Cambridge Journal of Economics 2011, **35,** 853–871
doi:10.1093/cje/beq053
Advance Access publication 13 February 2011

Money, housing and world market: the dialectic of globalised production

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This article offers an interpretation of the domestic and global dimensions of the US housing, financial and economic crisis in a Marxian framework. My key argument is that the origins of the Great Recession can be fully understood only within an analysis of the system of globalised production and the corresponding division of labour manifest in the symbiotic relationship between the financialised US-centred core and the commodity-producing periphery. The imbalance between production and finance in the US economy mirrors the global imbalance between the ability to produce and the capacity to consume.

Key words: Karl Marx, Money and crisis, Great Recession, US housing crisis, Global imbalances
JEL classifications: E40, E50, E60, F30, F40, F50

1. Introduction

The prevailing accounts of the crisis that started in the US mortgage and securities markets in the summer of 2007 have tended to emphasise its financial origins. Lack of regulation, runaway innovation and financial speculation are among its most commonly cited causes. Karl Marx would have found such explanations unoriginal at best. For, as he observed long ago,

> the very recurrence of crises despite all the warnings of the past, in regular intervals, forbids the idea of seeking their final causes in the recklessness of single individuals. If speculation towards the close of a given commercial period appears as the immediate forerunner of the crash, it should not be forgotten that speculation itself was engendered in the previous phases of the period, and is therefore, itself a result and an accident, instead of the final cause and the substance. The political economists who pretend to explain the regular spasms of industry and commerce by speculation, resemble the now-extinct school of natural philosophers who considered fever as the true cause of all maladies. (Marx and Engels, 1975, p. 401)

The attempt to distinguish the surface appearance of a phenomenon from its underlying cause is a hallmark of Marx's work. Thus, speculation and panic may trigger crises, but to trigger something does not mean to cause it. The Marxian perspective locates the origins of crises in the 'real economy'—the sphere of material production and exchange. But the

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possibility of crisis is *ex-ante* given in the very nature of money—the universal equivalent, which enables the temporal and spatial separation of purchase and sale. The uneven development of the forces of production generates disproportionalities that endanger the realisation of production, i.e. its transformation into money. Thus, crises of overproduction ultimately resurface as mismatches of supply and demand in the sphere of exchange.

This article offers an interpretation of the domestic and global dimensions of the US housing, financial and economic crisis. My key argument is that the origins of the Great Recession can be fully understood only within an analysis of the system of globalised production and the corresponding division of labour manifest in the symbiotic relationship between the financialised US-centred core and the commodity-producing periphery. The imbalance between production and finance in the US economy mirrors the global imbalance between the ability to produce and the capacity to consume. Thus, rather than resolving the internal contradictions of capitalist production, the spatial and temporal restructuring of the US economy has merely transferred them to a wider sphere and given them greater latitude.

2. Money and crisis: a Marxian interpretation

Bitter battles have been waged throughout history between theorists attempting to turn particular aspects of Marx's writings into some kind of general theory. Famous examples include the underconsumptionist theories originating in the work of Rosa Luxembourg, the disproportionality theory as initially put forward by Rudolf Hilferding, and crisis theories emphasising the central role of the falling rate of profit that became prominent in Anglo-Saxon Marxism in the post-war period (Clarke, 1994). However, as evident throughout Marx's work, and in particular in *Grundrisse*, the core arguments of the above three theories actually coexisted in his analysis of crisis. Marx neither intended to develop a general theory of crisis nor was he fond of monocausal explanations à la bourgeois scientism; thus, it is particularly ironic that his writings have become the object of such theorising. If I should venture an explanation as to the causes of this phenomenon, it would revolve around the conscious or unconscious attempts to position Marx's theory within the framework of

> the 'building-block' approach to knowledge so typical of bourgeois social science and deeply ingrained in widely accepted bourgeois modes of thought. According to this line of thought, it is both possible and desirable to build solid foundations to knowledge by isolating basic components within the social system and subjecting them to detailed investigation. Once the component is understood, we can build upon it as if it were a fixed and immutable foundation for subsequent inquiry. (Harvey, 2006, p. 3)

However, efforts to isolate basic components of Marx's theory while discarding (or domesticating) the rest ironically resemble Marx's own famous endeavour to separate the 'rational kernel' of Hegel's philosophy from its 'mystical shell'—something that ultimately produced a completely different entity (Althusser, 1967).

The purpose of this section is not to construct some general theory of crisis grounded in Marx's works, but rather to introduce overlapping layers of key dialectical relations—commodity and money, uneven development and disproportionality, capital and fictitious capita and, ultimately, overaccumulation and crisis—that can shed light on the forces at work in the run-up to the present crisis.

