

Money, Credit and Finance in Political Economy: National, Regional and Global Dimensions

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[Version: 14 November 2008: Friday, 5pm]

1. Introduction

An understanding of modern capitalism requires that we comprehend the workings of money, credit and finance since they represent some of the defining features of the system. This is especially the case in a relatively deregulated environment when money and credit take on a life of their own. Previously businesses, the rich and governments were the principle agents of finance capital. But more recently, lower middle class and even some working class households have become more involved in complicated questions of financial assets and portfolios. When speculative bubbles dominant the economy more people join the circus, and when they crash many people lose out as fewer households become involved in this risky business.

Heterodox political economy perspectives of money and credit are distinctive in that they seek to be realistic, institutional, historical and systemic in their methodology. They are realistic in that they try and develop a Wall Street perspective on the financial system, where cash flow and net worth are a critical part of the edifice (Dillard 1987). An attempt is made to embed successive institutional changes into the theory so knowledge becomes relevant to changes in the real economy. The analysis becomes historical as different phases of evolution are delineated through time as hysteresis and path dependence impact on the economy. The critical thing is to link the financial system to the workings of the capitalist system, where capitalism represents complex, long-term investments into productive structures of factories, warehouses, machinery, organisations and human capital.

Several schools of thought contribute to this heterodox view of money, including neo-Marxian, Schumpeterian, institutional and post-Keynesian political economy. Neo-Marxian contributions centre on the circuit of money capital, fictitious capital

and the break-up of the surplus value into profit, interest and rent. Schumpeterian perspectives focus on the role of credit-money in financing innovation or variously being used for general accumulation or speculation. Institutional themes include the financial instability hypothesis and social structures of accumulation. And post Keynesian approaches recognise the role of uncertainty in complex capital investments plus the role of endogenous finance and taxes-drive money. These approaches complement each other while they all centre on the core contradiction of industry versus finance and the need for a dynamic, circuitous vision of finance capitalism (Lavoie 1992).

2. Dynamic Circuit of Money Capital

Orthodox perspectives of money and credit are based on money as a stock, a static process where money is seen as part of an equilibrium, final-phase analysis. Money is in a state of rest where nothing changes, information is well disseminated, and the economy undergoes no persistent tendencies through time. In this equilibrium framework, money performs the tasks of buying and selling commodities. Money is a veil, in the sense that it has no long-term impact on output and employment, except under special circumstances that are unlikely to occur. In this scheme of things, money should not grow much faster than the rate of change of productivity, for if it does there will be inflation. Hence the main objective of government policy is to control the money supply to ensure that it does not stimulate inflation.

Recently, advances in political economy have resulted in deviations from orthodoxy, under the impact of two things. Firstly, the recognition that different classes of people have different quantities and qualities of information has resulted in the development of a non-neoclassical theory of money and credit, especially under the impact of Joseph Stiglitz and Frederick Mishkin. Asymmetrical distribution of information improves our understanding of the dynamics of the system, especially vis-à-vis creditors and debtors, the state and banking system, households and business, and capitalists and workers. Imperfect information means that we can never return to the perfect information situation where nothing changes and everyone is happy. As a result, we are potentially under threat of financial crisis, instability, and recession as moral hazard and adverse selection play a critical role.

This non-Walrasian system also undergoes motion and instability due to the operations of entrepreneurs who are interested in the generation of profit. Post-Keynesians, Schumpeterians and neo-Marxists are especially interested in the impact of entrepreneurs on money and credit. According to Schumpeterians, entrepreneurs introduce dynamics into the system through innovation, which requires credit for long-term projects. For post-Keynesians, entrepreneurs finance their innovations partly through credit, which enhances instability as decisions are made concerning the future upon which we have little or no knowledge. Neo-Marxists extend these views to the recognition that such credit is required for the

production and realisation of surplus value, the basis of profit and capital accumulation. Schumpeterians, post-Keynesians, neo-Marxists and indeed many institutionalists link money and credit into the circuit of capital to understand how the system changes through time. This circuit is illustrated in Figure One, below:

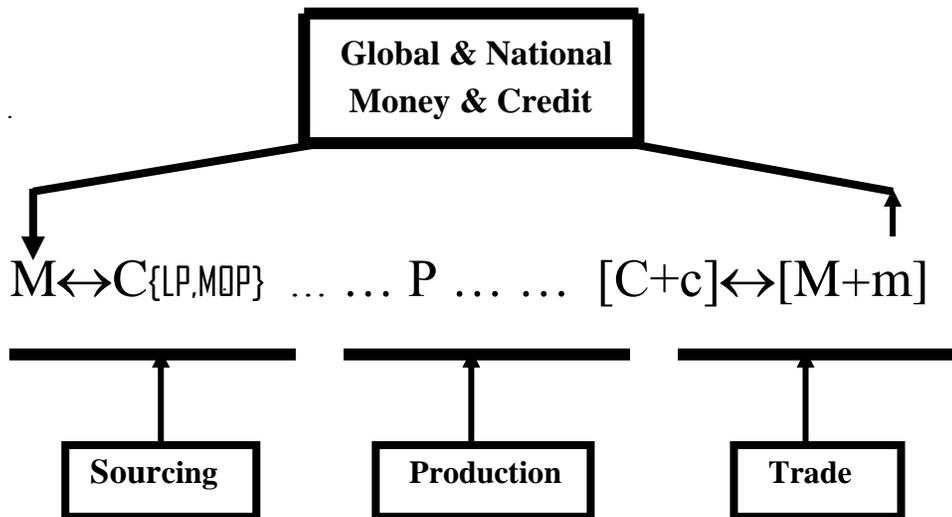


Figure One: The Circuit of Money Capital

The circuit of money capital illustrates the phases and stages involved in the general motion of social capital in the national and global political economy (Palloix 1977, O’Hara 2006). All the phases of the circuit interlink in a complex cybernetic network of motion. Money and credit (M) are required to stir the process into action, via internal corporate revenue, financial institutions and central banks. These largely endogenous sources of funds, propelled by the demand for finance, activate local national, regional, and global sources of labour power (LP) and means of production (MOP). This enables regional and global production value chains to be formed (... .. P), thereby enhancing the process of valorisation, resulting in the production of surplus product. Commodity value (C) and surplus product (c) must be sold on the market for value (M) and surplus value (m) to be realised via trade. Each of the four phases of the circuit — finance, sourcing, production, and sale — are institutionally linked through corporate, financial and governance structures and processes.¹

