

Marx, Minsky, and the Great Recession

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Abstract

This paper challenges prevailing accounts of the financial origins of the Great Recession by engaging two distinct theoretical perspectives originating in the works of Karl Marx and Hyman Minsky. The paper argues that the domestic and global, financial and 'real' origins of the crisis are deeply intertwined as the financialization of the US economy and the globalization of production have been inextricably linked. Thus, the merits of a Marxian interpretation of the crisis surpass those of the Minskyan for at least two reasons. First, the structural causes of the Great Recession lie not in the US financial sector but in the system of globalized production which reflects the growing unevenness of capital accumulation on a planetary scale, as manifested in the global imbalances. Second, the belief originally fathered by Proudhon, reinvented by Keynes, and avowedly embraced by Minsky, that social problems have monetary/financial origins, and *ergo* could be resolved by tinkering with money and financial institutions, is fundamentally flawed. For the very recurrence of crises attests to the limits of fiscal and monetary policies as means to ensure 'balanced' accumulation. The paper argues that outward expansion of US productive capital, coupled with financialization at home, has transformed the deep structure of the US economy making it progressively less responsive to stabilization efforts along Minskyan lines. This is why crisis management policies aimed at propping up asset values and stabilizing corporate profits have failed to spur domestic investment and employment, and, ultimately, to benefit society at large.

Introduction

This paper challenges prevailing accounts of the financial origins of the Great Recession by engaging two distinct theoretical perspectives, originating in the works of Karl Marx and Hyman Minsky. Marx was firmly opposed to blaming crises on financial speculation, or on the recklessness of single individuals (Marx and Engels, 1975, p. 401). Speculation and panic may trigger crises, but to trigger something does not mean to cause it. For Marx, the ultimate origins of all crises lie in the 'real' economy of production and exchange. But the possibility of crisis is inherent in the very nature of money – the universal equivalent, which enables the temporal and spatial separation of purchase and sale. Tensions lying at the heart of capitalism as a production system endanger the realization of production, i.e. its transformation into money. Hence, crises of capitalist production often announce themselves as either monetary panic or commercial crash triggered by the apparent lack of money, or 'liquidity' in modern-day parlance.

Minsky, whose financial instability hypothesis has been invoked frequently in discussions of the recent crisis, was also opposed to blaming financial instability on human policy errors. He argued instead that, in an economy with privately owned capital assets and complex financial institutions, periods of prolonged prosperity encourage the move from a stable financial structure dominated by hedge finance to an unstable structure dominated by speculative and Ponzi finance. Financial instability is thus endogenously generated and developments in the financial sector end up disrupting the real economy.

The purpose of this paper is to examine the origins of the Great Recession by interrogating the explanatory power of these two approaches. This is by no means an easy task; for Marx and Minsky make strange bedfellows. Their theories recognized the crucial importance of money in a capitalist economy – the purpose of all production is to be transformed into money, to realize a

monetary gain. But Marx's concept of money could not be more different from Minsky's. Marx saw money as the social expression of value – the amount of socially necessary labor time embodied in a commodity. Money thus expresses the deepest contradiction of the capitalist production relations in 'a palpable form'. The Minskyan perspective prides itself on its Keynesian origins. Keynes was pre-occupied with the monetary aspect of the economy as it pertained to (1) the special character of money deriving from its scarcity (money cannot be produced, it has (close to) zero elasticity of substitution), (2) the ability of money to generate interest, and (3) the implications of (1) and (2) for the pricing of capital assets, investment, and employment. In contradistinction to Marx, Keynes accorded primary importance to interest-bearing capital where capital appears *as property* and not *as function*. And since capital in that form does not function (i.e. does not engage in immediate production), it does not directly exploit labor; class conflict appears obliterated since the rate of profit now forms an antithesis not with wage labor but with the rate of interest (see Marx, 1991 [1894], ch. 23). Minsky's work on the sources and nature of financial instability as an inherent property of the capitalist system is an outgrowth of this theoretical framework. Implicit in the Keynesian-Minskyan perspective is the insight that finance can repress production, overpower it, and 'decouple' from it (at least temporarily) to the detriment of the wider economy. However, if finance were controlled, regulated, restrained, some of the worst ills of capitalism could be kept at bay.

Regardless of these differences, the Marxian and Minskyan approaches share at least one common feature: they acknowledge the existence of inherent flaws in the capitalist system that account for its propensity to recurrent crises. However, while for Marx the inherent contradictions of capitalism were beyond human control, Minsky believed, much in line with the Keynesian tradition, that the crises arising from the permanent disequilibrium of the capitalist system can be contained by the concerted effort of Big Government and Big Bank.

Undoubtedly, the popular tale of the purely financial origins of the recent crisis dovetails

nicely with the belief that financial instability and crises, albeit tragically unavoidable and potentially devastating, can be managed by means of money artistry; thus, Minskyan interpretations of the crisis have been warmly received. However, as this paper argues, the merits of a Marxian interpretation of the crisis surpass those of the Minskyan for at least two reasons. First, the origins of the Great Recession lie not in the US financial sector but in the system of globalized production that exhibits a growing unevenness of capital accumulation on a planetary scale, as manifested in the global imbalances.¹ In this context, the deepening financialization of the US economy and the offshore relocation of US production are inextricably linked. Second, the belief that social problems have monetary/financial origins, and could be resolved by tinkering with money and financial institutions, is fundamentally flawed. For the very recurrence of crises attests to the limits of fiscal and monetary policies as means to ensure 'balanced' accumulation. Outward expansion of US productive capital, coupled with financialization at home, has transformed the deep structure of the US economy, making it progressively less responsive to stabilization efforts along Minskyan lines. This is why crisis management policies aimed at propping up asset values and stabilizing corporate profits have failed to spur domestic investment and employment, and, ultimately, to benefit society at large.

