

Ann E. Davis  
Marist College

ASSA Chicago, January, 2017

Fetishism and Financialization

## I. Introduction

It is possible to apply the method of historical institutionalism to money, extending the analysis of property (Davis 2015). That is, the central concept is “money,” which is operationalized by a specific set of institutions and interpreted by a specific body of knowledge. This related institutional complex then varies historically and can be traced by documenting institutional practices and knowledge production. The particular analysis in this chapter builds on Marx, Keynes, Postone, and Minsky, with reference to recent trends in the global economy. The objective is to interpret money as a historically specific institution with changing functions and meanings, rather than a discrete “natural” object which is historically invariant. Consistent with Marx’s notion of the “fetishism of money,” there is a trend in modern monetary theories from viewing money as a representation of value to an intrinsically valuable asset itself, with implications for the operation of the system.

## II. Marx’s view of Money: Representation of Value and Instrument of Accumulation

One of Marx’s most important analytical concepts is money. In the famous Chapter One of Volume I of *Capital*, Marx introduces money as the abstract *representation* of social labor time in commodity production. Workers are not aware of their role as part of the whole of social labor in any given time period or location (Marx 1967, Vol. I Ch. 1, section 4, p. 73). The whole of social labor is only represented by the total value produced by employment in a given period, measured by the market value of total production, or Gross Domestic Product in modern terminology. Workers do not feel a relationship with other individual workers based on their collective role in social production, what Marx calls the “fetishism of commodities.”

In Vol. I, Ch. 3, Marx discusses money as an abstract expression of the value of commodities, or unit of account, in Section 1., and as a means of payment in Section 3. It is as a means of payment that money acquires the form of “hard cash” (Marx 1967, Vol. I, Ch. 3, Section 1, p. 103, and Section 3.b. p. 138; Vol. III Ch. 32, 515-517). Because credit is elastic in the banking system, cash is often short, especially in a crisis (Vol. III Ch. 30, 490-493). The circulation of commodities is not based on the quantity of money, but on the expression of value in an independent form (a critique of the quantity theory of money is developed in Vol. I Ch. 3 Section 2, 120-124; see also Vol. III. Ch. 28, 33, and 34)). Whether gold or paper (fiat currency) the symbolic role of money is sufficient as a measure of value until payment must be made (apart from the clearinghouse function of canceling offsetting debts). Money as the “universal commodity” becomes the subject of all contracts, and the specific form of money as cash is required for settlement.

In so far as actual payments have to be made, money does not serve as a circulating medium, as a mere transient agent in the interchange of products, but as the individual incarnation of social

labour, as the independent form of existence of exchange-value, as the universal commodity (Marx 1967 Vol. I, Ch. 3, Section 3.b. 138).... and the “universal subject-matter of all contracts” (Vol. I. Ch. 3 Section 3b. 140).

In the form of a means of payment, money becomes a *tool* of abstraction and accumulation, a “universal money” necessary for settling international accounts (Marx Vol. I Ch. 3, Section 3.c.). That is, money is an abstract symbol of value, whose origin is not widely understood, but it is also a *means* of accumulation, or a “technology of power” (Arrighi 1994, 15). In this context, the history of “primitive accumulation” (Vol. I Part VIII Ch. 26) provides certain groups with the social power of further accumulation, as well as concentration and centralization through the financial system. Capital accumulation is backed for the force of the state (Marx 1967, Vol. I, Ch 31, 751).

The credit system, which has its focus in the so-called national banks and the big money-lenders and usurers surrounding them, constitutes enormous centralization, and gives to this class of parasites the fabulous power, not only to periodically despoil industrial capitalists but also to interfere in actual production in a most dangerous manner. (Marx 1967 Vol. III, Ch 33, 544-545)

Once production is separate from consumption, or labor from ownership of the means of production and the product, there is a time lapse between production and realization, which is bridged by money as a unit of account and as a means of payment. “The appearance of the two equivalents, commodities and money, at the two poles of the process of sale, has ceased to be simultaneous” (Marx 1967 Vol. I Ch. 3 Section 3.b. 136). The use value of the commodity to the consumer becomes separate from the exchange value of the commodity to the producer, and appears only as a “double” (Ibid. 108, 134) which becomes a potential contradiction in an economic crisis. The apparent self-expansion of value is due to activities of humans, contrary to appearances, manifested in “flows of money” (Marx 1967 Vol. I Ch. 3 section 2a. and 2.b., 103-124).

This aspect of money as an *instrument* or a “technology” (Goetzmann 2016) is important for firms, who can acquire means of production and purchase the commodity labor power. Further, money is a *method* of homogenization and abstraction of commodities and labor, by means of workplace discipline and competition in product and labor markets. It is also an important means of payment for workers who can purchase the means of subsistence. The financial system is organized by the state to restrict access to credit to those who are capable of repayment with interest (Rousseau 2016). Circulation of the financial token of a particular state is a technique to extend the scale of circulation, increase the speed of turnover, and to increase its power among competing capitalist states. In this context, the state control of public credit becomes a means of extension of the power of the state.

While the historical origin of credit is from long distance trade and from the self-defense of Italian city-states, the modern liberal state has internalized the credit mobilization and allocation function, in partnership with financiers and merchants (Arrighi 1994). That is, the modern liberal state issued debt repayable with future tax revenues, in the form of public bonds. These bonds became the center of public credit, as “safe assets” of commercial banks, and later as collateral for “shadow banking” (Gabor and Vertergaard 2016). Regulation of access to credit is a state function, to assure credit-worthiness, and to provide a back-stop. Public bonds are the most liquid asset, and are guaranteed by the state as a whole.

Money becomes a tool of abstraction of social life, as well. The level of income and wages provides a metric for social status, by which individuals evaluate each other (Meister 1990), and provide the foundation of individual competition (de Vries 2008). The level of compensation provides a platform of individual competition in the labor market, where one tends to see one's own value in terms of the comparative wage payment (Veblen; Frank). The quality of a product is presumably measured by its price (leading to an upward sloping demand curve for a "Giffen" good). Housing is segregated by income level (and other forms of social status), which then influences life chances by access to schooling and social networks. Even ecological assets are measured in money terms, in the form of "ecosystems services" (Daily)

### III. Capital as Totality

When the purpose of commodity production becomes the expansion of value, per se, "the possessor of money becomes a capitalist" (Marx 1967 Vol. I Ch. 4 152) and the expansion of value appears automatic, as if "money begets money" (Vol. I Ch. 4 155; Vol. III Ch. 21, 345, Ch. 24, 391-399). The holder of money seems to have social power himself.

Just as every qualitative difference between commodities is extinguished in money, so money, on its side, like the radical leveler that it is, does away with all distinctions. But money itself is a commodity, an external object, capable of becoming the private property of any individual. Thus social power becomes the private power of private persons. (Marx 1967 Vol. I Ch. 3, Section 3a, 132).

While consisting of the production of specific commodities by specially trained workers employed by competing firms, the capitalist system operates as a whole. The value produced by the aggregate employment is measured at the macro level, coordinated in some mysterious fashion by Smith's "invisible hand." That mystery for Marx consists of the value produced by direct labor consisting in the value of the commodity and represented in external form by money (Vol. I ch. 3 Section 2.b. p. 116).

But how are gold and silver distinguished from other forms of wealth? Not by the magnitude of their value...but by the fact that they represent independent incarnations, expressions of the *social* character of wealth...It is faith in the social character of production which allows the money-form of products to assume the aspect of something that is only evanescent and ideal....(Marx 1967, Vol. III, ch. 35, 573-574; italics in original)

The concrete institutional coordination of the system is then conducted by corporations, financial institutions, and central banks by means of money. There is a division of labor between production and finance capital (Marx 1967, Vol. III, Ch. 21), and bankers become the "representatives of social capital" (Marx 1967, Vol. III, Ch. 32, 368). The whole of the system remains elusive, and vaguely manifested by the abstract notion of "capital" (Postone 1993, 152-157, 183-185, 271, 319-321, 349-352).

Marx's category of capital refers to an alienated, dualistic structure of labor-mediated relations in terms of which the peculiar fabric of modern society, its abstract form of domination, its historical dynamic, and its characteristic forms of production and of work can be understood systematically. For Marx, capital, as the unfolded commodity form, is the central totalizing category of modern life. (Postone 1993, 352)

The financial circuit,  $M - C - M'$ , is the abstract expression of the operation of capital as self-expanding value. As the system becomes well-established, money appears to expand of itself, in the form  $M - M'$ , a "pure fetish form" (Marx 1967, Vol. III, Ch. 24, 391-393).

Interest as such expresses precisely the existence of the conditions of labour as capital, in their social antithesis to labour, and in their transformation into personal power vis-à-vis and over labour. It represents the ownership of capital as a means of appropriating the products of the labour of others. But it represents this characteristic of capital as something which belongs to it outside the production process and by no means is the result of the specifically capitalist attribute of this production process itself. Interest represents this characteristic not as directly counterposed to labour, but rather as unrelated to labour, and simply as a relationship of one capitalist to another. ( Marx 1967, Vol III, Ch 23, 382)

#### IV. Equality of Property Owners vs. Two Distinct Types of Property

A key elements of Marx's analysis is the difference in outcomes of the exchange capital and labor, even though all property owners are treated equally (Vol. I Ch. 6, 176). That is, all property consists in access to concrete use value, and receives its exchange value in circulation, based on the embodiment of socially necessary living labor time. For the commodity labor power, the employment in actual production is the use value and the exchange value is the labor time necessary for its own reproduction. The difference is surplus value (Vol. I ch 6). For capital, the concrete use value is the legal capacity to organize and/or employ labor in the production of commodities, and the exchange value is a legal claim to the share in surplus produced (Vol. III 21, 23). That is, both capital and labor appear as commodities, subject to the same rules which determine use and exchange value. The appearance of money as a claim to an increment,  $M - M'$ , and the appearance of the capacity of money to expand itself, makes money appear as the source of value. Marx contrasts these appearances compared with the underlying social relations.