2.1 Commodity and money

A commodity, Marx (1990[1867], p. 163) famously wrote, is ‘a very strange thing, abounding in metaphysical subtleties and theological niceties’. This peculiar thing leads a double life as use value and exchange value, i.e. it possesses a particular nature as a 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, by effecting the actual split of use value and exchange value, enables the underlying contradiction of the commodity form to transcend its immediate boundaries, to grow, to flourish, and reproduce itself. Money mediates the exchange process; however, it can only suspend the inherent contradiction of the commodity by absorbing it, i.e. by becoming a contradiction itself. For the split of the commodity into

> this particular commodity on one side and [...] money on the other [expressing] the contradiction between the commodity’s particular natural qualities and its general social qualities contains from the beginning the possibility that these two separated forms in which the commodity exists are not convertible into one another. (Marx, 1993[1939], p. 147)

By acquiring an independent existence as a ‘thing beside it, as money, as something different from the commodity, something no longer directly identical with it’ (Marx, 1993[1939], p. 147), the exchangeability of the commodity for money is no longer a function of the commodity itself, but becomes governed by external conditions. This 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. Thus, the act of exchange itself becomes separated from production.

2.2 Uneven development and disproportionality

Capitalism is a social system organised around the production and private appropriation of surplus value by means of commodified human labour. This system is characterised by an underlying contradiction between the tendential drive towards limitless development of the forces of production and the need to ensure that production remains profitable, i.e. surplus value is realised. Consequently, uneven development within and between the constitutive parts of the system, such as production, exchange, credit, etc., underlies its state of permanent disequilibrium.

A number of different disproportionalities assert themselves in this difficult process and can serve as a source of a crisis: the disproportionality between variable and fixed capital related to the growing organic composition of capital, which determines the tendency of the rate of profit to fall (the rate of profit cannot keep pace with the rate of accumulation); the disproportionality between necessary labour (the worker’s wage) and surplus labour (the fall in the rate of profit is typically accompanied by an increase in the rate of exploitation); the disproportionality between the sector producing means of production and that producing means of consumption; the disproportionality between money as a measure of value and money as a medium of exchange, which underlies the essential conflict between the financial system grafted on credit-money and the monetary base grafted on money as embodiment of the value of social labour (Bologna, 1973; Mattick, 1981; Grossmann, 1992[1929]; Harvey, 2006). But money as a medium of exchange embodies another contradiction deriving from the split of the act of exchange into the

separate and independent acts of purchase and sale that stand in no causal relation to each other. A sale does not presuppose a purchase. Money can be hoarded.

All disproportionalities are not mutually exclusive and may coexist, overlap and transform into one another. They emphasise different aspects of the inherent crisis tendencies of capitalism, all arising from the commodity status of labour that takes different forms—commodity, money, capital (Marx, 1993[1939], p. 225). The different tendencies to disproportion share a common feature: they are born by the uneven development of the forces and relations of production but appear as full-blown crises in the sphere of exchange. For it is in exchange where surplus value vies for realisation through the acts of purchase and sale. So long as the universal equivalent—the monetary expression of socially necessary labour time embodied in commodities—appears to mediate exchange and use value, supply and demand, the process of valorisation of capital advances. This process, however, is bound to encounter limits, which are not limits to production in general, but to production based on capital (Marx, 1993[1939], pp. 401–16). The first barrier to limitless self-expansion of capital lies in the need for consumption itself and in the magnitude of the *effective* consumption capacity; '*non-paying needs*', as Marx put it, do not matter. The problem here arises from the fact that, at a certain point, the quantity of use value required to satisfy a particular need cannot be expanded further. The second barrier to expansion of capital is set by 'the magnitude of *available equivalents*, primarily money, not as a medium of circulation but as money' (Marx, 1993[1939], p. 405). The creation and realisation of surplus value in one sector of production requires the equivalent production (and realisation) of surplus value in another sector of production for which it can be exchanged. Capitalism, however, is a system characterised by uneven development, within and between sectors of production, which manifests itself in tension, disproportionality and, ultimately, crises. In the world of appearance, the limits to capitalist production assert themselves through the failure to realise surplus value in exchange—to transform production into money (cf. Clarke, 1994).

2.3 Fictitious capital

Marx (1991[1894], p. 515) emphasised that '[i]n interest-bearing capital, the capital relationship reaches its most superficial and fetishized form'. Since money in that form appears self-valorising, able to reproduce itself outside production and, ultimately, without being dependent on labour, the source of profit becomes unrecognisable, while capital seems to triumph as an autonomous source of self-multiplying wealth. But this is nothing more than an illusion, 'the capital mystification in the most flagrant form' (Marx, 1991[1894], p. 516). Clearly, the potentiality for 'fictitious capital' is presupposed by the dialectic of the money form, which enables the split of exchange value into a particular commodity, on the one hand, and money, on the other. This contradiction is further reproduced in the apparent antagonism of production (capital) and finance (capital).

The process of formation of fictitious capital, known as capitalisation, occurs within the credit system and is a natural outgrowth of the formation of joint-stock companies. Securities are ownership titles that claim to represent the invested capital. This capital, however, cannot exist twice—once as the capital value of the ownership titles and second time as the actually invested capital. It exists only in the latter form, and the shares are nothing but legal titles, accumulated claims on surplus value that may or may not be realised. Hence, the accumulation of money capital in the form of interest-bearing securities represents an accumulation of claims on future production (Marx, 1991[1894],

pp. 597–601). Fictitious capital thus appears as money (capital) and trades like commodity (capital) but is ultimately neither, as has been violently revealed during crisis.