1. Marx on Money, Overaccumulation, and Crisis

For Marx the possibility of crisis harks back to the contradiction inherent in the most basic unit of capitalist production – the commodity. This contradiction derives from the fact that every commodity has simultaneously use value and exchange value; that is, it possesses a particular nature as product that serves human needs and a general nature as exchange value. It is money as an independent form of existence of exchange value that enables the separation of exchange and use value. But the

¹ An analysis of the domestic and global origins of the US housing, financial, and economic crisis in a Marxian framework is developed in Ivanova (forthcoming).

double existence of exchange value as a particular commodity and as money underlies the split of the act of exchange into two mutually independent acts of purchase and sale that may be temporally and spatially separated (Marx, 1993 [1939], p. 147).

Capitalism as a mode of production represents an uneasy dialectical unity of a monetary production economy and a financial system. The dual nature of money as a *measure of value* and as a *medium of exchange* underlies the essential conflict between the monetary base grafted on money as embodiment of the value of social labor and the financial system grafted on credit-money (money as a means of payment). The financial system, empowered by its ability to reproduce credit-money, strives incessantly to free itself from the monetary base. Empirically, this takes the form of an over-production of credit that exceeds, sometimes considerably, the value of the social product. But, ultimately, a real decoupling of credit and finance remains an impossible task. 'The monetary system is essentially Catholic, the credit system essentially Protestant... But the credit system is no more emancipated from the monetary system as its basis than Protestantism is from the foundations of Catholicism' (Marx, 1991 [1894], p. 727). Since the elaborate edifice of credit and finance rests upon the monetary base defined by conditions of simple commodity production and exchange, credit-money remains fictitious if it is not validated by the product of social labor (Harvey, 2006, p. 253). This unhappy truth, however, reveals itself only during crisis, 'when the apparent means of payment are exposed as only *representing* money, rather than as money itself' (Arnon, 1984, p. 566).

The banking system – the institutional organization of the money form – embodies and amplifies the contradiction of the commodity form and thus of the very relation of production. Unsurprisingly, the former is a frequent epicenter of crisis. In a system of production based on credit, any major disruption to the flow of credit is bound to trigger a crisis – 'At first glance, therefore, the entire crisis presents itself as simply a credit and monetary crisis' (Marx, 1991 [1894], p. 621). But this may be surface appearance only, as monetary panic often precedes commercial crash on the way to

full-blown industrial crisis. In a commercial crisis, capital in the form of commodities loses its capacity to be transformed into money capital. But what appears as a crisis of realization is actually a crisis of overproduction whose roots lie outside the sphere of circulation. For the overproduction of commodities is symptom of overproduction of capital (overaccumulation) – the formation of surplus capital relative to the opportunities for its employment. The crisis may still appear as a failure to realize production in exchange triggered by the lack of ‘money’. However, what is truly lacking is ‘money, not as a medium of circulation but as money’ (Marx, 1993 [1939], p. 405); that is, money as objectified human labor, as ‘value for-itself’ (Ibid, p. 872). In crisis, ‘representation’ will not do; money has to be present ‘in person’ as money proper, as the universal equivalent, as surplus value realized as *money*, for which the existing commodities can be exchanged.

2. Minsky on Finance and Instability

Minsky developed his financial instability hypothesis as an alternative to standard economic theory epitomized in the neoclassical synthesis that, in his view, exhibited two key failures – the inability to integrate money and capital assets into economic analysis, and the resultant inability to explain financial instability (Minsky, 1982, pp. 91-92). He considered his theory a variant of Post Keynesian economics that integrated financial institutions and their usages into economic analysis to become ‘an investment theory of the business cycle and a financial theory of investment’ (Minsky, 1982, p. 95). Keynes rejected the main proposition of the quantity theory of money – that an increase in the quantity of money would only lead to a rise in the price level of output (goods and services) and argued instead that it would also affect the pricing of capital assets. Further, changes in the propensity to hoard money (or the liquidity preference) would primarily affect not prices, but the rate of interest (Keynes, 1937, p. 216). The latter determines the prices of capital assets at given level of profit expectations, and thus the volume of investment which, in turn, influences the level of out-

put and employment. Because 'it depends on two sets of judgments about the future, neither of which rests on an adequate or secure foundation – on the propensity to hoard and on opinions of the future yield of capital-assets' (Keynes, 1937, p. 218), investment tends to fluctuate widely, which accounts for the 'permanent disequilibrium' of the capitalist economy.

In an economy where investment demand is determined by a combination of the valuation of the existing capital stock, cost of external financing, and the supply price of investment output, a collapse of asset values leads to a collapse in investment. Minsky located the causes of asset price deflation and of investment fluctuation in the debt structure and in the financial system. In particular, he identified three income-debt relations for economic units – hedge, speculative, and Ponzi finance (Minsky, 2008 [1986], pp. 230-233; 1982, pp. 105-106). The first type financing units have a larger share of equity in their liability structure that allows them to pay existing debt obligations out of cash flows (profits). The second type units can pay only interest but not the principal of their obligations; thus, a continuous roll-over of liabilities is required; that is, additional borrowing to pay off the principal. Ponzi units do not generate sufficient profits to pay either the interest or the principal, and need to finance their obligations by further borrowing. If borrowing is not possible, they will have to sell assets to meet payments. The particular mix of hedge, speculative, and Ponzi finance at any point in time reflects the historical development of the economy and shapes long-term expectations. With the increase of the ratio of speculative and Ponzi finance in total liabilities, the economy grows more sensitive to interest rate variations and changes in asset prices and becomes potentially unstable. If access to credit is impaired for whatever reason, inability to finance debt obligations will trigger a process of deleveraging which, in turn, will cause a collapse of asset values (Minsky, 1992b, p. 8).