These reasons for compensation which enter the distribution of surplus-value as determinants are distorted in a capitalist's mind to appear as bases of origin and the (subjective) justification of profit itself (Vol. III ch. 23, 383).

That is, there is an ideological role for the claim to a share of the surplus by money capital. There is a danger in this view, nonetheless, which may tend towards a declining rate of investment, when an apparent option for financial returns exists, with less "risk" than production of commodities.

The individual capitalist has a choice of making use of his capital by lending it out as interest-bearing capital, or of expanding its value on his own by using it as productive capital....[but]if an untowardly large section of capitalists were to convert their capital into money-capital, the result would be a frightful depreciation of money-capital and a frightful fall in the rate of interest...(Vol. III Ch. 23, 377-378)

There is an ambiguity in the measure of capital, as well. Marx differentiates between the technical and the "organic" composition of capital, where the first is the physical mass of machinery and the second is the reflection of the cost of production of that machine. There is also ongoing concentration and centralization of competing firms (Marx 1967 Vol. I Ch. 25, Section 2, 621-628). In terms of credit, Marx

considers this a form of “fictitious” capital, which relies on calculation of present value (Marx 1967 Vol. III Ch. 25, 400-413, Ch. 29, 463-475).

#### V. The Role of the State with Respect to Money

Designation of currency is a function of the state (Marx 1967, Vol. I Ch. 3 section 2.c. 124-129). Each state maintains the circulation of its distinct token of money (Davis 2010; Polanyi 1944). There is currency competition among competing nation states (Cohen 2015) and currency hierarchies (Eichengreen and Hausmann 2005).

The state is responsible for managing and integrating the “capitalist totality,” as well as defining and enforcing the divisions among specific institutional forms, such as individual private property and wage labor. Both state and markets are constituted by “status function declarations” (Searle 2010), which assign functions to certain categories of persons. Key categories such as “property” and “money” are related to the totality of capitalism (Postone 1993, 216-225). These functions are often symbolized in documents or other types of writing, including money (Poovey 1998). The definitions and institutions of money and the state are mutually reinforcing and so elicit “performances” which maintain and enhance these institutions (MacKenzie).

For example, the formation of the joint stock corporation was both a legal and a political process (Davis 2009, 64-67), involving “other people’s capital” (Marx 1967, Vol. III, 436-441). As merchant guilds evolved into business companies, there was a removal of labor from membership to form the modern business corporation. The attack on guilds and constraints on labor organization as “monopolies” in early modern period reduced labor’s bargaining power, with some support from the Factory Acts (Smith; Marx 1967, Vol. I Ch. 10, 278-302; Ch. 28, 734-741). The exclusion of workers from the corporate organization, the guild, helped establish the institutional base for the process of commodification of labor, along with mechanization and use of science in aid of capital (Marx 1967, Vol. I, Ch. 15, 371-507; Ch. 24 Section 4, 605). Over time, finance became the dominant purpose of the corporation, within an infinite time perspective. Stock markets and limited liability provided “liquidity” for the investor (Lazonick 2015, 5 - 7).

There was a perceived reversal of living and dead labor (Marx 1947, Vol. I Ch. 7 Section 2, 195), with capital as agent and the worker as object. An increase in wages merely extends “the length and weight of the golden chain the wage worker has already forged for himself” (Vol. I, Ch. 25, section 1, 618)

Once the worker no longer owns the product of labor (Marx 1967, Vol. I Ch. 24, 587), the state defines and enforces “paradoxical” divisions, such as the public/private divide. That is, the whole of the economic system must be divided into factory and household, or work and non-work. This division enables the owner to maintain control of production by specific rules, and the individual household to maintain the “independence” vis-à-vis reliance on the state and the employer, according to the self-ownership of labor model (Davis 2016). Further, the family constitutes the “public,” in terms of citizenship, labor force, and population, while also shouldering the responsibility of the individual “private” household in terms of provision of necessities, education and socialization. This externalization of the costs of the reproduction of the labor force helps differentiate and define the limits of the financial circuit, such as children, and circumscribe the costs that can be attributed to the

firm, such as day care (with health care and pensions subject to variable contributions by firms). A similar “externalization” of environmental costs of disposal protects the firm from potential claims or deductions from its profit due to ecological disruption.

Money is the financial token which helps to externalize some costs and internalize others, defining the boundary of the financial circuit. Money is a symbol of delegated sovereignty which allows the control of property, and aids the state in managing decentralized agents and their division of tasks along the financial circuit. Completion or “realization” of the financial circuit is necessary for both firms and the state, and they maintain complementary roles. Completing the financial circuit by means of realization, by sales of the “final product” to the household and payment of taxes to the state, is increasingly complex, given the geographic extension and institutional innovation of financial forms and institutions. The definition of money is endogenous, instrumental, and evolutionary, as are theories of what constitutes money (Mehrling 1997, 2011; Streeck 2015; Minsky 1986, 223-229).

Financial institutions vary historically and comparatively (Hall and Soskice 2001), with a variety of arrangements of banks, stock markets, and state-owned enterprises, as well as provision of public goods. The state must regulate credit to maintain its “credibility,” while financial agents will seek to escape that regulation in order to expand credit and their associated interest payments and fees. The result is an ongoing regulatory arbitrage (Minsky 1986, 250-251). Like property, the state both creates money and allows for the relative autonomy of financial institutions, which is in turn protected from and enforced by the state.

That is, the state divides the economy according to the mandates of individual private property, adjudicated by courts and legislatures, and provides for its reintegration by means of the financial circuit. While considered “private,” this financial circuit is ultimately “public,” subject to state control and regulation. The hierarchy of money is based on proximity to the state, with the associated institutional arrangements to assure that “money always trades at par on demand” (Pozsar 2014, 7-23).

Public finance can provide a means of financing public goods as well as defense. Marx viewed public finance as a means of extracting wealth from the people.

“National debts, i.e., the alienation of the state – whether despotic, constitutional or republican – marked with its stamp the capitalistic era. The only part of the so-called national wealth that actually enters into collective possessions of modern peoples is – their national debt.... Public credit becomes the *credo* of capital. And with the rise of national debt-making, want of faith in the national debt takes the place of the blasphemy against the Holy Ghost, which may not be forgiven.” (Marx 1967, Vol. I Ch. 31, pp. 754-755)

For example, the formation of the Bank of England in 1694 as a joint stock company enabled it raise its own capital to lend to the government and to coin money to distribute to the public. It became the “receptacle of the metallic hoard of the country and the centre of gravity of all commercial credit” (Vol. I, Ch. 31, 755; see also Vol. III, Ch 33 national wealth backs the Bank of England (pp. 540-545); Ch. 34 pp. 554-555).

The role of a central bank also varies historically. The central bank can become more like a securities dealer, in Shaw's balance sheet framework (Mehrling 1997, 187-190; Garbade 2012). In this case, financial deepening is a substitute for price adjustment, by means of specialized assets and institutions, or "financial intermediation over financial markets" (Mehrling 1997, 209-211). The central bank can become "dealer of last resort" to maintain stable assets values and avoid bubbles (Mehrling 2011, 2012).

## VI. Keynes: Money and Liquidity

For Keynes, a central aspect of money is its liquidity, compared with other assets (Keynes 1964, 194-209). With the development of money as a means of payment, there is a tendency to "accumulate money against the dates fixed for the payment of the sums owing" (Marx Vol. I Ch. 3, section 3.b. 142). When the accumulation of money becomes the "end and aim" of production of commodities, money becomes a store of value, and along with it there arises a "gold fetish" (Marx Vol. I Ch. 3 Section 3.a.130, 133). This is similar to Keynes' notion of the precautionary demand for money (Keynes 1964, Ch 13, 166-172, Ch 15, 194-199). The ability to convert assets into means of payment quickly with no loss in value is often defined as "liquidity." At times in the trade cycle, demand for liquidity can be absolute (Keynes 1964, 207, 239-242, 316). Yet Keynes was aware that holding money as an asset can deter investment (Keynes 1964, 212-213, 222-225, 234-235), and so reduce economic growth.

### A. The Source of Value

For Marx, the measure of value is "socially necessary abstract labor" (Postone 1993, 190-200). That is, labor which counts as value-producing must achieve the level of productivity of the economy as a whole. Simply taking more time for production won't increase "value." In this sense, socially necessary labor time is already disciplined by competition in the workplace and among commodity producers. There is an implicit standard, reflecting the social dimension of labor even for the individual worker.

Productivity is commonly and frequently measured by economists and business owners at all levels of production. Productivity is simply expressed as  $Q/L$ , where  $Q$  is output and  $L$  is labor time. Yet quantity cannot be measured for the economy or industry as a whole simply by adding up diverse physical units. Implicit in the productivity measure is a market price, as a common unit of account. And as productivity increases in a given industry, the market price of the commodity will fall. In this sense, increasing productivity will increase the physical quantity of output, but will not necessarily increase the value of output. As Postone emphasizes (Postone 1993, 288-292), the *value* produced by a given unit time measure of labor expended is constant, even if that value is embodied in increased quantities of physical output. Postone highlights this difference between value and material wealth. Direct living human labor is necessary to embody value in the commodity, even as progress in science and technology reduces the amount of living labor necessary for production (Postone 1993, 196-200, 346-354).

Once there are limits to the working day, increasing surplus value can result from increases in the productivity of wage goods and the subsequent increase in relative surplus value (Postone 1993, 308-314). That is, productivity increases surplus value and profit only indirectly, and must take place at an accelerated rate.

### B. Keynes Units of Analysis

Keynes' money wage-unit avoids some of the ambiguity of attempting to measure physical output by using nominal measures to express the capacity for command of labor (Keynes 1964, Chapter 4, 37-45; Hayes 2013, 34-35). That is, Keynes estimates aggregate output by expenditures for the purchase of labor time paid for in units of money wage, in order to incorporate the effect of changes in productivity and technology. In Keynes' terminology,

$$E = N W$$

Where E is the wages and salaries bill, W in the money wage-unit, and N is the quantity of employment (Keynes 1964, 41). That is, labor is aggregated into a homogeneous unit, instead of output (Keynes 1964, 41-45). The real wage is then determined by the marginal productivity of labor in the wage-goods industries (Keynes 1964, 29).