The regulation and social structure of accumulation schools of political economy argue that this circuit of money capital cannot operate through purely market arrangements, and that networks of institutions provide the organisational, network and social capitals upon which long-term economic performance is based (Jessop 2001). The global economy, especially, needs to be embedded in a series of *institutional organisations, agreements, bodies and dynamic structures* of finance, sourcing, production and trade in order to enhance the workings of the complex circuit. Periodically these institutional structures are rebuilt and breakdown, impacting on socioeconomic performance. When they are not performing well they

are said not to constitute a suitable social structure of mode of regulation underlying accumulation. Hence, the conditions necessary for a *new* (viable) social structure of accumulation or mode of regulation within the circuit are multifarious, ranging from a suitable level, quality and price for the inputs of labour power and means of production; the effective mobilisation of labour and machines within the production process; a requisite level of global demand and trade; an efficient and relatively stable and sustainable level of money and credit to finance industry; a minimum level of innovation and business enterprise; plus a sufficient supply of support structures and processes to keep the elements of the circuit in motion.²

This circuit approach recognises that money and credit under capitalism is a dynamic force, one that is linked to investment, production, trade, and demand. This Monetary Theory of Production, as it is called, seeks to link money and credit to the critical forces of the system. Money cannot be considered to be a ‘veil’ because it finances much of the investment and consumption upon which growth and development is based. Any theory of money and credit, therefore, must be linked inextricably to the forces of enterprise, innovation, accumulation and speculation. As Marx, Veblen, Keynes and Schumpeter realised, capitalism could not exist without markets and credit. The ability of businesses to realise a profit depends partly on their ability to finance investments so the circuit can propel the stock of capital over long historical time. Anything that upsets this circuit will ultimately inhibit such profit and capital, including disruptions to the financial flows, insufficient demand, bottlenecks and conflict at the point of production (e.g., credit crunches). But if the flow continues unabated value added is possible through the creation of *surplus value* (Marx, Schumpeter), *intangible value* (Veblen), and *prospective yield* (Keynes).³

3. Endogenous versus Exogenous Money and Credit

Orthodoxy tends to assume that the money supply is exogenous in the sense that the ‘government’ has control over it and is able to effectively manage this power through the Reserve Bank and Treasury. Through being able to influence the money base – cash and coin – governments are able to control the rate of economic activity and demand, and therefore the rate of inflation. This is done through mainly open market operations, the buying and selling of government securities in the open market. Control of economic activity is made easier if the reserve bank has independence from the elected parliament to pursue inflation control as the primary target. Problems in controlling inflation are thus the fault of government, either not effectively undertaking its monetary duties or not giving the reserve bank adequate power to operationalise them.

Non-neoclassical alternatives to exogenous money and credit have been developing over the past few decades. One particularly influential trend has been what may be called a new-Keynesian theory of broad money transmission mechanisms. The idea behind this is that governments cannot control money supply

narrowly defined, but that they influence broad measures of economic activity through the credit process. This is a pragmatic perspective recognising economic activity being impacted by the financial system. Money and credit are thus not veils since they promote lending and borrowing through the financial system, which propels production and broad economic performance. This view thus realises that money and credit have a *critical element of endogeneity*, or in other words that they are influenced by and in turn promote economic activity.

Post-Keynesian, institutionalist and neo-Marxist perspectives of money and credit are similar to this broad view, although they extend it in several directions (Arestis 1988). The central hypothesis is that money demand stimulates money supply and credit, which in turn propels economic activity. The core idea here is that business cycle upswings generate their own momentum as the demand for finance stimulates supply. This is the essence of endogenous money and credit. *Capitalist economies thus undergo relatively endogenous business cycles, where the upswings and downswings have a central element of self-reinforcing dynamics.*⁴

When economic recovery takes hold businesses seek funds, and if they are not forthcoming from government then substitutes will emerge. This is the idea of *structural or innovative endogenous money and credit*. In the absence of government accommodation, banks/firms will generate new forms of finance or expand existing means of finance that are not controlled by the central bank. This may variously take the form of bank bills, trade credit, negotiable certificates of deposit, overseas finance, and exotic options or swaps. This finance enables business cycle upswing to emerge through the normal workings of business. It is likely that this will overextend the system beyond fundamental variables and that speculative bubbles will eventually emerge in the high reaches of cycle prosperity. This structural endogeneity is perhaps the most important element of endogenous money and credit.

A second possible form of endogenous finance is through the government accommodating the demand for money through additional liquidity. If the government allows the greater demand for money to be realised in the system through expanding money and finance then this is another form of endogenous finance. Some have argued that it is normal for the government to legitimize the greater demand through enhancing system-wide liquidity. One such way is through open market operations (buying government bonds), or reduced reserve ratios. In the contemporary environment this normally means lower interest rates or failing to increase interest rates. Indeed, to the extent that the government can either control interest rates or money, and generally targets interest rates, endogenous government finance has become institutionalised into the system.⁵

The operation of endogenous-exogenous money and credit depends upon the shape of the money supply curve, and whether money-finance demand is satisfied through supply. Figure Two, below, illustrates some of the possible situations:

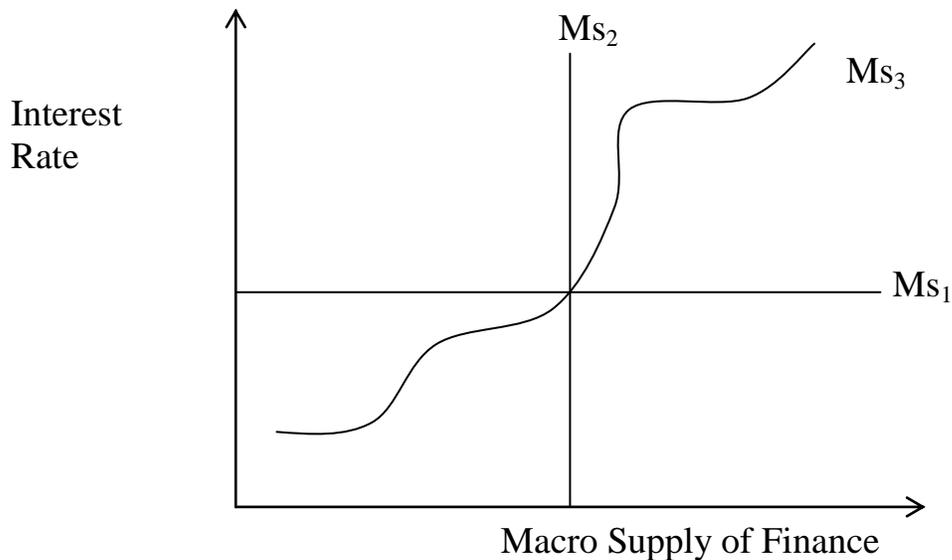


Figure Two: Endogenous-Exogenous Finance

Ms_1 shows a state of affairs where money and credit are entirely endogenous as the higher demand for finance expands the supply. Ms_2 shows the exogenous situation where higher credit demand has no impact on supply. And Ms_3 is a middle of the road situation where sometimes finance is mostly endogenous, at other times it is exogenous and sometimes in between the extremes. Ms_3 indicates that the degree of endogeneity-exogeneity depends on the reality of the institutional situation of the time. Endogenous finance analysts would perhaps tend to support a combination of Ms_1 and Ms_3 , although they would add that the current institutional environment, where finance is mostly deregulated, supports structural endogeneity, while a system of interest rate targeting supports accommodative endogenous credit.