Keynes (1997 [1936], p. 376) believed that economic planning along his theoretical lines would gradually lead to the 'euthanasia of the rentier, of the function-less investor', who profited

from interest and rent 'without sacrifice'. By contrast, Minsky seems to have lost faith that the rentier aspect of capitalism would reveal itself as a transitional phase. Correspondingly, he remained deeply concerned with containing the disasters perpetually lurking in the background of a rentier-driven economy. The key question that animated Minsky's theoretical inquiries was 'Can "It" [another Great Depression] happen again?'

The nature of the financial system makes cyclical depressions of differing magnitude unavoidable. In a deep depression cycle, an initial decline in income or in particular asset values sets off a general decline in asset values, which triggers a chain of mutually reinforcing defaults. In a mild depression cycle, price deflation is restricted to specific asset classes and a chain reaction can be avoided. Which type of cycle occurs depends on the particular condition of the financial structure comprised of the assets owned and the liabilities emitted by economic units, financial intermediaries, and specialized government agencies such as the Federal Deposit Insurance Corporation and the Federal Housing Authority. The existence of latter organizations presupposes that in a crisis certain losses will be absorbed by the government leading to increases in government debt and the money supply (Minsky, 1964). Thus, the key indicators of financial fragility include not only the relative share of hedge, speculative, and Ponzi finance in the economy, but also the willingness of the authorities to refinance units at concessionary terms and their ability to sustain aggregate profits and wages when market developments slow down the flow of profits and wages (Minsky, 1992-3, p. 80).

Minsky saw the preservation of profit levels as a key condition for avoiding financial meltdown. His recipe for avoiding another Great Depression revolved around what he called Big Government and Big Bank – two entities indispensable for stabilizing profits in time of crisis firstly, by means of countercyclical spending as a built-in feature of the budget structure complemented by discretionary action, and secondly, by low interest rate policy and lender-of-last-resort interventions by the Federal Reserve (Fed). Recessions are the natural and unavoidable conclusion of the business

cycle; however, as long as Big Government and Big Bank fulfill their functions, as they have generally done in the postwar period, their magnitude can be controlled and their worst forms contained.

3. Domestic and Global Origins of the Great Recession

The financial crisis that triggered the Great Recession was preceded by a dramatic housing bubble. In 1992-2006, US residential investment and housing construction experienced the longest sustained boom in postwar history with housing prices and turnover dramatically overshooting the historical trend. The median home price roughly doubled between 2000 and 2006. The S & P Case-Shiller 10-City Composite Home Price Index, which stood at 100.74 in January 2000, peaked at 226.8 in April 2006. New home sales averaged 1.156 million per year in 2003-2006. For comparison, in the 1970s, 1980s, and 1990s, the average number of new houses sold per year was respectively 655,200, 609,000, and 698,300. At first sight, the housing crisis lends itself nicely to Minskyan interpretations. Whalen (2009, p. 12) sees the origins of this 'classic Minsky crisis' in 'a housing boom fueled by rising expectations, expanding debt, and financial innovation. Then the bubble burst, creating first a credit crunch, then a broader banking and stock-market crisis, and now a recession'. In a similar vein, Wray (2009, p. 809) blames the crisis on unregulated 'money manager capitalism – characterized by highly leveraged funds seeking maximum total returns (income flows plus capital gains) in an environment that systematically under-prices risk'.

Minsky's theory assigns primary importance to investment demand, which is determined by the expected future profits and the cost of external financing. Accordingly, an argument can be made that expectations of continued housing price appreciation fueled borrowing and residential investment. Securitization and various financial techniques that expanded the secondary market for mortgages further boosted the supply and demand for housing. Credit expansion and the relaxation of lending standards bid up housing prices and encouraged yet more financial innovation and lever-

age; thus, the boom fed on itself.

This presentation of events, while superficially capturing some aspects of the situation, actually tells us remarkably little about the underlying causes of the crisis. Minsky's key contention, that financial instability is endogenously generated, implies that not only financial but also 'real' crises arise as a result of the inner workings of the financial system: 'History shows that every deep and long depression in the United States has been associated with a financial crisis, although, especially in recent history, we have had financial crises that have not led to a deep and long depression' (Minsky, 1992a, p. 11). Apart from the fact that correlation does not prove causation, Minsky's theory is vague as to the factors that trigger substantial changes in the behavior of the financial actors and in the workings of the financial system over the business cycle. Following his presentation, the initial phase of the cycle is characterized by financial stability and relative 'tranquility'. Gradually, rising profits encourage firms to increase investment by borrowing for that purpose. In time, borrowing becomes riskier and there is a tendency for debt to grow faster than income/profits, which leads to corresponding changes in the liability structure of economic units. It is not entirely clear what is the driving force behind this tendency. One can surmise that it has to do with the self-sustaining dynamic of the boom as rising profits lead to euphoria and feed the desire for more debt-financed investment, and, in particular, with the role of 'banks' – a term Minsky uses for all types of financial intermediaries. Banks are profit-seeking, speculative enterprises by nature that not only engage in speculative finance, but also serve as 'the transmission belt toward speculative financing by others' (Minsky, 1977, p. 20). On the one hand, the term to maturity of bank assets (loans) is usually longer than the maturity of their liabilities; thus, there is a refinancing cost upon which they have to 'speculate'. On the other hand, in order to gain market shares, they have an incentive to encourage other units to substitute short-term debts for long-term debts. It is essential, however, that banks have access to funds at a cost that allows them to maintain profitability, and financial innovation is a means

to push up the limits of profitability. For example, financial innovations can increase the velocity of money and thus enable the circulation of a given amount of money without triggering any changes in the interest rate (Minsky, 1957).