Money is the standard of value as the medium in which wages and debt is fixed (Keynes 1964, 236-239, 302). Keynes mentions legal tender in footnote on p. 167, along with arbitrary distinction between money and debt. The money wage unit is the means of aggregation for both aggregate demand and supply (Keynes 1964, Ch. 3 and Ch. 20), emphasizing the central role for labor (Keynes 1964, 213-214). "Stickiness" in the money wage unit was also a condition for stability (Keynes 1964, 239, 251, 253, 304, 309).

The actual quantitative production of value is unknown in advance, although anticipated by production decisions. That is, there is a potential difference between the production and realization of value of aggregate output. The "realization" problem may be due to the lack of effective demand, to be managed if full employment is to be achieved, as well as a coordination problem among multiple individual actors within the economy. The statistics for Gross Domestic Product, for example, are revised several times.

The yield to all capital assets calculated in "own rate of return" (Keynes 1964, 222-229). The possible conversion of physical yield (wheat in Keynes' example) into monetary yield allows the convertibility of yields among various assets in money terms. Along with the categorization of types of risk (Keynes 1964, 144), this analysis helps to standardize financial assets and so increase liquidity by facilitating exchange among them.

Keynes defined the marginal efficiency of capital as present discounted value of the expected yield, effected by changes in technology and business confidence (Keynes 1964, 135-137, 141-143, 148-149, 204, 308, 316-320, 325). It is possible to have a declining MEC over time, as technology improves and prices decline. This sets up the challenge for the monetary authority to lower the rate of interest to allow for continuing rates of investment (Keynes 1964, 216-218, 221, 308-309, 316).

Keynes made note of the circularity of the definition of capital. That is, the interest rate is necessary to measure the quantity of capital, while the quantity of capital also determines the interest rate (Keynes 1964, 137, 140; Minsky 1986, 213-218). Quantitative measures of capital are also affected by taxes and accounting conventions (Shaikh 2016, 243-256), as well as depreciation (Kliman 2012, 138-148).

### C. Money and Other Assets

Unlike Marx, and his distinction between property in capital and labor, Keynes aggregates across all types of property, or "assets." Keynes assumes that all assets have yield and can be compared based on



rate of return, time to maturity, and risk (Keynes 1964, 222-230). Money has a liquidity premium because it is a standard of value (Keynes 1964, 230, 236-239). Money is also unique in its conditions of production and substitution (Keynes 1964, 230-234).

Keynes' approach leads to a standardization of financial assets, and a perspective that leads to the calculation of the relative desirability of each. Unlike Marx, Keynes' analysis is primarily in nominal terms. The demand for money or alternative assets is separate from real investment, measured by the Marginal Efficiency of Capital, or MEC (Keynes 1964, 141-143, 145-146, 308, 316-320, 325). The MEC is in nominal terms, but is affected by changes in productivity and prices.

The supply of money is controlled by the monetary authority and is not connected with the production of total social value. Money has a scarcity value, similar to the Quantity Theory of Money (Keynes 1964, 208-209, 304-306). As a result, liquidity becomes a purely monetary phenomenon unlinked to the production total value. Yet monetary policy becomes a method of controlling the rate of investment (Keynes 1964, 326-327).

For Keynes, like the Classical economists, a distinction between money and real is possible. For Marx, the financial circuit involves both money and real, in a continual, contingent transformation.

## VII. Paradox of Liquidity

Both Marx and Keynes make note of the need for liquidity.

### A. Pursuit of Liquidity

Capital markets emerged to provide an exit strategy for investors in fixed capital with long term commitments. So-called "liquid" stock markets developed once limited liability and perpetual corporations enabled investors to exchange holdings of corporate securities (see Chapter Seven above).

From the point of view of money as capital, there is a contradiction between money as a qualitative representation of the totality of social power and the open-ended potential of production and innovation, as compared with the actual quantity of production of surplus in a given period.

"Marx elaborates a logical contradiction between the boundlessness of money, when considered qualitatively as the universal representation of wealth that is directly convertible into any other commodity, and the quantitative limitation of every actual sum of money" (Postone 1993, 267).

Both Marx and Keynes were critical of the quantity theory of money (Marx 1967, Vol. I, Ch 3, 123-124; Vol. III, Ch. 34, 554; Vol. III Ch. 35, 573-574; Moseley 2005, 143-174). There is a need to limit credit to maintain competition, but also to relax restrictions to enable entrepreneurship and to prevent collapse of expectations.

Keynes notes the paradox of liquidity but sees it in purely psychological terms related to the demand for money (Keynes 1964, 166-172, 202, 246-247, 315-316).

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. 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....These tendencies are a scarcely avoidable outcome of our having successfully organized "liquid" investment markets. (Keynes 1964, 159)

With the separation between ownership and management which prevails to-day and with the development of organized investment markets, a new factor of great importance has entered in, which sometimes facilitates investment but sometimes adds greatly to the instability of the system....It is as though a farmer, having tapped his barometer after breakfast, could decide to remove his capital from the farming business between 10 and 11 in the morning and reconsider whether he should return to it later in the week (Keynes 1964, 150-151).....Investments which are "fixed" for the community are thus made "liquid" for the individual (Keynes 1964, 153).

Of all the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of "liquid" securities. It forgets that there is no such thing as liquidity of investment for the community as a whole (Keynes 1964, 155).

...the liquidity of investment markets often facilitates, though it sometimes impedes, the course of new investment. For the fact that each individual investor flatters himself that his commitment is "liquid" (though this cannot be true for all investors collectively) calms his nerves and makes him much more willing to run a risk (Keynes 1964, 160).

Keynes proposes the "Euthanasia of the rentier" (pp. 221, 376) and "comprehensive socialization of investment" (p. 378). Further, "...the duty of ordering the current volume of investment cannot safely be left in private hands" (Keynes 1964, 320; 325, 378).

Keynes' policy solution is to expand the role of the state, as if the state were a neutral arbiter capable of long run stabilization. There are misgivings regarding the role of the state, nonetheless, such as from James Galbraith ("predator state" in Wray 2009) or Shleifer (the "grabbing hand" of the state) or the corporate liberal state (Davis 2015) or exploitative state (Marx 1967). That is, Keynes does not match his analysis of money with the political economy of the state or an analysis of historically specific financial institutions.

## B. Managing Liquidity

It is possible that attempts to stabilize the economy have set the conditions for future instability. That is, stabilization and prevention of depressions may weaken the "shake-out" function of financial crises, and preserve excess capacity, which in turn may slow recovery from financial crises and undermine long run growth (Brenner 2009; El-Erian 2016; Roubini and Mihm 2010). The "lender-of-last resort" function may have stabilized liquidity in the 1970s, but led to inflation as a consequence (Minsky 1986, 254-287). The shift to lower interest rate policies in the 1980s and 1990s may have led to asset bubbles rather than a recovery of investment (Brenner 2009; El-Erian 2016).

Evidence exists to support these hypotheses. There has been a long-term shift towards short term assets (Tirole JEL 2011), consistent with Keynes' "liquidity fetish" and TBTF moral hazard. The role of central bank as "dealer of last resort" in the 2008 Great Recession to stabilize the asset bubbles (Mehrling 2012) may have inadvertently placed a floor under collateral values, and hence removed the limits to credit expansion. This in turn would lead to over investment and a decline in the MEC, and the negative interest rates, as we now observe the global economy. This may be an expression of the limits

of monetary policy (as well as the political taboo on fiscal policy). Discussion of secular stagnation has reemerged (DeLong and Summers 2012). There may be political fall-out as well, from slow growth (Bremmer; Temin).

Minsky, as well as Marx, differentiates between two types of assets and cash flows: investment, or  $M - C - M'$ , and financial assets,  $M - M'$  (Minsky 1986, 69, 174-175, 179). For Minsky, the important distinction is the type of financing, whether hedge, speculative, or Ponzi (Minsky 1986, 70, 206), and the impact of the relative proportion among them on financial instability. For Minsky, the financial system facilitates the extraction of surplus for investment (Minsky 1986, 141-143, 169-170, 224). For Marx, money is also necessary for extraction of surplus, specifically based on extraction of surplus from labor. The analysis of both can be understood with a set of equations with a mark-up on labor costs (Minsky 1986, 144-157).

Crises are inevitable as long as value is expressed in a form external to the commodity (Marx 1967 Vol. I, Ch 3, section 3b 138; Vol. III Ch 32, 516-517; Ch. 35 573-574).

As long as the *social* character of labour appears as the *money-existence* of commodities, and thus as a *thing* external to actual production, money crises – independent of or as an intensification of actual crises – are inevitable

(Marx 1967 Vol. III Ch. 32, 516-517; italics in original).

## IX. Financialization in Global Context

There is now widespread discussion of “financialization” in the global economy. In spite of Marx’s clear prescription that living labor is the only source of surplus (Christophers 2013, 40-51), financial transactions appear to be increasingly prevalent.

### A. Definition of Financialization

One of many possible definitions of financialization is “a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production....[which tends to occur] during periods of hegemonic transition” (Krippner 2005, 174; Arrighi 1994, 92-96; Lapavitsas 2013, 138-168; Foster and McChesney 2012, 49-63; Kotz 2015, 32-37; Davis 2009; Tymoigne and Wray 2014, 78-83). Arrighi describes several “cycles of accumulation” in which the wealth generated in one hegemonic power is subsequently invested in the next, once profitable opportunities are limited in the context of the first (Arrighi 1994, 109-174, 228-238).

Once “capital has become a commodity,” available for loan in financial markets, it can be invested in either commodity production for profit or in financial assets. In either sphere, money loaned will receive a “pro-rata” rate of return relative to its magnitude (Marx 1967, Vol. III Ch 21, 338-339). In spite of this appearance of equal return, surplus production only takes place by the employment of living labor.