2.4 Overaccumulation and crisis

Marx saw the possibility of crisis as inherent in the inner contradiction of commodity and money. But he also argued that explaining the possibility of crises is not the same thing as explaining their actual occurrence (Marx, 1968, p. 502).

Monetary panic typically precedes commercial crash on the way to full-blown industrial crisis. And with good reason—it is by no means a matter of accident that crises habitually erupt in the banking system. The latter is namely the institutional organisation of the money form that embodies and amplifies the contradictions of the commodity form and, ultimately, of the very relation of production.

> In a system of production where the entire interconnection of the reproduction process rests on credit, a crisis must evidently break out if credit is suddenly withdrawn and only cash payment is accepted, in the form of a violent scramble for means of payment. At first glance, therefore, the entire crisis presents itself as simply a credit and monetary crisis. (Marx, 1991[1894], p. 621)

But this is surface appearance only. The deeper problem is that, in such a situation, capital in the form of commodities, including not only commodity capital proper, but also fictitious capital (securities circulating as commodities, debts parading as commodities in and outside 'the mind of the banker'), loses its capacity to be transformed into money capital. This means that commodities cannot be sold, production cannot be realised, securities cannot be traded. This is a crisis of overproduction. But the overproduction of commodities is symptom of overproduction of capital (overaccumulation)—the formation of surplus capital relative to the opportunities for its employment, i.e. the potential for productive investment is exhausted, the basis for production of surplus value cannot be expanded further. The fall in the rate of profit is now subsumed by the collapse in the mass of profits (Grossmann, 1992[1929]). This is the pregnant condition for a systemic breakdown. And indeed the crisis may appear as a failure to realise production in exchange triggered by the lack of 'money'—but money as *money* and not as a medium of circulation. 'Injecting liquidity', i.e. attempting to increase the supply of credit money that in good times successfully functions as a means of payment, will be futile to remedy such a crisis. For the underlying problem is the lack of equivalent surplus value realised as *money* for which the existing commodities can be exchanged.

2.5 Crisis and restructuring: the internationalisation of capital

Capitalism has seen many crises and, in time, even learnt to welcome them as an opportunity to resolve its contradictions on its own terms. In the post-Depression era, cyclical crises, popularly called recessions, have been typically limited in size and scope and, therefore, relatively easy to resolve with only minor adjustments such as small-scale resource reallocation or institutional changes. But the process of concentration of capital, manifested in the progressive bigness of business, has increased the probability of turning cyclical crises into structural ones. The latter affect simultaneously multiple sectors of production domestically and globally, thereby causing major disruptions to the interrelated circuits of commodity, money and production capital. Their resolution requires a fundamental restructuring of the mechanism for production and realisation of surplus value, that is, of production and social relations. First, restructuring begins with the reorganisation of

the labour process, such as the Taylorist reengineering of work through the radical separation of mental and manual labour in the early twentieth century or the neo-Taylorist flexible specialisation and casualisation of employment from the 1980s on. Second, resolving structural crises requires a profound restructuring of production. This process has a distinctive spatial dimension as it unfolds through the progressive internationalisation of the three distinct but interrelated circuits of capital—those of commodity, money and production capital (Palloix, 1977).

To better understand the importance of internationalisation of capital in overcoming structural crises, it is helpful to consider the following example. Capital accumulation occurs through the extraction of surplus value—the unpaid labour performed by workers beyond what is needed to create the value of their wages. Under a simple schema of capital reproduction, where all production is consumed within the same period, with no credit, international trade, or factor mobility, the total value of the goods produced by workers will systematically exceed the total amount of their wages or purchasing power. This fundamental problem is only aggravated by the persistent struggle of capitalists to cope with the falling rate of profit. Consequently, a certain portion of production cannot be realized, which leads to periodic breakdowns in the reproduction of capital. Such outcomes can be delayed or avoided by a variety of means such as export of goods (the internationalisation of commodity capital), export of capital (the internationalisation of money capital), and by the geographical separation of production (located in low-wage countries) and consumption (occurring in high-wage countries), which is established through the internationalisation of production capital. In the early period of capitalism, the internationalisation of capital was largely confined to the circuit of commodity capital (international trade). But the internationalisation of commodity trade necessitated the internationalisation of money capital, which in its initial stages occurred mainly, although not exclusively, through loans to the trading partners.