This presentation of the business cycle encounters two challenges. First, it offers no explanation as to what makes the tranquility stage at all possible under the ‘permanent disequilibrium’ of the capitalist economy. Correspondingly, apart from vague psychological references to investor ‘optimism’ and ‘overconfidence’, the source of the boom, and thus of financial instability, remains unexplained since ‘[a] theory of a systemic discoordination ought to be founded upon, or at least acknowledge, a theory of system-wide coordination’ (Prychitko, 2009, p. 208). Second, the financial instability hypothesis is based on microeconomic analysis of the behavior of individual firms that increase their debt and leverage ratios in the course of the business cycle. This framework is then generalized to the macroeconomy without a careful consideration of the link between micro and macro level of analysis (Lavoie & Seccareccia, 2001). However, there is no economic law that says that the leverage ratios for the total economy must grow during economic expansion; nor is this claim supported by empirical evidence (Bellofiore & Halevi, 2009). Any analysis of borrowing patterns and total debt levels should take into consideration the interest rate policy of the central bank and the behavior of government debt and deficit – two factors that are exogenous to the financial system but have a formidable impact upon its workings.

However, focusing, exclusively or primarily, on the low interest rate policy pursued by the Fed under Alan Greenspan, as many commentators have done, would also provide only a limited insight into the origins of Great Recession. Between January 2001 and January 2002, the Federal funds rate and the discount rate were brought down from 6 to 1.25 percent and remained at that level for about a year. During his tenure, Chairman Greenspan earned a lot of praise for masterful tinkering with interest rates. Shortly before his departure from the Fed, he was celebrated by his

eminent colleagues as ‘the greatest central banker who ever lived’ (Blinder & Reis, 2005, p. 3). After the housing crash, Greenspan was largely blamed for having caused the bubble with exactly the same policies that distinguished him at the Fed. Purportedly, he kept the interest rates ‘too low for too long’ and easy credit multiplied by financial innovation fueled the housing bubble. Undeniably, low interest rates and the cheapening of credit contributed to the housing bubble. However, as I argue below, the causes of the latter cannot be reduced to purely financial factors or domestic policy errors, and have much to do with fundamental conditions in the global system of capital accumulation.

The advent of easy money should not be attributed purely to Greenspan’s policy choice for at least two reasons. First, since the 1970s, the US economy has undergone profound structural changes that are far more fundamental than, and cannot be reduced to, the emergence of Minsky’s ‘money manager capitalism’ (a process corresponding to what has often been termed as ‘financialization’) in the early 1980s. The falling profitability of US manufacturing and the rise of overseas competition in the 1960s, along with the key currency status of the US dollar which conferred upon its owner the privilege of seigniorage, propelled a massive wave of production outsourcing. The decline of domestic mass production and the shift toward a services-based economy radically transformed work and the wage relation. It led to the dismantling of employment protection, the proliferation of ‘flexible’, low-paid, no-benefit jobs, and the emergence of economic insecurity as a structural feature of the American way of life (Lipietz & Cameron, 1997; Vallas, 1999; Uchitelle, 2007). The combination of persistent job outsourcing to low-wage countries and domestic wage stagnation made the US economy painfully dependent on credit expansion to sustain rising levels of personal consumption. Generous access to consumer credit has reconciled deepening income inequality and economic growth (Brown, 2008). In other words, easy money became an imperative for growth in the new economy.

Second, a significant share of the earnings of the export-oriented periphery has been rein-

vested in American debt – the explosion of foreign exchange reserves in the emerging markets has been inextricably linked to the explosion of consumer debt in the US. The loose-money policy of the Greenspan's Fed (and more recently of Bernanke's Fed) comfortably relied on the generous contributions of the hard-working, export-oriented periphery along with banks and institutional investors from the core. Evidence suggests that the massive inflow of foreign capital into Treasury securities has consistently depressed the yields and thus a number of key interest rates.² Furthermore, foreign demand for agency debt, collateral debt obligations, and various housing-related derivatives gave a strong boost to the securitization boom in the US.

Minsky (1987) acknowledged that securitization went hand in hand with the globalization of finance and he further anticipated that 'global financial integration is likely to characterize the next era of expansive capitalism' thereby creating the possibility for global financial fragility and an international debt deflation (Minsky, 1995, p. 93). Nevertheless, he failed to perceive the symbiotic relation between global finance and global production in a world where erratic financial movements reflect the growing unevenness of capital accumulation. Marx, however, recognized more than 150 years ago that '[t]he tendency to create the *world market* is directly given in the concept of capital itself' (Marx, 1993 [1939], p. 408). Therefore, one significant advantage of the Marxian interpretation over the Minskyan reading is the former's ability to integrate the globalization of capitalist production into an explanation of the origins of the present crisis.