The analysis of structural endogenous money and credit *involves a game* about the behaviour of economic agents and organisations through time. This dynamic game is about the conflict between systemic and individual interests of business and government. Business requires funds when business cycle upswing emerges, and usually the government provides liquidity to stimulate profit and investment, and business (including banks) often generates liabilities to enhance credit. This is the essence of endogenous funds, that both government and business may stimulate them. But as the high points of the cycle emerge risk increases as inflation, speculative bubbles and recession looms. In this environment, the reserve bank may decide that the boom has gone on for too long and will try and moderate it. If it does this, accommodative money and credit are not forthcoming and these funds become exogenous in the sense that they do not flow with the highs of the cycle. Instead, business may depend upon their own endogenous sources of funds, such as bank bills, overseas finance or certain exotic “innovations” such as mortgage-backed bonds. The reserve bank may, however, try to limit the extent of these

structural sources of endogenous finance by placing (higher) reserve requirements upon them (Rochon and Vernengo 2001).

However, the reserve bank may not succeed in preventing the creation of structural endogenous finance as financial institutions and other businesses create ongoing alternative sources of funds. This cat and mouse game can continue through several runs, especially over successive business cycles, as Figure Three, below illustrates:

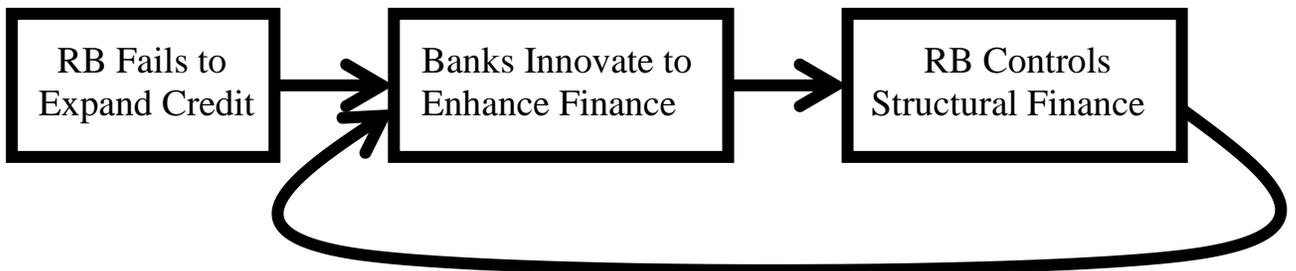


Figure Three: Interactive Game Between Reserve Bank and Banks

This shows that if the reserve bank decides not to accommodate private finance during the high points of the business cycle upswing then private banks and other businesses will likely create their own instruments of finance. This is likely to heighten the business cycle, although the government may intervene and introduce or increase reserve requirements on these forms of liability management. In response, the private sector generates further innovative finance (or modifies existing ones) to stimulate financial capabilities. This game can continue through several runs, during a simple business cycle and over successive cycles. It thus demonstrates endogenous and exogenous money, credit and finance are variously impacting up the system, depending on the changes occurring in the institutions. However the reality of the situation is that some combination of accommodative and structural finance generates higher booms in the cycle which thus leads generally to deeper recessions. This is because the highs of the booms, especially during long wave downswing, indicate the extent of *unproductive finance, bubbles and overextended accumulation*.

4. Industry-Finance Contradiction

In the theory of traditional neoclassical economics, when there are free and open markets, the economy is likely to experience the proper distribution of resources to the various sectors and agents according to their relative productivity. Industry and finance are equally productive sectors when the conditions are right in the markets and distribution accords with the laws of marginal cost and revenue. Beyond the provision of substantial positive public goods, governments are likely to misallocate resources if they distort prices and quantities between industry and

finance. Long movements and unstable dynamics in finance are likely to be short-lived as the market system adjusts rapidly to potential instability.

However, the combined insights of Marx, Veblen, Schumpeter and Keynes provide a different understanding of the relationship between industry and finance (O'Hara 2002a). Industry is the productive activity of promoting value added in the leading sectors of the economy, which provides the foundation for surplus value, intangible value or prospective yield. Finance is the necessary but less productive activity of providing the financial backing for business activities, whether through credit, equity or other means. There is a potential conflict between industry and finance, in the sense that the interests of industrial capital and financial capital are in relative disharmony from time to time.

However, if the power of industry or finance is significantly out of balance problems emerge (Cypher 1998). For instance, when industry is much more powerful than finance overproduction generally results since competition is too strong and markets are thin. The 1870s-90s is a good example of when this happened through many economies of the world, when output expanded rapidly through economies of scale and larger corporations, but without sufficient development of finance and business. Before and after the turn of the century the development of investment banks, mergers, imperial expansion, and international corporative accounting techniques helped to solve this problem for a while.

When the power relationship between industry and finance is in balance or slightly in favour of industry the economy is likely to be on a sustainable growth path. During the years of the Keynesian welfare state (1950s-early 1970s), there was a strong link between the returns to industry and finance. Both were working to promote economic growth and development through the advanced economies. This great boom was a classic period of relative buoyancy when optimism pervaded the dominant institutions.

When finance is too strong this is likely to generate speculative bubbles and a misallocation of resources towards equity, banking, financial, real estate and foreign exchange areas of the economy. The 1920s-30s and 1980s-2000s are good historical examples of when this occurred. During these times the financial system was largely deregulated, Treasury views dominated government actions, and speculative bubbles were regular occurrences that crashed periodically. The Great Depression and the recent global subprime crisis are classic examples of this. During the era of neoliberalism (1980s-2000s), evidence supports the view that there was little correlation between the returns to industry and finance as finance came to dominate the economy leading to bubbles and deeper recessions in the major economies. Investment in finance was too strong relative to industry thereby resulting in reduced growth and accumulation. Shareholder value was strong while the dominant industries had inadequate profit (Aglietta 2000, Boyer 2000, Binswanger, 2000, Stockhammer 2004).⁶ This culminated in the internet equity crash and corporate crisis of the early 2000s plus the global subprime crisis of the

late 2000s. Institutional changes resulting from these financial anomalies will quite likely result in the emergence of a more progressive form of governance where industry and finance are in relative balance (O'Hara 2008).