Capital exists as capital in actual movement, not in the process of circulation, but only in the process of production, in the process by which labour-power is exploited

(Marx 1967, Vol. III ch. 21, 343).

The expansion of capital involves the process of production and circulation as a whole (Marx 1967, Vol. III Ch 21, 343-345), with many overlapping circuits on an expanding scale. Financial capital may contribute to surplus in a number of channels: with tighter credit standards, it can lead to the intensification of competition for both labor and capital; it can increase exploitation of workers in other countries by globalization of capital, foreign direct investment, and supply chains (Milberg and Winkler 2013; Ali 2015); it can increase in centralization due to expansion of hegemonic currency and increase in access to information about profitable investment opportunities; it can increase in velocity and reduction of turnover time, and so increasing profit per time period; it can facilitate the management of war debt to increase hegemonic power relative to other capitalist countries (Eichengreen and Hausmann 2005; Garbade 2012), along with the associated power to determine the international rules of finance (Rodrik 2015a; Stiglitz 2016). In the recent period, there is a tendency to “predatory” finance, which is a zero sum game (Harvey 2010, 244-245; Akerlof and Shiller 2015).

There are in fact historical precedents to the international significance of financial institutions. The forms in which money markets have existed can be identified historically, such as “usurer’s capital” and “merchant’s capital” (Marx 1967 Vol. III, ch 20, ch 36, 591-600). The “rentier” is a well-known figure in Keynes writing as well (Keynes 1964; Adams 2005). Long distance trade and gold payments to merchants and mercenaries in the early modern period in Genoa, Venice, and Florence were noted by Marx as “pre-capitalist relations” (Marx 1967 Vol. III Ch. 36). The influence of private bankers, or *haute finance*, in alliance with hereditary dynasties, was noted by several historians (such as the Medici; Fugger; Warburg; Rothschild; Morgan family bankers) (Arrighi 1994, 54-56, 96-109; Polanyi 1944, 9-27). With the rise of the fiscal/military state, new financial forms developed and a new form of citizenship based on taxes and public expenditures (Arrighi 1994, 36-47; Celik 2016; Davis 2015). In certain circumstances, the leading hegemonic power is able to organize global financial relations with the hegemonic currency, such as Britain’s gold standard, a core aspect of the “liberal creed” (Polanyi 1944, 3, 135-142).

## B. Hegemonic Currency

Marx was also clear that gold was the universal commodity in international relations. Although there are theorists who interpret Marx as a commodity theorist (Shaikh 2016), there is an informative discussion in Vol. I, Ch. 3 Section 2.c. (124 – 129) regarding the possibilities of symbols of money, including paper. Historically gold was established as an “ideal measure of value,” as “hard cash” (Marx 1967 Vol. I Ch. 3 Section 1, 103). With commodity production, the function of money emerges as a means of expressing the value of commodities as an “independent reality” (Marx 1967 Vol. I Ch. 3 Section 2b, 116). Coining and other designations of the money commodity is a function of the state (Marx 1967 Vol. I Ch. 3, Section 2c, 125-129).

The independent existence of the exchange-value of a commodity is [in circulation] a transient apparition...Hence, in this process.... the mere symbolical existence of money suffices... Being a transient and objective reflex of the prices of commodities, it serves only as a symbol of itself, and is therefore capable of being replaced by a token.....This token must have an objective social validity of its own, and this the paper symbol acquires by its forced currency....this compulsory action of the State... (Marx 1967 Vol. Ch. 3 section 2c, 129)

Both Polanyi and Marx view such a national fiat currency as unable to circulate beyond the territory of the state, and so a gold standard is necessary for international trade (Marx 1967 Vol. I Ch. 3 Section 3c, 142-145; Polanyi 1944, 192-193). Similar views were expressed by modern monetary theorists after the end of the Bretton Woods dollar/gold standard in 1973. World trade has expanded since that period, nonetheless, with a new international financial institutional architecture, although with increasingly frequent financial crises.

The potential contributions to surplus from a hegemonic fiat currency are important to consider. The dimensions of hegemonic power include determination of the means of payment and the “rules of the game.” The hegemonic currency is also a store of value for global central banks, and the hegemonic country can issue debt in its own currency to finance public goods such as the military and economic innovation. As a reserve asset, the hegemonic currency would then be more stable and have a favorable terms of trade for outward foreign direct investment. During the Bretton Woods period, 1944-1973, the US-led International Monetary Fund (IMF) provided a buffer for domestic economic policy, and global capital flows and currency conversions were restricted.

### C. International Financial Institutions

During the Bretton Woods system, from 1944-1973, the US dollar became the key currency of global capitalism, because of its convertibility to gold, and to the supremacy of the US economy and military. Even after the Bretton Woods period, the US dollar and US Treasury bonds became the safe asset for foreign central banks, a legacy role from the Bretton Woods period. Once a currency has a status of “safety” it is likely to maintain that status, from the use of the asset as reserve currency in central banks. This enables that country to issue its own debt more easily, and so also finance military spending to maintain its status. Countries who are not able to issue debt in their own currency are subject to “original sin,” and must earn “hard” currencies on the global financial markets by exports, subject to shifting terms of trade (Eichengreen and Hausmann 2005; D’Arista 2007). There is a self-reinforcing dimension to the status of key currency (He, Krishnamurthy and Milbradt 2016).

Beginning in the U.S. in the 1960s, financial innovation developed new forms of money, such as the government securities market, certificates of deposit, the federal funds market, and repurchase agreements (Minsky 1986, 72-77). Since the end of the Bretton Woods era in 1973, there was both an opportunity and a necessity for new financial institutions to insure against exchange rate risk (Friedman 1960, 2011). The emergence of the unregulated Eurodollar market provide the opportunity (Wachtel 1986). In this context there was rapid innovation in currency futures contracts and new forms of unregulated credit default swaps (Carruthers 2013). There has been an increasing reliance on “private” capital markets (Tymoigne and Wray 2014, 93). The so-called “Washington Consensus” at the IMF after 1980 increased currency conversions and capital flows, as well as privatization. There was an increase in third world debt, and tighter conditions regarding its availability, leading to a new form of debt discipline. There has been a decrease in aid and an increase in borrowing by emerging countries (D’Arista 2007), and expanded global circuits of capital (Vasudevan), along with an increasing frequency and scale of international financial crises.

The institutional structure of international finance since the early 1970s can be variously interpreted to reveal the risks of a non-commodity money, as well as the feasibility of a long term international fiat currency. In spite of currency competition during this period, there has remained a hierarchy of national

currencies, with the U.S. dollar remaining the hegemonic currency (Goldberg 2013; Cohen 2015; Prasad 2014). It is possible that the legacy of the Bretton Woods period, as well as the continuing dominance of the US economy and military power, has enabled this “exorbitant privilege” to continue (Eichengreen 2011). The legacy role of the US dollar also helped sustain the leading role of the US in institutions such as the IMF, and to change their orientation after the 1980s towards the “Washington Consensus,” which then further reinforced that leading US role. Arguably this was a period of increasing “financialization” and financial innovation, an aggressive attempt to provide “safe assets” to the world economy to help maintain the role of the dollar as a key currency. Without this hegemonic role of the US dollar, the global feasibility and pervasive influence of “financialization” would not have been possible, in my view.

#### D. Financialization: Tools, Techniques and Conditions of Possibility

Conceptual and financial institutional innovations often occur together. For example, risk can only be “priced” as a separate conceptual category once stable financial institutions are in place to support regular financial circuits. That is, there is an “institutional complex,” consisting of specific institutions, categories, and knowledge (Davis 2015). According to Minsky, “what is money is determined by the workings of the economy” (Minsky 1986, 228), and these financial institutions are in flux historically.

For example, the insurance industry emerged in a particular historical circumstance: maritime insurance emerged with the increasing regularity of foreign trade in Venice in the 13<sup>th</sup> century (Baskin and Miranti). There was an emergence of a culture of life insurance in eighteenth century England, partly based on recent financial innovations and Enlightenment attitudes regarding progress (Clark 1999). Further, “modern” financial systems require the presence of six related institutions: stable public finances and debt management, stable money, an effective central bank, a functioning banking system, an active securities market, and a growing number of business corporations, both financial and nonfinancial (Sylla, Wright, Cowen 2009, 62). It is these institutional components, along with the symbol of money and credit, that make a resilient financial system.

The conceptualization and quantification of risk (Mehrling 2005; Goetzmann 2016, 276-288, 504-518) has institutional prerequisites, such as existing and stable financial circuits which can be measured and assessed. Further there is an assumption of efficient financial markets, with a stable central value. Consequently risk is seen as measured by volatility of financial assets, which are expected to return to their long term value. Since return is proportional to risk, there is a drive for return by means of increasing leverage (risk) to increase yield (Rajan 2005). With large institutions, this leads to systemic risk for the system as a whole.

The institutional complex for the emergence of financial innovation can be viewed as follows:

1. Stable modern financial institutions
2. Information technology
3. Theoretical advances based on assumptions of perfect financial markets; pricing of risk (Mehrling 2005, 2011)
4. Key currency, even after Bretton Woods, and the associated international financial institutions to support the dollar
5. Incentives regarding risk (Rajan 2005)

## 6. Political support (Roe 2006)

As suggested by Cooper (2015), there is a linkage across contexts, from finance, corporations, and government. That is, financial institutions do not exist separate from the political economic situation, as illustrated in Table 1. below.

**Table 1. Institutional Linkages**

<b>Role of government</b>	<b>Corporate Form</b>	<b>Financial Institutions</b>	<b>Period</b>
Public insurance	Fordist capital/labor accord	Regulated banks	1930-1980
Neoliberal privatization and Washington Consensus	New Economy Business Model with contingent labor; supply chains	Private capital market with public collateral as "safe asset"	1980 – 2015

There is an evident evolution of what are considered "safe assets" historically, along with associated political and legal institutions, as illustrated in Table 2. below.