Marx lived through the stage of 'competitive capitalism' when the internationalization of capital was largely confined to the circuit of commodity capital (international trade). During the stage of imperialism in the late nineteenth and early twentieth century, internationalization spread to the circuit of money capital. In the post-World War II period, internationalization extended further to reach its final stage – the internationalization of productive capital which gave rise to a new inter-

² This argument presented in this paragraph is comprehensively developed in Ivanova (forthcoming).

national division of labor (Palloix, 1977). The deep structural crisis of the 1970s accelerated this process. Two were the main strategies through which capital sought to resolve the crisis: reorganization of the labor process (domestically and on a world scale) along with the spatial and temporal restructuring of production and exchange. In what follows, I emphasize the link between the export-driven industrialization of the periphery and financialization in the core. In particular, I argue that the much debated financialization of the US economy cannot be properly understood in separation from the outward expansion of US productive capital and the organic linkages and mutually reinforcing feedback effects between these two processes.

Since its very early stages, industrialization of the periphery has been shaped and influenced by the needs and demands of foreign capital. Unsurprisingly, the economic strategies of ‘emerging’ countries have been geared to export-oriented growth. But the parameters of this process were radically altered in the decades following World War II as developing countries’ integration in the capitalist world economy no longer occurred primarily or exclusively through the traditional channel of international trade, but increasingly through the inclusion into what was later termed commodity chains, value chains, or global production networks. Falling profitability in the core and the desire to capitalize on the low labor costs in the periphery were among the prime motives behind this strategy of industrial restructuring. The underlying problem, however, was the seriously diminished capacity of capital to effectively control labor in the core. As noted by Hymer (1972, p. 97),

Twenty years of prosperity have changed labor’s expectations about consumption standards and work intensity. The greening of Europe is about to begin. A similar tendency toward labor shortage, that is, a decline in the margin between labor’s production and consumption, is emerging in Japan. In the United States resistance to work seems about to reach acute proportions from capital’s point of view. Firms from all these countries are looking more and more toward labor in outlying fields.

Nevertheless, until the late 1980s, the relocation of production to peripheral countries remained a relatively limited phenomenon, confined to certain industries and countries. It was the disintegration of the Soviet bloc that ushered in a worldwide restructuring of production and social re-

lations as it enabled transnational capital to surmount the last remaining obstacles to global interpenetration. First, the hurricane of liberalization during the 1990s largely freed goods and services (along with financial and capital flows) from the control of individual states. This 'leveling of the playing field' accelerated the 'global business revolution' that brought into being an unprecedented degree of firm-level concentration across the value chain in a wide range of sectors and on a global scale (Nolan et al, 2001). Second, in the 1990s, vast pools of surplus labor were assimilated into the global labor supply. By 2000, the addition of China, India, and the former Soviet bloc to the global system of production and consumption effectively doubled the global labor force and shifted the balance of power in the global economy away from workers and toward capital (Freeman, 2010). The surge in the global labor supply paralleled rising rates of investment in tradable industries which, in all likelihood, peaked in the 2000s. As reported by the Bank of International Settlements (2009, p. 75),

In Brazil, China, India, Korea and Poland, the average per-country investment in gross fixed capital in the tradable sectors (agriculture, mining and manufacturing) increased by 3.2 percentage points between 2003 and 2007, to 39% of total fixed investment. By comparison, in the first half of the 1990s tradable industries had accounted for about 28% of total fixed investment in China (vs 36% in 2003–07) and about 19% in Brazil (vs 56% in 2003–06).

Various signs of overaccumulation are now announcing themselves in the periphery and beyond as the massive embrace of export-oriented growth has augmented global manufacturing overcapacity and boosted overproduction thereby squeezing global prices and profits (Brenner, 2009; McNally, 2009). For example, China, a poster child of peripheral industrialization, and a global manufacturing powerhouse has entered a typical 'Marxian' pre-crisis situation where profit margins are falling, while the total mass of profits as a share of GDP is still rising (McKay & Song, 2010, pp. 15-16). Capitalist enterprises have attempted to cope with falling profitability by suppressing wages while still overinvesting in industry and manufacturing. Needless to say, this 'solution' is bound to aggravate overcapacity domestically and globally, putting further pressure on prices and profit rates.

The generation of super-profits in the periphery accelerated financialization in the core. This has been most pronounced in the US, where economic growth since the late 1990s has been powered by two consecutive asset bubbles (the dot-com bubble and the housing bubble) along with a huge credit-driven consumption bubble. Financialization is a complex process whose different dimensions include the global integration of financial markets, the growing importance of institutional investors and shareholder value, and the rising share of rentier income in GDP. Minsky's definition of 'money manager capitalism' emphasizes the second aspect:

Capitalism in the United States is now in a new stage, 'money manager capitalism', in which the proximate owners of a vast proportion of financial instruments are mutual and pension funds. The total return on the portfolio is the only criteria used for judging the performance of the managers of these funds, which translates into an emphasis upon the bottom line in the management of business organizations (Minsky, 1996, pp. 358-359).