> The entire credit system, and the over-trading, over-speculation etc. connected with it, rests on the necessity of expanding and leaping over the barrier to circulation and the sphere of exchange. This appears more colossally, classically, in the relations between peoples rather that in the relations between individuals. Thus, e.g. the English forced to lend to foreign nations, in order to have them as customers. (Marx, 1993[1939], p. 416)

The internationalisation of money capital during the stage of imperialism in the late nineteenth and early twentieth century was dominated by the expansion of British portfolio investment. In the years preceding World War I, British capitalists held 55% of foreign investments worldwide. The transfer abroad of these vast amounts of capital, which in the final decade before the war reached 7% of national income, occurred almost exclusively through the sale of stocks and bonds denominated in sterling on the London Stock Exchange (Edelstein, 1982; Oneal and Oneal, 1988). In the post-World War II period, the internationalisation of capital extended further to reach its final stage—the internationalisation of productive capital—which underlay the emergence of a global system of production, global labour force and a new international division of labour. This process unfolded under the leadership of US capital, and, in particular, foreign direct investment (FDI), which from the end of World War II to the early 1980s averaged over 46% of the total world's stock (Oneal and Oneal, 1988). While the US share of outward FDI in the total world's stock has declined over time, from an average of 37.8% in the 1990s to an average of 27.4% in 2000–9, it still remains substantial. But more importantly, no other

state comes even close to rivalling that amount—the shares of the next two countries, the UK and France, averaged, respectively, 10.5% and 9.6% in the 2000s.[1]

3. The origins of the Great Recession

Before its christening as 'the Great Recession', the upheaval that started in the US mortgage and securities markets in the summer of 2007 was called a subprime crisis, a banking crisis, a crisis of liquidity, a crisis of collateral and even a crisis of central banking (*The Economist,* 2007, p. 4). These accounts of the crisis can be grouped into two categories: those that emphasise the subprime aspect—borrowers with less than perfect credit histories targeted by predatory lenders bought houses they could not afford—and those that blame financial deregulation favouring market-based finance over traditional banking, the relaxation of lending standards and runaway financial innovation allowing for excess leverage. Both versions of events hint at regulatory failure—the government failed to regulate lenders, the government failed to regulate securitisation—and conclude with appeals for more regulation. The question of why there appeared to be inadequate regulation—was it sheer incompetence on the part of the government, or was the government somehow lacking in insight as to what was happening in the 'deregulated market'—is rarely given enough consideration, let alone adequately answered. Can it be that the 'deregulation' of the past, much like the 'reregulation' of the present, was merely a veil behind which the US government and big business joined efforts to resolve the contradictions of the 'free market' on their own terms?

3.1 A crisis of financialisation?

Financialisation is often defined as a pattern of accumulation in which a larger share of profits is derived from financial activities rather than through commodity production and trade (e.g. Krippner, 2005). While this description certainly applies to the US and its special partner, the UK, as well as to a few other less prominent cases, a large part of the world, including the entire export-oriented periphery, has not experienced a similar form of financialisation. The view taken here is that the process of financialisation can acquire its full meaning only when analysed within the context of the existing system of globalised production and the corresponding global division of labour manifest in the symbiotic relationship between the financialised US-centred core and the financially underdeveloped periphery, whereby the former recycles and multiplies the profits derived in the commodity-producing industries of the latter, often with the direct involvement of production capital from the core. Admittedly, financialisation-driven events, such as asset price bubbles, have occurred with relative frequency in the so-called emerging markets. These, however, remain phenomena of short duration, typically driven by the short-term inflows of unattached 'hot money' originating in, or rerouted through, the core, and inexorably followed by devastating disciplinary crashes, which relegate these countries back to the ranks of perpetually 'emerging' commodity producers. Thus, the present crisis of financialisation is merely the manifestation of a deeper crisis of the global division of labour, which generated the grave imbalance between the ability to produce and the capacity to consume.

[1] Post-1982 data drawn from the United Nations Conference on Trade and Development, FDI database, 2010.

The process of deepening financialisation was the outcome of structural changes in the US economy, which crystallised in the course of its dynamic and highly unequal interaction with the rest of the world during the almost three decades of the Bretton Woods system. Post-War US hegemony rested on four pillars: dominance in production and technology; the liberal-corporatist ideology and praxis underpinning the Fordist mode of accumulation; the international dollar standard epitomised by the acceptance of the US dollar as monetary anchor and key currency initially redeemable for gold; and the military supremacy of the USA. The post-war Atlantic economy developed as an offshoot of the production-led mode of accumulation in the centre country, whose industrial supremacy was unchallenged. The system-wide diffusion of American power was facilitated by the interpenetration and outward expansion of the US state, military, and industrial capital—initially as commodity capital but also increasingly as production capital. Although by the 1970s the balance of production power in the Atlantic world was significantly altered not to the advantage of the USA, the latter managed to not only retain, but even strengthen its grip on the capitalist world economy. This time the rejuvenation of US hegemony occurred through the interpenetration and outward expansion of the US state, military and private finance harnessing the power of American Money. The post-Bretton Woods international system inherited the deeply asymmetric power relations of its predecessor. It developed in the context of the US transition from the Fordist production-based regime to a finance-driven mode of accumulation. Among the forces that contributed to this process were the falling profitability of US domestic production, the rise of overseas competition, the emergence of peripheral Fordism through the incorporation of the so-called developing countries in the capitalist world economy, the growth in size and scope of the Eurodollar market, and the decades-long struggle for emancipation of American private finance (Lipietz, 1984; Brenner, 2006; Konings, 2008).