5. Financial Instability Hypothesis

According to traditional neoclassical theory, financial stability is the normal state of a free market economy. If markets are deregulated and industry productive then the credit system will operate efficiently since value will be determined by fundamental variables such as long-term dividends. The financial system will be efficient since well developed markets enable resources to be distributed to those areas when they are required. In the extreme, free banking version of orthodoxy, it is necessary to have free markets in money and currency as well. There thus should be no state monopoly of central banking as this promotes instability and disarray in the markets. However, the dominant view amongst orthodox economists is that central banks are needed for promoting quality currency and inflation control, while deposit insurance may help to instil stability into the system to some degree.

Political economy or heterodox perspectives generally support the *financial instability hypothesis* (FIH), namely, that financial instability is endogenous to free market capitalist systems of production, distribution and exchange. There are three main aspects to the FIH: uncertainly, endogenous money and credit, and the relationship between prospective yield and supply price. Hyman Minsky's FIH is an application of the industry-finance contradiction. Uncertainty is critical because of the actions of entrepreneurs, who consider the viability of projects over a long time frame when knowledge of critical factors is lacking. Investment in capital projects with a life of ten or twenty years into the future is based on a time frame when corporate planners know little of what is to come. They calculate prospective yield and supply price in an *uncertain environment when proper calculation is not possible*. It is simply that long-term (especially) future events are not known with any degree of certainty, or where the weight of confidence about future probabilities is very low. Making decisions about financing such projects in such a world of uncertainty is fraught with problems.

For this reason, as Minsky argues, vital business decisions are determined largely through institutions such as the prevailing business climate, accounting rules, and financial models. Without such conventions little action could reasonably be taken on critical business projects with a long gestation period. For this reason, instability is endogenous to the capitalist system since large credit-based projects run a high risk of failure as the business cycle moves from recovery to boom to financial crisis and recession. This is supported by evidence that most businesses fail in the formative stages of their development, with few firms incorporating such cycle dynamics into accounting systems.

Minsky develops a model to help explain the endogenous nature of this instability, based on cash flow (income and contractual commitments) and

capitalised values (of expected income and contractual commitments), plus degrees of safety. The model has two time periods, short and long, and a profit and loss account as well as a balance sheet. For the short run, cash flow is related to the difference between current income (Y) and current contractual commitments (CC) (related to debt); and for the long term, net worth is linked to capitalised income (or prospective yield) through many periods (K(Y)) compared with capitalised contractual commitments (or supply price) over the long-term (K(CC)). For business cycle phases when profit is at a relatively high level, with little risk, “Hedge Finance” prevails:

Hedge Finance

$$Y = \delta CC$$

$$K(Y) = \beta K(CC)$$

Where δ and β represent margins of financial safety that are above unity (>1); in other words, income, on average, is greater than contractual commitments by a certain level of safety in every period. The recovery and moderate boom in the cycle are generally good for business since the rate of profit is relatively high while risk is low. Hyman Minsky (1982, 1986) and Martin Wolfson (1994, 1994a, 2000) argue that there are endogenous financial factors that lead from this safe type of finance (hedge finance) to those that are less secure (speculative and Ponzi finance).⁷

The generation of endogenous finance during the boom in the cycle normally overextends economic activity beyond fundamentals, since uncertainty about the future leads firms to depend on current levels of activity as a guide to investment. Firms thus generate massive investment when the business environment becomes euphoric during boom. Income rises to extraordinary highs relative to supply price or contract commitments, even while interest rates may start to rise either as a result of higher demand (Minsky) or monetary policy (modern parlance). These increases in interest rates do not upset upswing just yet, though, since exuberant conditions still sustain prospective yield despite moderate increases in capitalised supply price. We thus have a slight deterioration in financial safety as, on average, cash flows becomes negative where income is often less than contractual commitments (short term) while capitalised income is still greater than capitalised contractual commitments (long-term). This is called “Speculative Finance”, where long term conditions are still buoyant and credit demand high:

Speculative Finance

$$C < CC$$

$$CC > \beta KCC$$

Lastly, buoyant conditions gradually stimulate instability and crisis (especially during long wave downswing) as a number of environmental conditions deteriorate, costs increase and bubbles crash. Because exuberant conditions push investment and stock prices beyond long-term fundamentals, decline is highly likely (Raines and Leathers 2000). In the age of neoliberalism and shareholder value in the 1980s-2000s in the US, UK and similar nations, the stock market gained relative autonomy from the real sector. A far greater proportion of credit went to finance equity expansion, while a lesser degree financed consumption (hence declining inflation). Thus the crash in the share market prior to and during recession was far greater than average. A number of things stimulate such periodic crashes, including higher raw material prices, interest rates rises as monetary authorities moderate demand, corporate excesses and crises as profits are inflated and subsequently diminish as corporate bankruptcies escalate. All these factors lead to a deterioration in the business climate, lower expected profits, declining investment, stock market crash and recession (especially during the mid-1970s, early 1980s, early 1990s and early 2000s in most western nations).

This leads to a further decline in financial safety as a far greater number of firms move from Speculative to “Ponzi Finance”, where cash flows often negative through income being lower than contractual commitments and capitalised cash flows (prospective yield) being often smaller than capitalised contractual costs (supply price):

Ponzi Finance

$$\begin{aligned} C &< CC \\ CC &< KCC \end{aligned}$$

Ponzi Finance is thus the worst form of financial condition for the economy as many firms are undergoing bankruptcy, the share market is crashing, corporate excesses have been found to be unsustainable, and deep recession emerges during long wave downswing (Dymski et al 1994, Fazzari 1992). Due to intersectoral linkages these crises tend often to be regionally and internationally synchronised, although uneven, in similarly organised economies.

The endogenous force stimulating the movement from Hedge to Speculative Finance is a higher prospective yield as uncertainty seemingly declines in addition to a higher interest rate. On balance this is a positive environment. The endogenous force moving the system from Speculative to Ponzi Finance is a crash in prospective yield, in a possible environment where input prices have risen considerably. On balance this is a periodic system-crisis of finance and economics. Speculative bubbles tend to crash during these times of Ponzi finance, corporate accounting crises are highly likely, and chains of bankruptcy are probable during

these uncertain times. They are endogenously linked to the system dynamics of state-capitalism throughout most advanced nations of the world.