In this analysis, financialization of the US economy is broadly understood as the general re-orientation away from profit-generation through investment in production and toward financial rent-seeking by an expanded rentier class. Membership in the latter extends beyond the core constituency of 'function-less' investors, who derive rent on the basis of ownership of loanable capital, to include layers of other non-productive elements able to extract rent because of their position relative to the financial sector such as stockbrokers, mortgage brokers, and various financial consultants. Further, the spread of financialization has been strongly correlated not only with the growth in size and scope of the financial sector, but also with increased financial investment by non-financial businesses. A number of studies have concluded that the so-called 'financialization of the non-financial corporate sector' in the US has led to lower rates of capital investment and to a slowdown of capital accumulation (Crotty, 2005; Stockhammer, 2004; Orhangazi, 2008). This tendency has been linked to the emergence of a system of globalized production characterized by the concentration of labor-intensive production processes in low-wage countries such as China, whose paramount importance as supplier of first resort for the US market cannot be exaggerated. China's goods deficit with the US grew from \$56.9 billion in 1998 to \$266.3 billion in 2008. Collapsing demand in 2009 brought it

down to \$226.8 billion which represented 45 percent of the total US goods deficit on a Census basis (\$503.6 billion). In the meantime, the goods deficit with China has rebounded to \$226.7 billion as of October 2010 making it highly likely that by the end of the year it will reach its highest level ever³. Chinese officials state that American companies operating in China account for more than 60 percent of China's exports to the US (Pomfret, 2010)

US companies have played a major role in the acceleration of foreign direct investment (FDI) since the mid-1980s and, correspondingly, reaped substantial benefits from the formidable expansion of global value chains (Nolan et al., 2001). The vertical disintegration of production across the globe has lowered input costs (including labor cost), enabling US lead firms to maintain and even raise cost mark-ups and profit rates without having to increase product prices (Milberg, 2008). This has had important consequences for the domestic economy. First, under the condition of stable and even falling import prices, stagnating real incomes in the US have not precluded the rising consumption of imported goods. Second, due to the sizeable share of imports in the consumer basket, they have significantly contributed to the stability of the general price level. Finally, while offshore outsourcing has boosted corporate profits, back at home the latter have been largely employed to raise shareholder value, mostly through share buybacks and higher dividend payments, at the expense of investment in productive assets that could benefit the US economy by raising productivity, employment, and income (Milberg & Winkler, 2010).

The pattern of ongoing restructuring in the world economy confirms the continuing and growing importance of penetration into the periphery for the reproduction of global capitalism. Following the 'global slump', in 2009, total FDI inflows fell 37 percent to \$1.114 trillion, while outflows fell some 43 percent to \$1.101 trillion. What is, however, remarkable is that the 27 percent decline of FDI inflows to developing and transition economies was much smaller than that for developed

³ Data drawn from the US Department of Commerce.

countries (44 percent). Thus, the former countries' share in global FDI inflows kept rising: for the first time ever, these economies are now absorbing half of global FDI inflows, while China became the second largest recipient of FDI after the US (UNCTAD, 2010, pp. xviii-xix). And it cannot be stressed enough that this globalization of production does not in the least entail a tendency towards equalization of the conditions of production and exchange on a world scale, but rather a tendency towards deepening differentiation. Because, as Palloix (1977, p. 3) observed in the earlier stages of this process, the internationalization of capital 'signifies the shifting of industrial activities to a world level, so that they may be eliminated in the advanced capitalist nations'. This tendency has progressively unfolded over the last three decades but nowhere more forcefully than in the US – the 'most advanced' capitalist nation with some 86 percent of its labor force presently employed in service provision.

In sum, the globalization of production and the financialization of the US economy have been linked via two main channels. First, US transnational companies have employed the formidable profits generated through offshore outsourcing of their production activities to engage in lucrative financial operations at home. This business model has produced a combination of rising trade deficits and financial asset appreciation in the US. Second, a generous portion of the earnings of the export-oriented periphery has been reinvested in US Treasury securities, further boosting domestic consumption, credit expansion, and asset price inflation. The two channels have been linked through the dense web of financial markets and intermediaries comprising the international mechanism of credit and debt recycling whose underlying source of liquidity – the US current account deficit – peaked at \$803.5 billion in 2006. Thus, the fact that the Great Recession was triggered by the burst of the domestic debt bubble should not deceive us of its global origins, which lie in the grossly imbalanced system of global capital accumulation.

4. Can 'It' Happen Again: From Socialization of Investment to Communism of Capital

Any attempt to apply Minsky's theory to the analysis of the present crisis has to tackle a number of challenges. As argued above, the globalized and financialized American economy of today appears increasingly different from the one Minsky portrayed and analyzed. In the latter economy, investment demand was the key determinant of corporate profits, which, in turn, were largely reinvested. Bank lending occurred 'mainly to business' (Minsky, 1982, p. xx) and served to finance investment-related activities. Financial speculation affected the economy by bidding up the price of capital assets beyond levels that could be validated by future profits. While it is possible to craft an argument along these lines to explain the supply side of the housing bubble, the demand side remains unexplained. The bubble would not have reached its remarkable proportions without the engagement of ordinary households acting as speculative 'investors'. While Minsky acknowledged that the link between wage income and consumption had progressively weakened in the postwar period, he argued that household borrowing for consumption and housing was typically financed by hedge financing. Thus, 'only a fall in income (wages) can transform such contracts into examples of Ponzi financing' (Minsky, 1982, p. 32). Apparently, Minsky did not contemplate a scenario where households become increasingly entangled in speculative and Ponzi borrowing to finance consumption and/or the acquisition of housing at prices that cannot be validated by any rational calculation of future income.