The deep structural crisis that engulfed the USA and the world economy in the 1970s served as a catalyst for the profound restructuring of production and social relations. The resolution of the crisis was sought along the typical lines of reorganisation of labour and capital, of streamlining accumulation and class struggle. The 1980s witnessed the proliferation of 'workplace flexibility' in the USA manifested in the progressive substitution of 'permanent', full-time employment with benefits by temporary, part-time, no-benefits jobs. The transformation of the wage relation was paralleled by the continuing internationalisation of US productive capital epitomised in the outsourcing of the labour-intensive Fordist industries to peripheral countries. Over time, the share of value added by manufacturing in US GDP decreased from 20% in 1980 to 11.5% in 2008. Similarly, manufacturing employment shrank from 20.7% of total non-farm employment in 1980 to 9% in 2009. By the same year, 85.7% of non-farm employment was in service-providing industries versus 14.3% in goods-producing industries. In this context, the entrenchment of 'subprime' employment preceded and, in a way, conditioned the subprime solution to the housing problem as labour market segmentation, a perennial feature of the US economy, deepened even further in the services-based economy. Under the conditions of stagnant, or falling, in real terms incomes, domestic demand increasingly came to depend on access to credit, whose generous provision has helped reconcile deepening income inequality with economic growth (Brown, 2008). Remarkably, the post-Fordist spatial and temporal restructuring of production and circulation was not accompanied by a corresponding modification of the social norm of mass consumption, which remained centred around the key Fordist commodity—the home—albeit increasingly disguised as a financial asset.

The origins of the present crisis hark back to the monetarist experiment of 1979–81 centred around the Federal Reserve's (Fed) attempt to reassert the value of the ailing dollar by refusing to indiscriminately pseudo-validate money creation by private banks. However, despite interest rates in the neighbourhood of 20%, money supply growth did not decrease in the early 1980s. Paradoxically at first glance, inflation was brought under control, although without any fall in prices. Coupled with the high interest rates, this not only stopped the international flight from the dollar but significantly reversed the trend. The brief exercise in monetarism had two further implications. Firstly, exorbitant interest rates made borrowing for productive investment unfeasible and encouraged financial rent-seeking. Secondly, money supply growth, and excess liquidity in general, did no longer lead to inflation defined as an increase in the general price level, but translated instead into rising asset prices and the resultant formation of financial bubbles.

It is important to emphasize that the financialisation of the US economy was not an unplanned child of monetarist policies or a growth externality reluctantly endured by US authorities. Rather, it was lovingly nurtured by them. For it was part and parcel of the process of transnationalisation of American private finance, which, much like the post-war expansion of US transnational corporations, was not only consistent with the US foreign policy goals, but also state-fostered. This should not imply that Washington and Wall Street wanted the same things at all times or that the relationship between them was always easy or harmonious. There were at lot of tensions in the 1950s and 1960s when American finance capital struggled to strip off the vestiges of 'financial repression' embedded in the post-Depression regulatory framework. The 1970s became a decade of experimentation when both private finance and the US state tested new grounds for expansion and cooperation. The monetarist turn marked the consolidation of this process and the firm establishment of the USA as the banker of the world, whose income generating activities were intimately related to the privilege to issue the preeminent world currency and to innovate in marketing its debt. For bankers, 'whether they be brokers or dealers, are merchants of debt who strive to innovate in the assets they acquire and the liabilities they market' (Minsky, 1992, p. 6). According to the first annual survey of foreign portfolio holdings of US securities conducted in 1974, total foreign holdings amounted to US$67.1 billion divided between US$24.7 billion, or 36.8%, equity and US$42.4 billion, or 63.2%, debt. By 2009, total foreign holdings had increased to US$9.64 trillion with the share of long-term and short-term debt reaching 76.6%.[2]

In sum, the monetarist exercise cemented the position of the US dollar as key international currency, having no other anchor but itself while being the reference point for all other currencies. The unique status of the dollar ensured the stable and growing demand for American debt, while the transnationalisation of American private finance created the dense web of markets and instruments for the recycling of the US trade deficits, which became the key source of global liquidity (Ivanova, 2010). The avalanche of innovation, speculation, and swindle that brought about the financial implosion of 2007–2008 was a natural outgrowth of this institutional framework.

[2] Between 1974 and 2000, the surveys conducted jointly by the US Department of the Treasury, the Federal Reserve Bank of New York, and the Board of Governors of the Federal Reserve System at approximately five-year intervals measured only foreign holdings of US long-term securities. Since 2002, surveys have been conducted annually at end-June and measure foreign holdings of US short-term and long-term securities. Historical data are available at http://www.treas.gov/tic/shlhistdat.html. Last accessed on 15 September 2010.