6. Financial Social Structures of Accumulation

The extent to which there is financial instability and fragility, however, depends on the nature of the institutions. Post Keynesian, institutionalist and neo-Marxist perspectives of money and credit are based on the principle that the economy should be *minimally dislocated* (Bush 2001), meaning that a degree of institutionalised stability is required, especially for a dynamic economy such as capitalism. This is similar to Karl Polanyi’s (1944) idea that free market economies cannot exist in the long run because they propel instability due to inadequate public goods. Deregulated monetary systems increase the volatility of the business cycle as endogenous finance escalates during cycle boom and diminishes radically during recession. Corporations suffer inadequate governance leading to periodic over-reporting of profitability and other accounting irregularities during cycle boom; and concentrations of economic power leading to higher levels of white collar crime, fraud and insider trading.

Heterodox political economy recognises that these financial excesses will vary over short business cycles and long waves. Long waves are especially important. These are long movements of the economy, characterised usually by twenty or thirty years of relatively high economic activity along with minimum financial instability and crises, followed by twenty or thirty years of greater instability characterised by periodic deep recessions and financial crises. A schematic view of these long waves for the advanced capitalist economies is presented in Table One, below.

Table One
Long Waves and Financial Dynamics

	Long Wave	Upswing	Downs wing	Financial Developments
1780s-1840s	Competitive Capitalism	1780s-1810s	1810s-1840s	Predominant Money and Commodity Economy
1850s-1890s	Industrial Revolution	1850s-1870s	1870s-1890s	Equity Capital and Money Capital in Firms
1890s-1940s	Imperialism-Finance Capital	1870s-1910s	1910s-1940s	Investment Banks and Credit-Money for Finance Capital
1940s-2000s	Fordism-Welfare State	1940s-1970s	1970s-2000s	Industry-Finance Balance → Shareholder Value Economy
2010s-2040s?	Electronics & Biotechnology	2010s-2030s?	2030s-2050s	Predominant Electronic Credit & Finance Economy

Long wave upswings have been characteristic of the 1780s-1810s, 1850s-1870s, 1890s-1910s, 1940s-1970s and possibly 2010s-2040s in the advanced nations. Minor recessions, minimal financial instability and development are characteristic of these periods. The main reason financial stability mostly prevails is that long-term rates of profit are high and the prevailing business climate is positive. Profit rates for industry, therefore, are critical for financial stability. Long wave downswings were characteristic of the periods 1815-1849, 1873-1895, 1915/1925-1944, and 1973-2009. During these periods financial instability is high as periodic financial crises and deep recessions are common. Rates of profit for industry are thus on average low and/or highly volatile, financial risk excessive, and investment subdued. Also during these downswings, debt crises in the third world typically emerge as credit is excessive in the face of low profit and investment.

The basis of these long movements of economic activity is the *shape of the institutions*. When the institutions sustain demand and productivity long upswings are typical, and when the institutions inhibit demand and productivity long downswings follow. Successive waves see major evolutionary developments in all institutions, including finance. For instance, the transformation of capitalism over numerous waves has seen the emergence of the original predominant money and commodity economy (1780s-1840s) through to the evolution of equity business finance (1850s-1890s), followed by credit-money and investment banks (1890s-1940s), through to the period when regulation evolved to deregulation under neoliberalism (1940s-2000s). Electronic credit-money banking dominate practices and institutions.

For instance, during the long wave upswing of 1945-1973, well developed financial social structures of accumulation operated through central banking, credit creation, financial intermediaries and business-household savings and investment institutions (Wolfson 1994, O'Hara 2000, Guttman 2001). These financial structures helped develop a viable system of industry and technology along with the rate of profit for business. However, long wave downswing emerged into the 1970s-2000s in the advanced economies as contradictions emerged in the institutions of production-distribution, finance, the state, world economy and family. Finance came to dominate industry as the rate of industrial profit declined and financial assets ruled business decisions. The pecuniary instinct typically dominates workmanship during downswings.

The tendency for fictitious capitals to periodically dominate industry occurs when there is substantial misallocation of resources. In advanced nations this has persistently occurred during the 1970s-2000s, generating various financial crises and deep recessions. During the 1980s corporate finance led to excesses as debt financed unproductive speculative activity, leading to a major stock market crash of 1987, soon followed by a deep recession of the early 1990s. The 1990s led to excesses, especially in the internet and high-tech sectors, leading to a series of speculative bubble crashes and accounting crisis. The 2000s led to excesses

especially in the sub-prime mortgage market which spilled over into the general and global economies. Critical to these instabilities are financial and other “innovations” (e.g., mortgage-backed bonds) that take time to evolve and develop and which involve overproduction and overinvestment in certain sectors such as the share market and residential housing.

7. Global Money, Payments and Prices

Heterodox political economy believes that capitalism is by its very nature a global system, with centre-periphery uneven relations affecting global growth and development. It also believes that economic power is central to its functioning, and that money power is a critical aspect of this power equation. Market relations are imbued with power differentials because of certain centripetal and centralising tendencies of business. Money tends to be dispersed to those who are able to gain monopoly rents, be they individuals, organisations, firms, sectors, areas, nations or commodity chains. By-and-large, most of the rents go to those who are able to commodify the dominant technological, social and informational resources of society. In particular, those able to organise *global and regional networks of business* will gain the most profit and money. (Grou 1985.)

Power is linked to hegemonic processes, especially nations and areas that lead the world in production, commerce, finance and international relations. Global power has shifted from Dutch hegemony in the 17th century through to British hegemony in the 19th century and on to US hegemony in the 20th century. Debate continues whether currently the US has hegemonic dominance or not, with some arguing that they have moved from *absolute* hegemony in the late 20th century to *relative* hegemony in the early 21st century. The money-currency of the hegemonic power tends to be the world currency. At present the US dollar is the dominant currency in the world, although it is slowly losing power relative to the Euro, the Yen and potentially the Chinese Yuan (Renminbi). The problem is that asymmetric power leading to the dominant role of the US dollar may inhibit global performance if the hegemon underplays critical system-functions or global public goods.

There is thus a *contradiction* between the US dollar performing the dual role of national and global currency. The efforts of US monetary authorities to safeguard national objectives are often in conflict with the smooth workings of the international financial system. For instance, during the early 1980s when the US authorities doubled interest rates from 5 to 10 percent to moderate domestic inflation this initiated debt crises in Latin America. Latin American debt was mostly denominated in US dollars, US interest rates and “spot” contracts. This pushed many such nations backwards by a decade or more. Also, during the Asian crisis, most contracts were denominated in US dollars, US rates and often with US global banks. When US authorities began to raise rates in the light of the emerging speculative bubble of the late 1990s this had a major negative impact on Asian debt, leading to massive hot capital outflows and recession. (Schmeister 2000.)