In the context of deepening financialization of the US economy, Minsky's view of business investment as the key source of profits is also difficult to reconcile with the reality of the last decades. Except for a brief respite in the late 1990s, the rate of net investment, apart from residential construction, has been either stagnant or on the downward trend since the late 1960s (Beitel, 2009). Correspondingly, there has been a decoupling of the rate of profit and the rate of net investment. Corporate profits, in particular over the last decade, have increasingly been sustained by a combination of government and household debt. In fact, credit financing surpassed labor income as the key

sustainer of consumer demand in the US during the bubble years. The radical transformation of banking and financial services over the last three decades has institutionalized the normalcy of rising personal debt. The reorientation of large corporations toward market finance and away from bank loans has encouraged commercial banks and a host of other financial intermediaries to turn toward 'financial expropriation' – the extraction of financial profits directly out of personal labor income (Lapavitsas, 2009). This modern form of class-monopoly rent resembles traditional usury in that the former is derived not from enterprise profit but from labor income. In sum, the extreme financialization of all facets of human existence has increased the size, scope and intensity of financial fragility, while the threat of devastating financial instability is now perpetually lurking in the background. Thus, it is questionable to what extent and for how long the progressive Ponzification of the private economy could be counteracted by a progressive Ponzification of the government.

This question brings us to the second and biggest challenge of Minsky's theory, which concerns its excessive faith in the power of artful tinkering with money and government debt to cure economic ills. Money/finance is thus perceived simultaneously as the source of instability and the principal lever to tinker with the system. According to Minsky's theory, every business cycle contains the seeds of a speculative boom which tends to absorb the available liquidity and drag the financial system towards a deflationary depression. The move of the private economy towards a liability structure dominated by speculative and Ponzi financing is accompanied by a contraction of 'ultimate liquidity' – assets with fixed contract value and no default risk, which include Treasury currency, specie, and, most importantly, 'domestically owned government debt outside government funds' – and a fall in what Minsky calls 'Pigou velocity of money' – the gross domestic product divided by the amount of ultimate liquidity (Minsky, 1982, p. 9). Consequently, a crisis or recession will require an increase of ultimate liquidity, or government debt that can be 'leveraged' (i.e. serve as collateral for borrowing) thus preventing a collapse of asset values, profits, and investment. Complemented with

'extra-market refinancing' by the Fed, rising government debt will 'validate' the liability structure engineered by financial innovations and speculation during the boom thereby 'aborting' a deep depression. Minsky refuses to entertain the idea that asset prices may have to fall simply because they are too high and a relative price adjustment may be necessary to restart a new cycle of accumulation.

This analysis does not suggest that Minsky deliberately favored the enrichment of finance at the expense of the rest of society. However, it is difficult to overlook that his recipe for aborting deep depressions offers 'fragile finance' a convenient way out of its self-created debacle, while absolving it from responsibility for the latter. Unsurprisingly, in the eye of the recent financial storm, Wall Street insiders were keen to embrace the popular version of the inevitable 'Minsky moment', while overemphasizing the necessity of a 'stabilizing' bailout solution. However, these crisis management policies, on the surface consistent with Minsky's recommendations, have acquired a sinister spin as their implementation has *de facto* constituted a socialization of the cost of financial blunder and plunder on a previously unimagined scale. The putative benefits of this communism of capital have yet to trickle down to the working and unemployed segments of the populace.

Since the fall of 2007, Big Government and Big Bank have done the utmost in terms of fiscal stimuli, massive bailouts of insolvent firms, two waves of quantitative easing, purchases of 'toxic' mortgage-backed securities, and the relaxation of accounting standards to halt the collapse of asset values and restore corporate profits. In the summer of 2009, the total amount of what had been spent, lent, or committed to prop up the unstable economy was estimated at \$12.8 trillion according to one source (Pittman & Ivry, 2009) and at \$23.7 trillion according to another (Braithwaite, 2009). The success of these efforts has been moderate at best. They succeeded in restoring the earnings of big business, but have not stemmed the massive wave of foreclosures or lowered unemployment. A balance sheet recovery of corporate profits started in 2009, while in the third quarter of 2010 profits

of American business reached an annual rate of \$1.659 trillion in nominal terms⁴ (the highest figure since records began over 60 years ago), which represents 12.9 percent as a share of national income. The stock market has recovered, although still below previous heights. But in addition to stubbornly high unemployment, there are no signs of recovery in the troubled area of housing. Government-sponsored experiments such as loan modifications and homebuyer tax credits have failed to initiate a turnaround in the housing market. According to the S & P Case-Shiller 20-City Composite Index, home prices in October 2010 were still 29.6 percent below the peak reached in April 2006. The failure to stem foreclosures is likely to pose further challenges to housing prices. Over 2.8 million and 2.9 million foreclosures were initiated in 2009 and 2010, respectively.

It is important not to treat the actual crisis management policies as a matter of inevitability but as a deliberate choice by government authorities to privilege the interests of finance over those of the rest of society. In the summer of 2007, when upheaval in the mortgage market started, there were two options (or a combination thereof) to manage the unfolding crisis: devaluing money or assets, devaluing labor or capital. It was decided to prevent deflation of asset values and collapse of corporate profits at all costs. Contrary to what Minsky thought, propping up corporate profits does not necessarily sustain wage levels or preserve employment. Companies have behaved more along the lines that Marx would have predicted; they attempted to weather the crisis by cutting wages and laying off workers. In 2009, labor productivity increased by 3.5 percent and unit labor costs fell 1.6 percent, the biggest drop since records began six decades ago. At the same time, the total wage bill decreased \$250 billion between 2008 and 2009⁵. Marx saw crises as the means by which capital attempts to resolve its contradictions on its own terms and this insight bears on the totality of crisis management efforts by monetary and fiscal authorities. In fact, the latter have served to consolidate

⁴ These are corporate profits with inventory valuation and capital consumption adjustments drawn from the Federal Reserve Board of Governors Flow of Funds, Release date: 9 December 2010.