**Table 2. History of Safe Assets**

<b>Safe Asset</b>	<b>Financial/Political institution</b>	<b>Legal institution</b>	<b>Period</b>
British Consols	Exchange Alley	Bank of England charter revisions	1720
Bank Notes	Bank of England 1694	Bank Act of 1844	1844
	Federal Reserve 1913	Federal Reserve Act of 1913	1913
Corporate stock	Private business corporations; stock markets	Dartmouth	1819
		General incorporation statutes; Protection of outside investors	1880s
US dollars	Banks	National Currency Act of 1863; Gold Standard Act of 1879	1863
US Treasury Bonds	Dealers	Federal Reserve Act of 1913, 1916	1916
Derivatives	Brokers	Commodity Exchange Act of 1936	1880s
		Commodity Futures Modernization Act of 2000	2000s

For example, the Bank Act of 1844 delegated the management of the nation's gold reserve to the Bank of England (BOE), a form of monetizing the gold stock (Marx 1967 Vol. III, 572-574). The BOE notes were also backed by government securities, as well as gold reserve (Andreades 1966, 84-85, 290), like the US dollar subsequently (Mehrling 2011, 37). Once "naturalized," any safe asset seems obviously secure, like gold. There was an institutional evolution, nonetheless, which led to the installation of each type/genre, along with political and legal backstops, without which the asset would not have been "safe." That is, there was an institutional process, which occurred to define and identify the physical characteristics of each entity, and to secure its meaning.

There is a need for a "safe asset" to secure the rewards of capital accumulation. Yet further growth, technological innovation, and competition, as well as the business cycle, may undermine the safety of any asset. The legal/institutional backstop requires the support of the state, even for financial assets which are presumably "private." Regulatory arbitrage occurs to seek profitable niches, even while the regulation is necessary for stability. This dynamic of private innovation beyond the public backstop then results in rescue and re-regulation, and a possible ever-widening public responsibility for financial stability. There is a long run institutional plasticity which is best submerged in the consciousness of investors in the present, in the interests of confidence in the stability of the financial system. That is, reification is functional.

#### X. Periodization: The Rise of Neoliberalism

Distinct financial institutions can be observed in particular periods (Tabb 2012; Kotz 2015). The 1970s were a transitional period, which helped pave the way for a new regime.

The end of the Bretton Woods system was partly due to the loss of international competitiveness by the U.S., its persistent balance of payments deficits, and the loss of gold reserve (Brenner 2009; Harvey 2010). There was both an opportunity and a need to develop financial instruments to counteract the instability of currency exchange rates (Friedman 1960, 2011). Several authors note a change in regime, such as the "Wall Street-Treasury Complex" (Bhagwati 2004, 199-207); the "state-finance nexus" (Harvey 2010, 204-209); "asset price Keynesianism" (Brenner 2009, 3); Washington Consensus (Stiglitz 2002); and "privatized Keynesianism" (Celik 2016).

With near full-employment in the 1960s, there were rising labor costs (Tymoigne and Wray 2014, 68), along with increasing price of oil from OPEC's formation, and intensification of religious conflict in the Middle East. The turn to US "exorbitant privilege" of the key currency can be understood in this context, parlaying the remaining strength on international capital markets, even with a fiat currency. US dollar became "safe haven" of last resort, a reified asset in financial markets. For the leading hegemonic country, this financial power still enabled the financing of the military in an increasingly unpredictable global political economy.

With the reassertion of prerogatives of capital in the Reagan/Thatcher period, there was deregulation, tax cuts, and privatization, as well as an increasing divergence of wages and productivity growth (Shaikh 2016, 60, 731), and increasing inequality.



Neoliberal “financialization” developed in the context of OPEC and recycling of petrodollars (Wachtel 1986) through US banks and the third world debt crisis. Deregulation of finance with Eurodollar market, and competition among global financial centers (with London’s “Big Bang” in 1986) increased regulatory competition. Volcker’s Monetarism Experiment in 1979-1981 raised interest rates and attracted global investment into dollars, until the Plaza Accord (and crash of 1987), which led to the bursting of Japan’s property bubble in the 1990s. The Washington Consensus at the IMF, and the opening of third world markets to foreign direct investment (FDI) at the same time, facilitated the outsourcing of US multinational corporations (MNCs), beginning with electronics. The decline of unions and the reassertion of shareholders control over corporations reinforced inequality, with the growing power of institutional investors leading to more assets under management and the rise of shadow banking (Pozsar 2011, 2015). The low interest rates of the 2001 period were intended to release equity in residential real estate via securitization, and Greenspan’s preferences for self-regulation of financial markets, were intended to avoid deflation like Japan.

With China’s entrance into the world market with membership in the WTO in 2000, there developed a new international division of labor: “Chimerica” (Ferguson and Schularick 2007). This new relationship was based on manufacturing in China organized by MNC supply chains, and exporting to the US market. This interdependency may have limits, nonetheless, with US consumers still in debt and with China increasingly able to produce at the leading edge of technology, learned from inward FDI from MNCs. Even after 2008, China’s continual growth maintained an export market for commodity supplying emerging market countries. The recovery since 2008 has also relied upon extraordinary measures by Central Banks, with the series of Quantitative Easing experiments, and more recently negative interest rates. Recently China has reduced its accumulation of US Treasury reserves, with its increasing outward Foreign Direct Investment directed towards resource acquisition in Africa as well as mergers and acquisition of leading technology companies in the West. China has recently founded an international development bank, and is launching a “New Silk Road” with infrastructure investment in Central Asia. China’s recent efforts to open its financial sector have been compromised by high indebtedness, as well as instability in its stock market and currency. If the US Federal Reserve does raise interest rates, there is a risk of another global debt crisis, centered in emerging countries (IMF FSR 2016).

In spite of some success to maintain its hegemonic currency role, there may be a decline in US prestige and influence after 2008 (Kirshner 2014), along with increasing neo-mercantilism in China regarding the role of the renminbi (Prasad 2016). A focus on financial investment alone may succeed in increasing the rate of profit, at least in the case of the hegemonic currency, where the hegemon can write the rules of international finance. Debt is also useful as a discipline, for countries, as well as households and CEOs, at least until global excess capacity, lack of effective demand, and distribution of advanced production techniques due to MNC FDI and local investments in learning (Yu Zhou, Lazonick, Sun 2016; Brenner 2009; Rodrik 2015). There is evidence of an emerging “mercantilist” response in the present, to compete with US financial power. The potential increase in financial return with the hegemonic currency may then provide a higher threshold for real investment, delaying the embodiment of new techniques of production in new capacity. Reliance on the reified dollar may work to undermine economic performance and confidence in the long term, and lead to increasing international competition for the next hegemon.

## XI. Finance as Fetters

With “financialization,” there was a change in the financial institutions. There was a period of secure banking system from 1933 – 1980, with public insurance and regulation (Cooper 2015; Tymoigne and Wray 2014). The subsequent growth in the “shadow banking” sector was based on repurchase agreements of US Treasury bonds as the safe asset, to back-stop increasing inventories of derivatives.

The definition of “shadow banking” includes extension of credit beyond the reach of financial regulation and insurance (Krugman 2009, 158-162; Adrian and Ashcraft 2012; Gorton and Metrick 2010; Pozsar, Adrian, Ashcraft and Boesky 2013; Tabb 2012, 93-131; Pozsar 2015).

There was a shift to “private market” insurance provision with rising assets under management, such as credit default swaps. With the deregulation after 1980, new financial institutions developed, such as brokerage firms. With the end of Bretton Woods, there was more exchange rate risk and more need to insure against it. There was large accumulation of cash pools in excess of the FDIC insurance cap due to increasing income inequality, rising corporate profits, foreign exchange holdings, and aging population (Pozsar 2015). There was an expansion in institutional investors such as pension funds, money market funds, hedge funds, private equity.

Evidence of financialization includes the rising ratio of financial assets to GDP (Tymoigne and Wray 2014, 100-101; Adrian 2014; Tabb 2012, 100); increasing share of Short Term/Long Term assets (Tirole 2011); cash hoards in US Information Technology corporations (Gruber and Kamin 2015); negative interest rates (Palley 2016); declining rate of investment (IMF 2015; Eggertsson, Mehrotra, and Summers 2016; Tabb 2012, 219-224, 237-241); increase in cash under management with rising inequality (Pozsar 2011); increase in search for yield (Pozsar and Singh 2011).

The irony is that so-called “private” insurance depends on the existence of public debt. That is, the global “safe financial asset” is US Treasury bond, or “repo,” used as collateral, for “private” capital market, the rapid growth of which potentially destabilizes the entire system. There is a “Triffin Dilemma” of sorts, with an excess demand for the safe asset that may lead to a potential increase in public debt (Pozsar 2011; Cabellero, Farhi, Gourinchas 2016). There is a “shortage of safe assets” because of the limits on public debt due to neoliberal austerity, while the new purpose of this public debt is to stabilize the value of “private” financial assets.

Negative interest rates may also represent a charge for the provision of liquidity, much as Mehrling (2011) would support. That is, the provision of safe assets for the large global accumulation of financial wealth incurs a considerable cost, in the maintenance of an inventory of financial assets and the provision of the role of “dealer of last resort.” The safe asset is the US Treasury bond, which depends on the public credit and projection of long term growth. If, however, there is global stagnation instead, then the public credit will no longer be safe, with no increment to surplus with the decline of investment. Having witnessed the Great Depression, Keynes foresaw the possibility an MEC = zero and a low or negative interest rate (Keynes 1964, 215-221, 315-324). His solution was not financial, but was for a larger role for the government investment and for income redistribution. The longer that the government assumes the role of financial manager instead of public investor, the greater the possibility of economic collapse.

That is, the ultimate purpose of the public sphere in the tax/credit state is to support private wealth. Such protection of the value of existing financial assets may ultimately prevent the adjustment of obsolete capital values to new vintages of more productive capital, and so delay new investment. That

is, too much support for existing financial assets may delay Schumpeter's "creative destruction," a periodic aspect of capital accumulation.

There are two different approaches to managing liquidity and risk in the current context.