Typically, post Keynesian scholars argue for a truly “global currency”, one that transcends national power relations and currencies. It is believed this will eschew the hegemon’s preferences and policies when they are abrogating global public goods. Having a truly global currency will make world monetary relations fairer with global stability. They also argue that balance of payments equilibria is better obtained through a new rule, one where those nations experiencing persistent current account surpluses are obliged to increase demand for the goods and services of those nations experiencing current account deficits. Currently the opposite tends to prevail, especially for developing or underdeveloped nations: BOP deficit developing nations are ‘forced’ by the IMF to reduce government spending, increase interest rates and reduce demand in the domestic economy to supposedly equilibrate payments imbalances. The opposite rule is said to rectify the current trend to inadequate global effective demand and periodic financial instability.⁸

This global view of capital explains why heterodoxy advocates a Monetary Theory of Production in a system of circular and cumulative causation, summarised below in Figure Four:

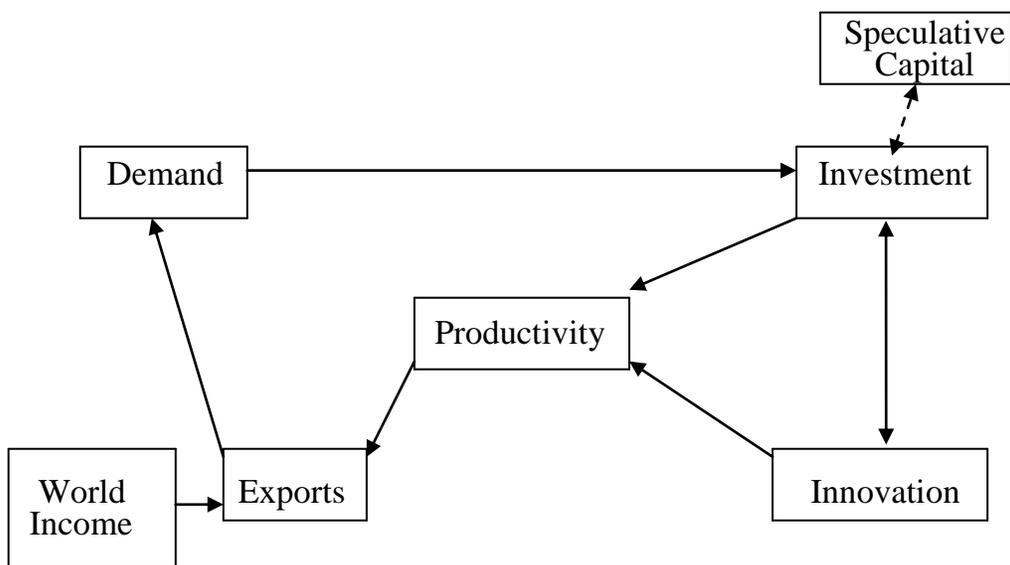


Figure Four Kaldorian Dynamics of Circular and Cumulative Causation

It is critical to propel three things in the global economy. The first is to enhance effective demand, ultimately to expand investment, both private and public. Where uncertainty is relatively low, private investment tends to be at a high rate, and when uncertainty is high public investment can help through crowding-in private investment in areas such as education, health, communications and infrastructure. Demand is in fact interdependent with supply, since demand can manifest in greater demand for capital which through economies of scope and scale plus embodied innovative investment may stimulate productivity. And where world income is relatively high – especially when governments do not impose austerity measures – this translates into higher demand for global exports. This in turn propels greater

demand, and so on as the system works through this in multiple rounds of circular and cumulative action. If demand can be sustained productivity and profitability tend to increase, thus moderating financial crises and deep recession.

It is necessary, though, to moderate levels of speculative and hot capitals, when they crowd-out investment, both private and public (Wincoop et al 2000, O'Hara 2003). If speculative bubbles rise to great heights this is an indication that finance dominates industry, and therefore resources transfer to relatively unproductive areas. Rules need to be devised to moderate this dominance, so that real investment is enhanced. Much of the force here is cultural and historical. But to some degree policy can help. For instance, the introduction of asset-based reserve requirements can be a way of moderating bubbles. If the authorities, for instance, believe that bubbles are rising rapidly in the stock, property and/or foreign currency markets, increasing reserve requirements on these specific bubble assets can redirect finance to more productive areas. This may relinquish the need for raising interest rates, which can be a very blunt tool, not discriminating between productive and unproductive areas (Mishkin 2001).

The global financial instabilities of the 1990s and early 2000s taught many financial analysts about the problems of hot capitals: borrowing funds from international banks for short maturity periods. Most countries linked to the Asian crisis, for instance, saw an escalation of incoming loans before the crisis, followed by massive outflows during the crisis. It is not simply a problem of needing to develop a sound financial system prior to deregulation, since the US experienced similarly unstable finance in the early 2000s. Deregulating finance completely is the major problem (Coggins 1998). Apart from the need for transparency, accountability, prudential regulation and speculative asset controls, there is also a need for moderating hot capitals. This can perhaps be done through the introduction of a Tobin Tax, with, say, a small 0.2% tax on international loans of less than 12 months duration. This may not only "put grains of sand into the wheels of international finance", but also perhaps be a way of financing some development projects for very poor nations, and providing funds for domestic governments.

Heterodox money and credit also recognises the generally negative financial impact of the terms of trade on developing and underdeveloped nations. Probably the most important financial constraint on development is the inability of poor nations to produce and export goods and services with a high price that reflects a good income elasticity of demand and also the monopoly rents associated with the leading commodities and services. Empirical research shows the existence of two major problems. Firstly, there have been two periods of declining terms of trade for poor nations, the 1920s and the 1970s; and secondly, they tend to produce goods and services (particularly commodities) with a volatile price pattern. These two problems of low and variable prices have been a central limit on development, creating a financial limit to productive investment and government spending. (O'Hara 2006.)

The IMF and World Bank have been singing the praises of simple comparative advantage, where developing and underdeveloped nations produce those commodities where they have a natural relative advantage. Mostly these are in the areas of commodities such as agricultural goods, timber, and low value added manufactures. To call for poor nations to produce more of such commodities that are already in over-abundance is problematic. Poor nations more than anything need to develop a long-term strategy of enhancing human, social and specialist capitals to create the finance needed for development. This will necessitate the use of intelligent industry policy to create relatively high value added goods and services; some degree of protection for infant industries; and a policy of generating human, social and network capitals for development. Development studies and international political economy have been isolating detailed measures along these lines for several decades now.