⁵ Data drawn from the US Bureau of Labor Statistics and from the Federal Reserve Board of Governors Flow of Funds.

financial power and thus to tighten the grip of *haute finance* and big business on the US economy. There is little evidence, however, that this 'success' bodes well for the future of social or economic stability in the country.

It is essential to acknowledge that Minsky's theory owes a lot to the particular historical context in which it originated – the experience of the advanced capitalist states during the first three postwar decades, the so-called Fordist period of capitalism. This experience is then generalized to form a universal foundation for policy. Consequently, Minsky kept repeating throughout his life that '[t]he core countries of the capitalist world have not had a big depression in the 50 years since the end of World War II [because] Big government provide[d] insurance against an utter collapse of profit flows and asset prices such as happened between 1929 and 1933' (Minsky, 1996, p. 359). Stabilizing profits was meant to prevent a collapse of investment, output, and employment. But could it be that these policies supposedly worked as stated in the earlier period because the underlying structural conditions of the US economy were different? As noted by Wray (2009, p. 813), the Depression and World War II 'directly contributed to the creation of an environment conducive to financial stability' by wiping out most financial assets and liabilities, thereby relieving firms and households from the burden of excess debt. But the key difference is that the underlying structure of the post-war accumulation regime rested on a large productive base that is no longer there.

Minsky (1996, p. 362) considered the dependence of non-financial businesses on 'external funds to finance the long-term capital development of the economy' a key source of instability. This provided an important rationale for government intervention – 'Once Big Government stabilizes aggregate profits, the banker's reason for market power loses its force' (Minsky, 2008 [1986], p. 367). However, there is evidence that investment decisions of large firms in the recent past have not been limited by the high cost of external financing as said companies have had at their disposal significant internal funds that could have been, but were not, used for investment. As Bates et al. (2006) shows,

between 1980 and 2004, the average cash-to-assets ratio for US industrial firms increased 129 per cent leading to a dramatic fall in average net debt, which turned negative in 2004. These high cash holdings have been negatively related to capital expenditure. The situation is no different at present. In the midst of the most spectacular corporate profit recovery ever, the nation's biggest companies, deriving a significant share of their income abroad, are awash in cash, but either hoarding it, distributing it to shareholders, or investing it in financial assets (such as their own stock); they are not using it to expand or improve their domestic capital base. Arguably, it was this 'offshoring-financialization linkage' which underlay the diminished capacity of the non-financial sector to lead and sustain an economic recovery after the crash of 2008 (Milberg & Winkler, 2010). This is why the effort to stabilize corporate profits by propping up financial asset prices failed to stimulate domestic employment and benefit society at large.

In light of the above, one final challenge of Minsky's theory concerns the social implications of stabilizing finance. Keynes (1997 [1936], p. 372) famously pinpointed two major flaws of the capitalist system – the inability to maintain full employment over time and 'its arbitrary and inequitable distribution of wealth and incomes'. Keynes's concern was of pragmatic nature – he recognized that said phenomena were incompatible with maintaining an adequate level of effective demand. In a way, Minsky's views represent a step backwards from even this moderate position. His preoccupation with maintaining financial stability – saving capitalism and its financial system from one another, while keeping them both intact – seems to take precedence over social concerns.

It may also be maintained that capitalist societies are inequitable and inefficient. But the flaws of poverty, corruption, uneven distribution of amenities and private power, and monopoly-induced inefficiency (which can be summarized in the assertion that capitalism is unfair) are not inconsistent with the survival of a capitalist economic system. Distasteful as inequality and inefficiency may be, there is no scientific law or historical evidence that says that, to survive, an economic order must meet some standard of efficiency and equity (fairness) (Minsky, 2008 [1986], p. 6).

One problem with this view is that the practice of bailing out finance tends to aggravate both inequality and inefficiency. Minsky was aware of the social limitations of the struggle to rein in finance,

but considered these 'side-effects' the lesser evil as, in his view, they did not necessarily threaten the existence of capitalism. He conceded that government intervention has successfully prevented deep depressions, but has failed to sustain employment, growth and price stability. The economy has been trapped in a vicious cycle swinging between the extremes of deflationary depression and inflation/stagflation – the effort to abort depressions leads to inflation, while fighting inflation rekindles the threats of crisis and depression (Minsky, 1982, pp. xv-xvi).

But if capitalism is a system generating inequality and inefficiency in the course of perpetual swings between depression and stagflation, then one is left seriously wondering as to whether the benefit of preserving this system outweighs the social cost of the effort.

Conclusion

Minsky's work provides interesting insights into the mechanics and *modus operandi* of the financial sector, the dynamics of asset bubbles, the role of uncertainty, and the deflationary impact of rising debt levels on the overall economy. However, as this paper strives to emphasize, the financial form of the recent crisis obfuscated the latter's 'real' origins, which lie in the grossly imbalanced global system of capital accumulation. An analysis inspired by Marx's theory would be more useful in tracing the organic linkages between the deepening crisis of globalized production and the social and economic crisis in the US, of which financialization is only the perceptible appearance. Traditional fiscal and monetary policies, relying on the manipulation of government spending and the expansion of the money supply, are unable to tackle the structural problems of the globalized US economy, let alone offer a lasting solution to this systemic crisis of US and global capitalism.

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