Recommendation #1: extend role of FED to dealer of last resort, to stabilize asset values in the now-global private capital markets (Mehrling 2011; Gabor and Vestergaard 2016);

Recommendation #2: increase taxes and government investment, to reduce cash pools and stimulate consumption private investment and GDP (Summers 2014; Keynes 1964, 320-326).

The first extends the recent role of the Federal Reserve to provide a back-stop in a global financial crisis. The FED would take upon its balance sheet the private "safe assets" and maintain liquidity for them. The second would return to a Keynesian view of the government, to make public investments based on a system-wide perspective on needs and opportunities, replacing the casino-like capital markets.

Financialization increases claims to surplus, without producing surplus. The rush to "hard cash" in the crisis appears to be a shortage of means of payment, but is actually a shortage of total surplus production with which to meet those claims. That is, there is a distinction between "currency and capital" (Marx Vol. III Ch. 28, 442). The availability of "liquidity" is pro-cyclical, a function of expansion of credit (Minsky 1986) and "fictitious capital" (Marx 1967 Vol. III Ch. 25, 27, 29, 30, 33).

There is an irony of financial power: the focus solely on  $M - M'$  leads to lower total social surplus and so less success in expansion of value through money. Social power of money is misleading, while hoarding and increasing velocity of money and the focus on liquidity leads to decline in the global economy.

Money is the only expression of the totality of capital. Central banks are the "only game in town" (Erian 2016) while a decreasing share of financial assets are regulated and insured by central banks. Credit continues to expand for profit, making the task of rescue like the one facing the Red Queen in Alice in Wonderland.

## XII. Fetishism and Knowledge

### A. Meanings of Money

In a historical institutional context, money can be conceptualized as a crucial link between firms, households, government, and its central bank, once production and households have been separated. Money is not just a crystalized relation between credit and debt, but a historically specific kind of credit and debt. That is, in a capitalist economy, workers provide credit to the firm, by working first and receiving payment afterwards. Then firms provide credit to the worker, by allowing a time lag between the purchase of consumer goods and the payment. The time lag between work and pay, and between purchase and sales receipt can provide a means of accumulation to financial intermediaries. These financial intermediaries can provide credit for improved or expanded production technology, increase in scale and scope, and extension of time to maturity. These financial intermediaries are supported by the state, for assistance in management of public finances, the issue of debt and the collection of taxes. Such a stable circular flow of finances was put in place, along with a new form of the state, from 1688-1694 in England, followed by other modern industrial powers (US in 1776; France in 1789; Germany and Italy in the 1880s after unification), replacing the hereditary monarchy allied with the church (Arrighi

1994; Davis 2015; Adams) . That is, money is not an “object” but a “relation,” an aid to state power in a system of competing states.

Marx clearly differentiated between types of property, capital and labor. Only living labor contributed to surplus, although the substitution for labor in production is a central dynamic of capitalist production for both Smith and Marx. Marx differentiated between flows which incorporated living labor in commodity production,  $M - C - M'$  and financial flows,  $M - M'$ , which did not. For Postone this dynamic represents a contradiction between use value and value, the increase in wealth which capitalism is capable of producing, compared with its decreasing foundation in living labor (Postone 1993, 348, 358-359).

Unlike Marx, other theorists of money did not clearly differentiate between types of property. Keynes merged all types of property into a generalized concept of “assets,” with yields which could be transformed into money. Keynes also noted the central importance of wages as a source of income and aggregate demand. Minsky focused on cash flow and types of cash flow. He analyzed financial institutions and banking as a for-profit activity, with a possible impact on macroeconomic outcomes such as the rate of investment and financial fragility. Minsky also noted the importance of financial flows to validate capital asset values and to carry the surplus. Keynes and Minsky did not examine the two types of capital flows differentiated by Marx, the commodity production and the financial flows. Without this differentiation, there is no clear explanation for the macro indicators such as declining investment, declining profit rates, declining capacity utilization, and slow growth which are now widely noted as characteristic of the global economy.

The increasingly widespread acceptance of the term “financialization” after the financial crisis of 2008 provides an opening to a critique of the concept of money as valuable in itself. This step has not yet been taken in most analyses today.

## B. Paradigms

Essentially the concept of “fetishism” is a critique of a way of thinking, what might be called a paradigm. Money is taken as valuable in itself, instead of a means of facilitating the relationship among key institutions, in the pursuit of the accumulation of capital. Money is understood as unrelated to labor, as a convenience, rather than as the abstract expression of socially necessary labor time as value.

Marx’s notion of the fetish is centrally related to his theory of alienation as social constitution... It is integral to Marx’s theory of social constitution, which relates forms of thought, worldviews, and beliefs to the forms of social relations and the ways in which they appear to immediate experience. (Postone 1993, 224)

Keynes was consciously mediating between the Classical tradition and Marx (Keynes 1964, 3, 32, 353—358, 371, 379). Keynes was a reformist, but was nonetheless aware of the weaknesses of capitalism, including the circularity of the definition of capital (Keynes 1964, 137, 140) and the potential for technological unemployment (Keynes 1963). In fact, the ambiguity of capital valuation may lead to the instability of the MEC and vulnerability to shifting expectations.

Keynes assumed that all assets have a yield, or their “own-rate of return.” For Keynes, the demand for financial assets was a function of psychological phenomena. In contrast, Marx’s analysis was structural.

For him, the return to money lending constituted a claim to a share of the surplus. If the surplus wasn't forthcoming in the process of production, there was no surplus to be shared. Marx's analysis of crises consisted of at least three aspects: the instability of credit, the decline in surplus due to increasing automation, and the lack of effective demand due to limits on labor income. In the recent crisis of 2007-2008, all three factors may have contributed to the long-delayed recovery.

Forms of knowledge, such as contemporary social science, can be influenced by certain paradigms. That is, it is possible to analyze modern social sciences as subject to the pervasive logic of a paradigm of maximizing the financial circuit,  $M - M'$ . In general there is an emphasis on abstraction and automation, control and optimization, as well as objectification. In economics and business, such methods as increasing productivity, economizing on fixed assets, as well as reducing the turnover time of currency and credit would all contribute to the expansion of  $M'$ . The structure of modern social sciences, including management and economics, may also contribute to this outcome.

There is a rough parallel between theories of institutions and the operation of those institutions. Arguably the form of knowledge helps to legitimize and to reinforce the specific operation of the institutions (Davis 2015). For example,

- Theories of the firm have evolved (MSV), as well as the specific institutional forms of the corporation (Chandler; Fligstein 1990; Lazonick; Stout; G.F. Davis 2009, 53-58)
- Theories of money have evolved (CAPM; EMH), as well as specific financial institutions (Mehrling; Garbade; Rajan 2005)
- Theories of the state have evolved, as well as specific forms of the state (Celik 2016; Davis 2015)
- Theories of information have evolved, as well as information technology for storage, retrieval, and processing (Gleick; Edwards)
- Theories of labor organization have evolved, as well as specific types of employment relations, from the commodification of labor, the separation of mental from manual, mechanization and automation, as well as abstraction of knowledge and information processing with development of ICT industries (Marx; Braverman; Noble; Lazonick)
- Theories of the economy have evolved, along with the specific organization of economic institutions (Mirowski; MacKenzie; Nelson; Postone 1993)
- Cultural incentives have evolved from the "motive of gain" (Polanyi 1944, 30) to a motive for safe assets, in the "portfolio society" (Davis 2009)

That is, fetishism as a form of knowledge leads to distorted analysis of economics, and to inadequate policies. For example, in the contemporary period, financial innovation tends to increase the number of financial assets, without understanding their relation to the production of total value by the employment of living labor. By multiplying the number of claims on an ever-limited surplus, there is a tendency to create asset bubbles and then collapse. Keynes' "fetish of liquidity" is still the reigning strategy, with an increasing share of assets in short term rather than long term securities (Tirole 2011).

During the financial crisis of 2008, the role of the state was to increase liquidity, and to save large financial institutions. But an increase in the supply of money does not necessarily induce investment, or employment, or production of surplus. Quantitative measures do not address qualitative structure of financial institutions. Such efforts can then lead to a loss of confidence in the state, with political ramifications.

Critique of fetishism of money still has yet to take place.

## Bibliography

Andreades, A. *History of the Bank of England 1640 to 1903*. New York: Augustus M. Kelley, 1966.

Acharya, Viral V., Matthew Richardson, Stijn Van Nieuwerburgh, Lawrence J. White. *Guarantee to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance*. Princeton, NJ: Princeton University Press, 2011.

Acharya, Viral V., Thomas F. Cooley, Matthew Richardson, and Ingo Walter (eds.). *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*. New York: John Wiley & Sons, Inc. 2011.

Adrian, Tobias. "Shadow Banking: A Review of the Literature," *Federal Reserve Bank of New York Staff Report No. 580*. October, 2012.

\_\_\_\_\_. "Financial Stability Politics for Shadow Banking." *Federal Reserve Bank of New York Staff Report No. 664*. February 2014.

\_\_\_\_\_. "Discussion of 'Systemic Risk and the Solvency-Liquidity Nexus of Banks' " *Federal Reserve Bank of New York Staff Report No. 722*, April, 2015.

Adrian, Tobias and Adam B. Ashcraft. "Shadow Banking: A Review of the Literature." *Federal Reserve Bank of New York Staff Report No. 580*, October 2012.

Adrian, Tobias and Hyun Song Shin. "Liquidity and Leverage," *Federal Reserve Bank of New York Staff Report No. 328*. December 2010.

Aizenman, Joshua and Jaewoo Lee. "Financial versus Monetary Mercantilism: Long-run View of Large International Reserves Hoarding." *The World Economy*, 2008, 593-611.

Aizenman, Joshua, Yothin Jinjark, and Huanhuan Zheng, "Chinese Outwards Mercantilism – the Art and Practice of Bundling," NBER Working Paper No. 21089, June, 2015.

Akerlof, George and Robert J. Shiller. *Phishing for Phools: The Economics of Manipulation and Deception*. Princeton, NJ: Princeton University Press, 2015.

