge.
- Chick, V. 1983. Macroeconomics after Keynes. Cambridge, MA: MIT Press.
- Dow, S.C. 1997. "Endogenous money." in G.C. Harcourt and P. Riach (eds.), A 'Second Edition' of The General Theory. London: Routledge.
- Goodhart, C.A.E. 1995. *The Central Bank and the Financial System*. Cambridge, MA: MIT Press.
- Kahn, R.F. 1972. *Selected Essays on Employment and Growth*. Cambridge, UK: Cambridge University Press.
- Keynes, J.M. 1978. "The General Theory of Employment, Interest and Money." in D.E. Moggridge (ed.), *The Collected Writings of John Maynard Keynes*, volume VII. London: Macmillan and Cambridge University Press for the Royal Economic Society.
- ———. 1987. "The General Theory of Employment." in D.E. Moggridge (ed.), *The Collected Writings of John Maynard Keynes*, volume XIV. London: Macmillan and Cambridge University Press for the Royal Economic Society. (Originally published in *Quarterly Journal of Economics*.)
- Kregel, J. 1998. "Aspects of a Post Keynesian Theory of Finance." *Journal of Post Keynesian Economics* 21(1): 111–33.
- Minsky, H.P. 2008 [1975]. John Maynard Keynes. New York: McGraw-Hill.
- Pasinetti, L.L. 2007. Keynes and the Cambridge Keynesians: A Revolution in Economics to be Accomplished. Cambridge, UK: Cambridge University Press.
- Runde, J.H. 1996. "Uncertainty, Keynesian/Knightian." in J. Davis, W. Hands, and U. Maki (eds.), *Handbook of Economic Methodology*. Aldershot: Edward Elgar.