3.2 Home, $weet home

Ever since the Great Depression, the housing sector has occupied a prominent position in the US economy, while the federal government has played a unique role in the creation of an integrated mortgage market and the expansion of homeownership by supplying proper legislation, institutional support and mortgage guarantees. In time, the housing sector developed as a safety valve enabling the flow of overaccumulated capital into construction and real estate. This process of 'capital switching' from the primary circuit of capital (industry and manufacturing) to the secondary circuit (built environment for production and consumption) relied heavily on the existence of a functioning capital market and a credit system 'that creates "fictitious capital" *in advance* of actual production and consumption' (Harvey, 1985, p. 7). As a result of deepening financialisation, paralleled by the rise of the services-based economy, a gargantuan parasitic structure grew around housing cementing its role as a lifeline of the US economy, whose condition had to be taken into consideration in the design and conduct of any government policy. Evidence suggests, for example, that residential investment has been an important channel through which monetary policy affects the economy. The fact that eight out of ten US recessions between 1949 and 2001 have been preceded by significant weakness in housing and consumer durables prompted Leamer (2007) to conclude that 'housing is the business cycle'. Furthermore, severe housing crises precipitated both the Great Depression and the Great Recession (Gjerstad and Smith, 2009).

Housing possesses certain special features that render it an ideal object of speculation. Like a typical commodity, a house leads a double existence as use value that provides shelter and exchange value that can be bought and sold, transformed into money. Unlike a typical commodity, it can also serve as an investment and an asset not only for the capitalist that produces it, but also for the homeowner that 'consumes' it. In fact, it is the most significant 'investment' that the average person ever makes. For the middle three wealth quintiles of the US population, in 2004, the principal residence constituted 66.1% of the value of the total household assets, whereas corporate stocks and securities accounted for only 7.9% (Wolff, 2007, table 7). Investment in construction, residential as well as commercial, similarly to investment in infrastructure, does not immediately produce value; it rather freezes exchangeable wealth in a way that 'creates no direct equivalent and therefore devours it, for the moment, without replacement' (Marx, 1993[1939], p. 121). Furthermore, the housing asset is typically highly leveraged. As long as the home is inhabited by the owner, it does not generate any significant income; the most it can do is to serve as an inflation hedge. In April 2002, when some perceptive observers feared the emergences of a housing bubble, Fed Chairman Alan Greenspan dismissed this possibility as unlikely with arguments that appeared both lucid and logical.

> First, unlike in the stock market, sales in the real estate market incur substantial transactions costs and, when most homes are sold, the seller must physically move out. Doing so often entails significant financial and emotional costs and is an obvious impediment to stimulating a bubble through speculative trading in homes. Thus, while stock market turnover is more than 100 percent annually, the turnover of home ownership is less than 10 percent annually—scarcely tinder for speculative conflagration. Second, arbitrage opportunities are much more limited in housing markets than in securities markets. A home in Portland, Oregon is not a close substitute for a home in Portland, Maine, and the 'national' housing market is better understood as a collection of small, local housing markets. Even if a bubble were to develop in a local market, it would not necessarily have implications for the nation as a whole. (Greenspan, 2002)

However, the commodification-cum-financialisation of the home seems to challenge such logical considerations. While the phenomenon of securitisation can be traced back to the formation of joint-stock companies, it underwent significant changes from the 1970s on when it became applied not only to companies, but to a broad range of assets, and asset in this sense could be anything that generates a stream of income. Home mortgages can be securitised to produce ownership titles that are traded like commodities, separately and independently of the underlying asset. The development of mortgage securitisation in the USA was government-fostered; the so-called government-sponsored enterprises—Fannie Mae, Freddie Mac and Ginnie Mae—played a key role in the standardisation of mortgage underwriting, pioneered the development of securitised assets and the establishment of the secondary mortgage market. Mortgage securitisation served to greatly expand the supply of credit available to finance both production and consumption of housing.

With the advance of mortgage securitisation, epitomised in mortgage-backed securities (MBSs) and collateralised debt obligations (CDOs), the capital originally invested ('frozen') in the housing commodity not only appears 'liquid' again, but seems to be duplicated, triplicated or decuplicated 'by the various ways in which the same capital, or even the same claim, appears in various hands in different guises' (Marx, 1991[1894], p. 601). In this situation, the capital invested in the housing commodity/asset appears as self-valorising. This imaginary money wealth represents claims on future income streams associated with the underlying assets and thus proprietary claims on future labour performed by the homeowners. These paper claims can appear as capital as long as they function as saleable commodities that can be transformed back into money (capital). If, for whatever reason, this transformation is impaired, the claims become worthless ('illiquid').

In this context, a further dimension of financialisation is revealed—it refers to the intensification of the process of creation and multiplication of claims on existing assets and on previously established claims. In time, the financial structure displays an intricate layering of overlapping claims and grows increasingly complex, interdependent and fragile. Has finance decoupled from production? No way! Finance can no more escape the law of value than the capitalist mode of production could proceed on its course without capitalist production. The financial paper economy needs a value-producing base. While a financial structure resembling an inverted pyramid of overlapping claims may appear 'decoupled' from production, its bottom line is still screaming from every little cell of the elaborate edifice—these claims are fictitious; they cannot be validated! They will not be validated! This is why even the small breakages in the sophisticated financial fabric make giant holes: the unhappy truth is mercilessly revealed.