8. Finance and Socioeconomic Development

Ultimately heterodox political economy seeks to enhance the standard of living of the community, paying particular attention to the generation of a reasonably efficient and equitable society. It especially wants to promote a form of conventional rights where the rules of society promote less division on the basis of class, ethnicity, gender and nation. Special reference is given in heterodox governance to the promotion of a participatory social economy, where people not only have the right to a decent job, or alternative compensation, but also the right to be included in decision making in the dominant institutions of business, state, community and family. Heterodoxy agrees that CEOs and business vested interests gain too much remuneration compared with the underlings who often work harder and longer, or lack the resources for adequate inclusion in the social economy.⁹

Financial considerations are primary to these concerns for greater participation and inclusion. Heterodox macro dynamics posits an investment-led growth program for social development. The orthodox neoclassical theory assumes that savings stimulates investment through providing funds for productive projects, and encouraging the growth of a class of savers. Hence their concern with recent trends towards lower savings rates in especially advanced capitalist economies. Heterodoxy has no such concern, since for them investment is the core variable for sustainable growth. The creation of an institutional apparatus for lower levels of uncertainty provides a business environment for higher levels of private investment, thus stimulating national income, and savings. Once effective demand is forthcoming long term progress is more likely.

One way to encourage inclusion and justice is to expand productive government investment in education, health, communications and infrastructure. Extensive research in most nations has supported the case for public investment crowding-in private investment. Such productive investment is generally better than subsidies for business and individuals which tend to crowd-out private investment. Providing

such productive state spending and providing an environment for greater private investment is the core method of providing jobs and enhancing conventional rights to employment. The best way to improve the conditions of working people and others who are financially disadvantaged is to encourage them to *gain the skills and creative arts of a modern technological society*.¹⁰

Recently a new theory of money and credit has emerged to support employment, inclusion and justice; the taxes-drive-money (TDM) approach. This theory follows the Chartalist view that the core role of government is to sustain proper levels of aggregate demand, and that functional rules of public finance should prevail over rigid ideology. The major tenets of TDM are summarised in Table Two below:

**Table 2:
Core Elements of the Taxes-Drive Money Approach v. Orthodoxy**

	TDM Function	TDM Government Finance	TDM Purpose for Government	Orthodox Government Accounting
Taxes	Drives Demand for Money	Does not finance G	Modifies demand	Balances Budget
Money	Provides Reserves for the System	Finances Government Spending	Government Financing	Finances Budget Deficit
Bonds	Interest rate Targeting	Does not finance G	Modifies Demand	Finances Budget Deficit

In TDM it is believed that mostly budget deficits will be required by government to enhance private investment, especially when there is recession; while in the long run productive government spending will enhance aggregate demand and thus produce “balanced budgets” or even during booms “government surplus” (in the old-fashioned vocabulary). Balanced and surplus budgets tend to be generated during high points in the business cycle, but the government should spend adequately to reduce the depth of recession. Taxes do not finance central government spending; rather, taxes increase the demand for government money. Government spending is financed instead by money, since the Treasury writes a check to finance state spending, and does not need pre-existing taxes to do so.

The right of people to employment will only be achieved if pragmatic rules of finance are undertaken by government. It needs to spend more when demand is low and spend less when inflation looms. The role of government borrowing, on the other hand, is to activate monetary policy through open market operations. Government borrowing (bonds) from the public is done purely for interest rate targeting purposes. TDM thus argues that financing spending through deficits to prevent recession does not crowd-out private investment via higher interest rates.

This is because higher spending may increase rates but financing it from money reduces rates, the net effect likely being neutral. But if the spending is productive this has the added advantage of crowding-in private investment, as argued earlier.¹¹ Social justice may thus prevail as taxes-drive-money encourages governments to stimulate social and regional development, especially if they can moderate the tendency to waste resources on major wars and military expansion.

Heterodoxy recognises that money and credit matters and it is unlikely that productive finance would generally act as a veil or fail to impact on the production system in the short, medium and long runs. Heterodoxy has taken the quantity theory of money and its modern variants as a point of critical departure for governance. Social inclusion and justice requires a humanistic and realistic view of economic agents. Agents are thus seen as exhibiting *bounded rationality* that is affected by the institutional environment in which they are brought up and coexist with others. As a general rule, it is thus unlikely that agents anticipate adequately the actions of monetary authorities, and less so the impact of such actions on economic activity. The old “rational agent” model and “policy ineffectiveness proposition” that follows were shown to be empirically extreme. People or agents are subject to habit, social influences, and even instincts that impact behaviour. Finance thus affects real social variables through technological and institutional innovations, large scale production, economies of scope and scale, and productive government investment into infrastructure, education, health and communications. Demand thus affects social inclusion and justice through directly impacting on employment and income.

The financial environment is especially critical for those on lower levels of income, wealth and power. They tend to have low levels of collateral, finance and material assets, thus making it difficult to get sizable loans from banks and other formal institutions. It is here that community reinvestment programs, microfinance, and government financial priorities play a role. Those with low collateral tend to congregate among the lower classes in society. Government programs can influence this through public productive capital such as education, communications, health, transportation and infrastructural spending. Microfinance can help if the borrower uses them for capital purposes, rather than for consumption items that exhaust themselves quickly.

The institutional environment requires a critical degree of stability and certainty to enable firms to invest and workers to plan their life effectively. Being able to provide such conditions reduces the level of liquidity preference through lower levels of uncertainty. Both the speculative and precautionary demands decline as the institutional environment stimulates business and consumer confidence. While the finance demand for money may increase along with investment confidence, overall there is a more intense turnover of the circuit of capital through purchase, production, sale and reinvestment of the surplus. It is not just the *speed* of the

circuit but also the *stability* of the speed through time that determines socioeconomic prosperity.

9. Conclusion

This paper has sought to present the main contours of a heterodox monetary approach to political economy. The essence of such an approach is to view the money circuit as a dynamic process that operates through historical time, and is subject to hysteresis and path dependence. History matters in political economy and therefore a dynamic view of credit and finance is central to its core theory and policy. Being dynamic, credit and finance is mostly endogenous, as the liquidity requirements of business tend to be satisfied through innovations and changes. Business and government together try and stimulate investment when business desires funds for expansion. However, when finance dominates industry institutional changes are needed to activate productive spending and investment.

There is a tendency for capitalism to create instability since it depends upon prospective yield the knowledge of which is lacking because of the very long-term nature of expected profit. The future is unknowable, while conventions are introduced to deal with investment in the face of such radical uncertainty. Business thus tends to finance such projects partly with credit, but often exuberant conditions are present so that finance becomes overextended. This leads to periodic crises and recessions as speculative bubbles crash and real values assert themselves. Fictitious capital thus often rules business decisions when fundamental variables are difficult to ascertain (O'Hara 2000). Financial conditions thus evolve variously through hedge, speculative and Ponzi positions as business lacks the required knowledge for stability.