Albritton, Robert. *Dialectics and Deconstruction in Political Economy*. New York: Palgrave, 1999.

Ali, Mona. "Dark Matter, Black Holes and Old-Fashioned Exploitation: Transnational Corporations and the US Economy." *Cambridge Journal of Economics*. 2015.

Allen, Franklin and Jun "QJ" Qian. "Comparing Legal and Alternative Institutions in Finance and Commerce. In James J. Heckman, Robert L Nelson, and Lee Cabatingan (eds.). *Global Perspectives on the Rule of Law*. New York: Routledge, 2010, 118-144.

Arrighi, Giovanni. *The Long Twentieth Century: Money, Power, and the Origins of Our Times*. London: Verso, 1994.

Atack, Jeremy and Larry Neal (eds.). *The Origin and Development of Financial Markets and Institutions: From the Seventeenth Century to the Present*. New York: Cambridge University Press, 2009.

Baker, Dean, Gerald Epstein, and Robert Pollin (eds.). *Globalization and Progressive Economic Policy*. New York: Cambridge University Press, 1998.

Bhagwati, Jagdish. *In Defense of Globalization*. New York: Oxford University Press, 2004.

Brenner, Robert. "The Capitalist Economy, 1945-2000: A Reply to Konings and to Panitch and Gindin." In David Coates (ed.). *Varieties of Capitalism, Varieties of Approaches*. New York: Palgrave MacMillan, 2005, 211-241.

\_\_\_\_\_. "What is Good for Goldman Sachs is Good for America: The Origins of the Current Crisis," introduction to *Economics of Global Turbulence*. Spanish translation. London: Verso, 2009.

Brunhoff, Suzanne de and Duncan K. Foley. "Karl Marx's Theory of Money and Credit," in Philip Arestis and Malcolm Sawyer (eds.) *A Handbook of Alternative Monetary Economics*. Cheltenham, UK: Edward Elgar, 2006, 188-204.

Brunnermeier, Markus K, Luis Garicano, Philip R. Lane, Marco Pagano, Ricardo Reis, Tano Santos, David Thesmar, Stijn Van Nieuwerburgh, and Dimitri Vayanos. "The Sovereign-Bank Diabolic Loop and ESBies" *American Economic Review* May, 2016, Vol. 106, No. 5 508-512.

Caballero, Ricardo J., Emmanuel Farhi, and Pierre-Olivier Gourinchas. "Safe Asset Scarcity and Aggregate Demand," *American Economic Review*, May, 2016, Vol. 106, No. 5, 513-518.

Carruthers, Bruce G. "Diverging Derivatives: Law, Governance and Modern Financial Markets," in *Journal of Comparative Economics*, Vol. 41, 2013, 386-400.

Celik, Tim Holst. "Fiscal State-Citizen Alignment: Tracing the Sociohistorical Conditions of the Financial Crisis," *Critical Historical Studies*, Spring, 2016, 105-141.

Chen, Sally, Philip Liu, Andrea Maechler, Chris Marsh, Sergejs Saksonovs, and Hyun Song Shin. "Exploring the Dynamics of Global Liquidity." IMF Working Paper WP/12/246. October, 2012.

Chandler, Alfred D. Jr. and Bruce Mazlish (eds.). *Leviathans: Multinational Corporations and the New Global History*. New York: Cambridge University Press, 2005.

Christophers, Brett. *Banking Across Boundaries: Placing Finance in Capitalism*. Oxford, UK: Wiley-Blackwell, 2013.

- Clark, Geoffrey. *Betting on Lives: The Culture of Life Insurance in England, 1695-1775*. Manchester: Manchester University Press, 1999.
- Cohen, Benjamin J. *Currency Power: Understanding Monetary Rivalry*. Princeton, N.J. Princeton University Press, 2015.
- Cohen, Lizabeth. Consumers' Republic
- Cooper, Melinda. "Shadow Money and the Shadow Workforce: Rethinking Labor and Liquidity." *South Atlantic Quarterly*, Vol. 114, No. 2, April 2015.
- D'Arista, Jane. "U.S. Debt and Global Imbalances" PERI Working Paper No. 136, May, 2007.
- \_\_\_\_\_. "The Evolving International Monetary System," in *Cambridge Journal of Economics*, Vol. 33, 2009, 633-652.
- Davis, Ann E. *Science and Society* 2010.
- \_\_\_\_\_. "The New 'Voodoo Economics': Fetishism and the Public-Private Divide," *Review of Radical Political Economics*, Vol. 45, No. 1, March, 2013, 42-58.
- \_\_\_\_\_. *The Evolution of the Property Relation: Understanding paradigms, Debates, Prospects*. New York: Palgrave MacMillan, 2015.
- Davis, Gerald F. *Managed by the Markets: How Finance Reshaped America*. New York: Oxford University Press, 2009.
- Davis, John B. "The Conception of the Socially Embedded Individual," in John B. Davis and Wilfred Dolfsma (eds.). *The Elgar Companion to Social Economics*. Cheltenham, UK: Edward Elgar, 2008, 92-105.
- DeLong, J. Bradford and Lawrence H. Summers. "Fiscal Policy in a Depressed Economy," *Brookings Papers on Economic Activity*, Spring, 2012, 233-297.
- Eggertsson, Gauti B., Neil R. Mehrotra, and Lawrence H. Summers. "Secular Stagnation in the Open Economy." *American Economic Review*, 2016, Vol. 106, No. 5, 503-507.
- Eichengreen, Barry. *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. New York: Oxford University Press, 2011.
- Eichengreen, Barry and Ricardo Hausmann (eds.). *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies*. Chicago: University of Chicago Press, 2005.
- El-Erian, Mohamed A. *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse*. New York: Random House, 2016.
- Epstein, Gerald (ed.). *Financialization and the World Economy*. Cheltenham, UK: Edward Elgar, 2005.
- Farhi, Emmanuel and Jean Tirole. "Deadly Embrace: Sovereign and Financial Balance Sheets Doom Loops." Cambridge, MA: NBER Working Paper 21843, January, 2016.
- Ferguson, Niall. *The Ascent of Money: A Financial History of the World*. New York: Penguin, 2008.



Ferguson, Niall, and Moritz Schularick. “ ‘Chimerica’ and the Global Asset Market Boom,” *International Finance*, 2007, Vol. 10, No. 3, 215-239.

Fisk, Catherine L. *Working Knowledge: Employee Innovation and the Rise of Corporate Intellectual Property, 1800-1930*. Chapel Hill: University of North Carolina Press, 2009.

Fligstein, Neil.

Ford, Martin. *Rise of the Robots: Technology and the Threat of a Jobless Future*. New York: Basic, 2015.

Foster, John Bellamy and Robert W. McChesney. *The Endless Crisis: How Monopoly-Finance Capital Produces Stagnation and Upheaval from the USA to China*. New York: Monthly Review Press, 2012.

Friedman, Milton. “In Defense of Destabilizing Speculation,” in *Essays in Economics and Econometrics*, Ralph W. Pfouts (ed.). Chapel Hill: University of North Carolina Press, 1960, 133-141.

\_\_\_\_\_. “The Need for Futures Markets in Currencies,” *Cato Journal*, Vol. 31, No. 3 (Fall, 2011), 635-641.

Gabor, Daniela and Jakob Vertergaard. “Towards a Theory of Shadow Money,” INET working paper, 2016.

Garbade, Kenneth D. “The Evolution of Repo Contracting Conventions in the 1980s.” *FRBNY Economic Policy Review*, May, 2006, 27-42.

\_\_\_\_\_. *Birth of a Market: The U.S. Treasury Securities Market from the Great War to the Great Depression*. Cambridge, MA: MIT press, 2012.

Galison, Peter. *Einstein’s Clocks, Poincare’s Maps: Empires of Time*. New York: W.W. Norton & Co., 2003.

Goldberg, Linda S. “The International Role of the Dollar: Does It Matter If It Changes?” in Yin-Wong Cheung and Frank Westermann (eds.). *Global Interdependence, Decoupling, and Recoupling*. Cambridge, MA: MIT Press, 2013, 243-262.

Gorton, Gary. *Slapped by the Invisible Hand: The Panic of 2007*. New York: Oxford University Press, 2010.

Gorton, Gary and Andrew Metrick. “Regulating the Shadow Banking System,” *Brookings Papers on Economic Activity*, Fall, 2010, 261-297.

Goetzmann, William N. *Money Changes Everything: How Finance Made Civilization Possible*. Princeton, NJ: Princeton University Press, 2016.

Gruber, Joseph W. and Steven B. Kamin. “The Corporate Saving Glut in the Aftermath of the Global Financial Crisis,” Board of Governors of the Federal Reserve System, June, 2015. Washington, D.C.

Hall, P. A. and D. Soskice (eds.). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. New York: Oxford University Press, 2001.

Hannah, Leslie. *The Rise of the Corporate Economy*. 2<sup>nd</sup> ed. London: Methuen, 1983.

Harris, Ron. "Law, Finance, and the First Corporations." In James J. Heckman, Robert L Nelson, and Lee Cabatingan (eds.). *Global Perspectives on the Rule of Law*. New York: Routledge, 2010, 145-171.

Harvey, David. *The Enigma of Capital and the Crisis of Capitalism*. Oxford: Oxford University Press, 2010.

Hayes, M.G. "Ingham and Keynes on the Nature of Money" in Jocelyn Pixley and G.C. Harcourt (eds.). *Financial Crises and the Nature of Capitalist Money: Mutual Developments from the Work of Geoffrey Ingham*. New York: Palgrave MacMillan, 2013, 31-45.

He, Zhiguo, Arvind Krishnamurthy and Konstantin Milbradt. "What Makes US Government Bonds Safe Assets?" *American Economic Review*, 2016, Vol. 106, No. 5, 519-523.

International Monetary Fund. *Global Financial Stability Report*, Ch. 4, "Private Investment: What's the Holdup?" April, 2015, 111-143.