While one of the factors that precipitated the crisis was the rising number of defaults by subprime borrowers failing to make payments on their 'exotic' mortgages, the subprime aspect of the crisis should not be treated outside the context of the bigger picture. And we would do well to consider Marx's distinction between the form of the crisis and its causes. Thus, the origins of the housing crisis lay not in the growing number of defaults and foreclosures—these were the symptoms of the crisis pertaining to its particular form. The actual causes of the crisis had to do with the limits to production based on capital. Extending mortgages to subprime borrowers was an attempt to expand the limits of the market—an attempt that could not but ultimately fail. For the size of the housing market, with or without securitisation, is limited by the effective consumption capacity of the aspiring homeowners. Firstly, there are limits to the number of houses as use values that the average person would like to accumulate. Expanding the pool of eligible buyers can only delay the inevitable at a cost. Secondly, the purchase of housing, as well as consumption in

general, is limited by the amount of labour income—present and future—generated in other sectors of the economy. Access to credit does not alter this underlying fact; it can only change the temporal allocation of income by allowing the use of future income to purchase a house in the present. However, as with all sorts of income, there is never a guarantee that prospective labour income will be realised—this depends on the future conditions in the particular sector of the economy where this income is derived as well as on the condition of the overall economy. The existence of a bloated housing sector including construction and the production of housing-related commodities and services is already an indication that there is serious imbalance in the economy, which sooner or later will have to be corrected by the elimination of overcapacity—a process that habitually takes the form of a crisis.

3.3 Overaccumulation and imbalances: the dialectic of globalised production

In 1992–2006, US residential investment and housing construction experienced the longest sustained boom in post-war history with housing prices and turnover dramatically overshooting the historical trend. The median home prices roughly doubled between 2000 and 2007. 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 655,200, 609,000 and 698,300, respectively. What were the factors that fuelled the housing boom? As commonly argued, the expectations of continued housing price appreciation and easy credit fuelled residential investment. Securitisation and various financial techniques that expanded the secondary market for mortgages further boosted the supply and demand for housing. The general surge in liquidity coupled with relaxation of lending standards bid up housing prices and encouraged yet more innovation, competition and leverage; thus, a virtuous cycle was created. Was this really the heart of the matter?

In January 2001, to fight the recession that followed the burst of the dot-com bubble, Fed Chairman Greenspan embarked on a spectacular rate-cutting spree that brought down the Federal funds rate and the discount rate from 6.5% to 1.75% within the course of a single year. While the overall effect of the rate cuts on total investment was ambiguous, to say the least, they definitely succeeded in diverting resources to residential construction. While real non-residential expenditures on plant and equipment declined 4.2% in 2001 and a further 9.2% in 2002, residential investment grew at an average yearly rate of 7.45% between 2002 and 2005. Thus, the share of the latter in total private fixed investment soared from 26.6% in 2000 to 32.1% in 2002 and peaked at 37.7% in 2005. Throughout his tenure Greenspan—a free-marketeer of the libertarian sort and a passionate opponent of financial regulation—earned a lot of praise for masterful tinkering with interest rates. After the housing crash, the Maestro became ‘the bubble man’, whose loose-money policy was largely blamed for having caused the bubble.

Indeed, the above presented chain of events seems to lend credence to the case that easy credit multiplied by financial innovation fuelled the housing bubble. But, blaming the credit boom exclusively on Greenspan’s clueless design is disingenuous. Indeed, Greenspan did nothing to restrain the bubble. On the contrary, his suppression of the short-term interest rates, his crusade against financial regulation, his dubious statements and various false signals all helped feed the frenzy. But it is also important to understand that underlying structural conditions encouraged the Chairman’s embrace of the policy of easy money. First, persistent job outsourcing to low-wage countries coupled with domestic wage stagnation has made the US economy painfully dependent on credit expansion to sustain demand and

growth. Second, a large share of the periphery's export-earnings has been habitually reinvested in American debt. The loose-money policy of the Greenspan's Fed would have been impossible to sustain without the plentiful funds provided by the hard-working, export-oriented periphery, complemented by the generous contributions of banks and institutional investors (such as pension funds) from the core. For it was the massive inflow of foreign capital into Treasury securities that consistently depressed the yields and thus a number of key interest rates. Significantly, when Greenspan started raising the short-term interest rates in June 2004, long-term rates determined by bond yields, along with the mortgage rates linked to the yields on the 10-year Treasury note, barely moved—this was the famous 'Greenspan's conundrum'. As estimated by Warnock and Warnock (2005), foreign flows in US government securities in the 12 months ending May 2005 depressed the yields on the 10-year Treasury note by 150 basis points. Furthermore, the securitisation boom would have unfolded quite differently without the foreign appetite for agency debt, CDOs and various housing-related derivatives.