Meanwhile the dominant theories of finance tend to sustain the myths either of stability and certainty under business conditions or the systemic need for periodic major insolvency to regenerate the spirit of innovation and motion. Heterodoxy maintains that uncertainty is rampant and also that major insolvency is undesirable. Aggregate demand is thus the critical interdependent variable when finance funds productive investment and sustains industrial profit. The role of government is essentially to encourage and stimulate private spending through institutions and innovations that propel the circuit of money. It should stimulate industry, moderate speculative bubbles and aid the process of recreating financial social structures underlying accumulation. The government needs to be proactive rather than just reactive or neutral in its approach to business.

Heterodoxy also recognises that power and the asymmetric distribution of information and knowledge affects finance capital. Relying on interest rate mechanisms to moderate spending may fail as high rates create risk and instability in the system. They also function as a blunt instrument through not distinguishing between real and speculative values. Thus asset-based reserve requirement may assist in moderating bubbles and instabilities. Policy should stimulate the power of

industry over finance. It should also ensure that hegemonic-inspired nations do not rule international money, creating contradictions with their own national policy. A truly global currency will provide major public goods benefits while current account surplus nations are encouraged to spend to stabilise international finance.

Heterodoxy thus tries to embed financial theory in a pragmatic and realistic edifice based on endogenous processes. The institutions of business and government are in potential symbiotic unity if the principles of circuit, instability, endogeneity, and power are put into service to sustain demand and reduce liquidity preference. But in doing so the state needs to look after the system as a whole rather than its section interests, while business is required to create some degree of balance between industry and finance. Such are the lessons of the political economy of heterodox finance.

Questions and Discussion Points

1. Discuss the following assumptions of orthodoxy. Why are they usually or often problem-assumptions for political economy?

- (a) Exogenous money, credit and finance;
- (b) Rational agents
- (c) Policy ineffectiveness proposition

2. Discuss and illustrate the workings of the following principles or empirical regularities:

- (a) Circuit of social capital
- (b) Endogenous money, credit and finance (structural and accommodative)
- (c) The endogenous cyclical movement of hedge to speculative and then to Ponzi finance
- (d) The importance of financial innovations and institutional changes.
- (e) The role of speculative bubbles, prospective yield relative to supply price, and recession.

3. Examine the following historical and empirical aspects of modern finance-capitalism

- (a) long waves of evolution and metamorphosis
- (b) financial social structure of accumulation
- (c) global money and credit; US hegemony; changing hegemonies
- (d) skills and creative arts; bounded rationality; circular and cumulative causation

Useful Journals to Aid Study and Research in Heterodox Money, Credit and Finance

Journal of Post Keynesian Economics
International Journal of Political Economy
Journal of Economic Issues
Review of Political Economy
Cambridge Journal of Economics
Review of Radical Political Economics
International Review of Applied Economics
Economy and Society
Review of Social Economics
Forum for Social Economics
Feminist Economics
Ecological Economics
Structural Change and Economic Dynamics
Journal of Institutional Economics
Rethinking Marxism
Journal of Evolutionary Economics
Studies in Political Economy
Capital and Class
World Development
Journal of Human Development
Review of International Political Economy
New Political Economy
Review (from Fernand Braudel Centre)

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Endnotes

1. Considerable work has been done of late on the financial circuit of money and credit, especially through the analysis of the French-Italian circuitists (Louis-Philippe Rochon 1999), the link between the circuit and endogenous finance (Alain Parguez 2001) linkages to the Marxian circuit of capital (Martha Campbell 1998), and the classic work of David P. Levine (1978, 1981).

2. The three critical functions of a viable financial social structure of accumulation include (a) financial stability, (b) historical relative resolution of the conflict between industry and finance and (c) promotion of industrial-financial productivity and performance. These conditions are linked to the financial system by Martin Wolfson (1994, 1994a) and O'Hara (2002) and more generally analysed by O'Hara (2006).

3. Surplus value is the value added in production created by labor and the conditions of circulation generally perceived, manifesting in profit. The breakup of surplus value into profit, interest and rent reveals the money-finance aspects of surplus in a multi-capital model (see Marx 1894). Intangible value is the term used by Veblen (1923) to describe the financial generation of value that enables finance capital to generate profit and hence surplus. And prospective yield is the expected valuation of productive investment by entrepreneurs and capitalists that posits a return on their capital in the long-term horizon (Keynes 1936).

4. For instance, the work of Howard Sherman (2003) applies endogenous business cycles to all the dominant institutions of contemporary capitalism, including financial capital; while Igor Matutinovic (2005) analyses the endogenous nature of cycles along the lines of Marx, Keynes, Schumpeter and Mitchell but with a more microeconomic foundation.

5. Some of the classic more contemporary studies on structural and accommodative endogenous money, credit and finance include Basil Moore (1988), who tends to support accommodative approaches; Randy Wray (1990) who analyses the institutional complexities of endogenous money and credit; and Robert Pollin (1991), who empirically supports structural credit and finance.

6. Recent studies on the destabilising role of the stock market on productive investment reinforce the theories of fictitious capital, speculative bubbles and the division between industry and finance. These themes are documented in the work of Andong Zhu (2004) on anomalous stock market liquidity; Elgelbert Stockhammer (2004) on the destabilising influence of US-UK-style financial dominance via equity markets; and Mathias Binswanger (2000) on the problems of financial dominance of industry.

7. Recent studies on Minsky's hypothesis and related policies include the destabilising influence of interest rate adjustments on investment by Gregg Hannsgen (2005); the more selective policy developed by Thomas Palley of asset-based reserve requirements; and the relevance of the FIH to Asia (Lino Sau 2003).

8. For some recent work on post-Keynesian perspectives on global money and credit, and the link to global growth and development, see Basil Moore (2004) on the need for a global currency, Paul Davidson (2004) on failures and policy potential in the international economy; Jan Kregel (2004) on international financial innovations for the developing nations; and Arestis et al (2005) on the need for a single global reserve currency and global reserve bank.

9. Some recent studies that examine this question of standard of living and governance on the basis of divisions of class, ethnicity and gender include David Brennan (2005) on pension reform, David Zalewski (2005) on the equity-efficiency tradeoff, and Jay Drydyk (2005) on democratic participation.

10. Recent studies on productive government spending point to the importance of education, health, infrastructure and communications, which are detailed in papers such as Phillip O'Hara (2004), who argues that globalisation has not destroyed the potential for productive fiscal policy; Philip Arestis and Malcolm Sawyer (2004) on fiscal policy as an important source of demand; and Christian Weber (2000) on the lack of productive government spending in the US causing recent recessions.

11. Modern studies reveal some considerable evidence in support of the Chartal taxes-drive-money theory, including, for instance, the work of Stephenie Bell et al (2004) on a debt-based theory of money; and George Kadmos and O'Hara (2001) on recent empirical material supporting money finance and budget deficits.

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