Keynes, John Maynard. "Economic Possibilities for Our Grandchildren," *Essays in Persuasion*, New York: W.W. Norton & Co., 1963, 358-373.

\_\_\_\_\_. *The General Theory of Employment, Interest, and Money*. New York: Harcourt, Brace & World, 1964.

Kirshner, Jonathan. *American Power After the Financial Crisis*. Ithaca: Cornell University Press, 2014.

Kliman, Andrew. *The Failure of Capitalist Production: Underlying Causes of the Great Recession*. London: Pluto Press, 2012.

Kotz, David M. *The Rise and Fall of Neoliberal Capitalism*. Cambridge, MA: Harvard University Press, 2015.

Krippner, Greta R. "The Financialization of the American Economy." *Socio-Economic Review*, (2005) Vol. 3, 173-208.

\_\_\_\_\_. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press, 2011.

Konings, Martijn (ed.). *The Great Credit Crash*. New York: Verso, 2010.

\_\_\_\_\_. *The Emotional Logic of Capitalism: What Progressives Have Missed*. Stanford, CA: Stanford University Press, 2015.

Kotz, David M. *The Rise and Fall of Neoliberal Capitalism*. Cambridge, MA: Harvard University Press, 2015.

Kruse, Kevin M. and Thomas J. Sugrue (eds.). *The New Suburban History*. Chicago: University of Chicago Press, 2006.

Lamoreaux, Naomi. "The Mystery of Property Rights: A U.S. Perspective." *Journal of Economic History*. Vol. 71, No. 2, June, 2011, 275-306.

Lapavistas, Costas. *Profiting Without Producing: How Finance Exploits Us All*. London: Verso, 2013.

MacDonald, James. *A Free Nation Deep in Debt: The Financial Roots of Democracy*. New York: Farrar, Straus & Giroux, 2003.

Mazower, Mark.

McGirr, Lisa. *Suburban Warriors: The Origins of the New American Right*. Princeton University Press, 2001.

McKinnon, Ronald I. *The Unloved Dollar Standard: From Bretton Woods to the Rise of China*. New York: Oxford, 2013.

Milberg, William and Deborah Winkler. *Outsourcing Economics: Global Value Chains in Capitalist Development*. New York: Cambridge University Press, 2013.

Mehrling, Perry G. *The Money Interest and the Public Interest: American Monetary Thought, 1920-1970*. Cambridge, MA: Harvard University Press, 1997.

\_\_\_\_\_. *The New Lombard Street: How the Fed Became the Dealer of Last Resort*. Princeton, NJ: Princeton University Press, 2011.

\_\_\_\_\_. "Essential Hybridity: A Money View of FX" *Journal of Comparative Economics*, Vol. 41 (2013), 355-363.

Mehrling, Perry, Zoltan Pozsar, James Sweeney, Dan Neilson. "Bagehot Was A Shadow Banker: Shadow Banking, Central Banking and the Future of Global Finance." INET, November 5, 2013.

Meister, Robert. *Political Identity: Thinking Through Marx*. Oxford, UK: Basil Blackwell, 1990.

Minsky, Hyman P. *Stabilizing and Unstable Economy*. New Haven: Yale University Press, 1986.

Monson, Andrew and Walter Scheidel (eds.). *Fiscal Regimes and the Political Economy of Premodern States*. New York: Cambridge University Press, 2015.

Moseley, Fred (ed.). *Marx's Theory of Money: Modern Appraisals*. New York: Palgrave MacMillan, 2005.

Nersisyan, Yeva and L. Randall Wray. "The Global Financial Crisis and the Shift to Shadow Banking" *Levy Institute Working Paper No. 587*, February, 2010.

Pak, Susie J. *Gentlemen Bankers: The World of J.P. Morgan*. Cambridge, MA: Harvard University Press, 2013.

Palley, Thomas I. *Financialization: The Economics of Finance Capital Domination*. New York: Palgrave, 2013.

\_\_\_\_\_. "Why Negative Interest Rate Policy (NIRP) is Ineffective and Dangerous," Private Debt Project, June 24, 2016.

Phillips-Fein, Kimberly. *Invisible Hands: the Making of the Conservative Movement from the New Deal to Reagan*. New York: W. W. Norton, 2009.

\_\_\_\_\_. (ed.). *What's Good For Business: Business and American Politics Since World War II*. Oxford: Oxford University Press, 2012.

- Polanyi, Karl. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press, 1944.
- Postone, Moishe. *Time Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*. New York: Cambridge University Press, 1993.
- Poovey, Mary. *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: University of Chicago Press, 1998.
- Pozsar, Zoltan. "Institutional Cash Pools and the Triffin Dilemma of the U.S. Banking System" IMF Working Paper WP/11/190, August, 2011.
- \_\_\_\_\_. "Shadow Banking and the Global Financial Ecosystem," VOX CEPR's Policy Portal, November 7, 2013.
- \_\_\_\_\_. "Shadow Banking: The Money View." Office of Financial Research Working Paper 14-04, U.S. Treasury, Washington, D.C., July 2, 2014.
- \_\_\_\_\_. "A Macro View of Shadow Banking: Levered Betas and Wholesale Funding in the Context of Secular Stagnation," January, 2015.
- Pozsar, Zoltan, Tobias Adrian, Adam Ashcraft, and Hayley Boesky. "Shadow Banking." *FRBNY Economic Policy Review*, December, 2013, 1-16.
- Pozsar, Zoltan and Manmohan Singh. "The Nonbank-bank Nexus and the Shadow Banking System," IMF Working Paper WP/11/28. Washington, D.C. International Monetary Fund, December, 2011.
- Prasad, Eswar S. *The Dollar Trap: How the U.S. Dollar Tightened its Grip on Global Finance*. Princeton, N.J.: Princeton University Press, 2014.
- \_\_\_\_\_. "China's Efforts to Expand the International Use of the Renminbi." A Report Prepared for the U.S.-China Economic and Security Review Committee. Washington, D.C.: Brookings Institution. 2016.
- Realfonzo, Riccardo. "The Italian Circuitist Approach," in Philip Arestis and Malcolm Sawyer (eds.) *A Handbook of Alternative Monetary Economics*. Cheltenham, UK: Edward Elgar, 2006, 105-120.
- Rodrik, Dani. *Economics Rules: The Rights and Wrongs of the Dismal Science*. New York: W.W. Norton, Inc., 2015.
- \_\_\_\_\_. "Premature Deindustrialization." Institute for Advanced Study, Princeton University, 2015.
- Roubini, Nouriel and Stephen Mihm. *Crisis Economics: A Crash Course in the Future of Finance*. New York: Penguin, 2010.
- Rousseau, Peter L. "The Politics of Financial Development: A Review of Calomiris' and Haber's *Fragile by Design*." *Journal of Economic Literature*, Vol. 54, No. 1, 2016, 208-223.
- Sicard, Germain. *The Origins of Corporations: The Mills of Toulouse in the Middle Ages*. New Haven: Yale University Press, 2015.

Singh, Manmohan and James Aitken, "The (Sizable) Role of Rehypothecation in the Shadow Banking System." IMF Working Paper WP/10/172, 2010.

Stiglitz, Joseph E. *Globalization and its Discontents*. New York: W.W. Norton & Co, 2002.

Stiglitz, Joseph E. *ReWriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity*. New York: W.W.Norton & Co. 2016.

Stiglitz, Joseph E. and Bruce C. Greenwald. *Creating a Learning Society: A New Approach to Growth, Development, and Social Progress*. New York: Columbia University Press, 2014.

Stout, Lynn A. "Derivatives and the Legal Origin of the 2008 Credit Crisis." *Harvard Business Law Review*, Vol. 1, 1 – 38, 2011.

\_\_\_\_\_. *The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public*. San Francisco: Berrett-Koehler Publishers, Inc. 2012.

Streeck, Wolfgang. *Buying Time: The Delayed Crisis of Democratic Capitalism*. New York: Verso, 2013.

\_\_\_\_\_. "Why the Euro Divides Europe," *New Left Review*, Vo. 95, September/October 2015, 5 – 26.

Summers, Lawrence H. "U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound," *Business Economics* 49, 2014, 65-73.

Sylla, Richard, Robert E. Wright, and David J. Cowen. "Alexander Hamilton, Central Banker: Crisis Management During the U.S. Financial Panic of 1792," *Business History Review*, Vol. 83, Spring, 2009, 61-86.

Tabb, William K. *The Restructuring of Capitalism in our Time*. New York: Columbia University Press, 2012.

Tirole, Jean. "Illiquidity and All Its Friends," *Journal of Economic Literature*, Vol. 49, No. 2 (June 2011), 287-325.

Toporowski, Jan. *The Economics of Financial Markets and the 1987 Crash*. Cheltenham, UK: Edward Elgar, 1993.

\_\_\_\_\_. *The End of Finance: The Theory of Capital Market Inflation, Financial Derivatives and Pension Fund Capitalism*. New York: Routledge, 2000.

Tymoigne, Eric and L. Randall Wray. *The Rise and Fall of Money Manager Capitalism: Minsky's Half Century from World War Two to the Great Recession*. New York: Routledge, 2014.

Wachtel, Howard M. *The Money Mandarins: The Making of a Supranational Economic Order*. New York: Pantheon, 1986.

Wolfson, Martin H. and Gerald A. Epstein. *Handbook of Political Economy of Financial Crises*. New York: Oxford University Press, 2013.

Woodford, Michael. "Public Debt as Private Liquidity," *The American Economic Review*, Vol. 80, No. 2, (May, 1990), 382-388.

Wray, L. Randall. "The Rise and Fall of Money Manager Capitalism: A Minskyian Approach." *Cambridge Journal of Economics*, Vol. 33, 2009, 807-828.

Yu Zhou, William Lazonick, and Yifei Sun (eds.). *China as an Innovation Nation*. New York: Oxford University Press, 2016.

Zelizer, Julian E. (ed.). *Rightward Bound: Making America Conservative in the 1970s*. Cambridge, MA: Harvard University Press, 2008.