Greenspan (2009) himself offered an apparently self-serving explanation of the above phenomenon by invoking Ben Bernanke's (2005) savings glut hypothesis: the surge in prosperity experienced by developing countries pursuant to the embrace of 'increasingly dynamic, export-led market competition' has generated 'an excess of global intended savings relative to intended capital investment', which progressively lowered global long-term interest rates. First of all, it should be noted that the global savings glut hypothesis lacks empirical support. As the International Monetary Fund (IMF) estimates show, there was no significant increase in the world saving rate in the early 2000s (Dooley *et al.*, 2005, pp. 71–82). But, I challenge this argument on different grounds by engaging Marx's distinction between the 'esoteric and exoteric method of approach'. The esoteric approach deals with 'the intrinsic connection existing between economic categories or the obscure structure of the bourgeois economic system', while the exoteric mode of inquiry is limited to 'the *apparent* connections without any internal relation' (Marx, 1968, pp. 165–9). Thus, in what follows I argue that the underlying causes of the global imbalances cannot be reduced to their exoteric or phenomenal features represented by saving and investment decisions made by economic agents in response to underlying structural conditions. Rather, the source of the imbalances should be sought in the objective social relations that structure the system of globalised production. Further, I take China as an example to demonstrate how the alleged surge in savings is attributable to the increase of the relative shares of government and corporate savings, which reflects the heightened degree of labour exploitation against the backdrop of falling profit rates.

At first glance, the motivation of foreigners to favour US financial assets cannot but seem puzzling considering that more than two thirds of foreign holdings have been comprised of relatively low-yielding debt and less than one third of equity. In 2002–7, 68–69% of foreign portfolio holdings of US securities consisted of long-term and short-term Treasury, agency and corporate debt. This share even increased to 71 and 76.6%, respectively, in 2008 and 2009. Over the last two decades, official international reserves (OIR) accumulated by central banks in the periphery have risen spectacularly and coincidentally with the highest US current account deficits (CADs) in history. Developing countries' OIR increased by US$1.08 trillion, or 238%, in the period 1992–2002 and by US$3.3 trillion, or 214.6%, in 2002–2007. By contrast, industrial countries' OIR increased by US$452,971, or 77.6%, and US$538,316, or 52%, in the respective periods.[3] Correspondingly, in the early 2000s,

[3] Data drawn from the International Monetary Fund, International Financial Statistics.

along with the highest US CADs in history fluctuating between 4 and 6.1% of GDP, there was an explosion of US consumer debt, in particular mortgage debt, which increased from US$6.8 trillion in 2000 to US$14.6 trillion in 2007, or 151%. For comparison, the increase in total mortgage debt outstanding for the entire decade of the 1990s was 63.6%.[4]

Much ink has been spilt to explain why developing countries have accumulated reserves beyond levels that could be considered prudent or necessary—a problem inextricably linked to the financing of the exorbitant US CADs. Surveying this vast body of literature is beyond the scope of this paper; some peculiarities of the debate, however, should be noted. Mainstream accounts have been overwhelmingly focused on one side of the current-account identity, thereby effectively limiting the range of possible explanations to trade-related and finance-related factors. One group of explanations emphasises the mercantilist motives of export-oriented countries, which accumulate dollar-denominated assets in an attempt to keep their currencies strategically undervalued because of the high price-sensitivity of manufacturing exports (e.g. Dooley *et al.*, 2005). A second group comprises various finance-related explanations, which ultimately boil down to saving and investment imbalances (e.g. Bernanke, 2005; McKinnon, 2007; Salvatore, 2007). Finally, a third group of explanations points to structural and institutional factors associated with capital account liberalisation, the global financial architecture, the volatility of short-term capital flows and the potential for financial instability inherent in the use of a national currency—the US dollar—as key international currency (e.g. Gowan, 1999; Mendoza, 2004; Aizenman, 2007; Ocampo, 2007–8). In this context, excessive reserves accumulation is seen as precautionary behaviour, triggered by the heightened fragility of the global financial system and simultaneously reinforcing it.

While some of these explanations capture important aspects of the problem, the view taken here is that the dynamics at work behind the global imbalances can be fully understood only when considering the internationalisation of all three circuits of capital instead of restricting the analysis to international trade and financial flows, respectively to structural and institutional aspects of the global trading and financial systems. For the structural framework that engendered the global imbalances is grafted on the system of globalised production. For example, the underlying causes of the USA–China trade imbalance cannot be reduced to 'currency manipulation' or saving-investment mismatches considering the fact that American companies operating in China account for more than 60% of China's exports to the USA. In this context, by performing said manipulation, the Chinese government is actually serving US capital while suppressing the wages of domestic labour. But this 'development' strategy is rapidly approaching its limits as attested to by the razor-thin profit margins for Chinese exporters—ranging from 1.7% to 2% (Pomfret, 2010).

One fact that has often escaped due attention is that the bulk of foreign holdings of US debts securities is in the hands of private investors. On the contrary, the impression that predominantly foreign central banks finance the US CAD has been commonplace. Evidence shows, however, that despite a slight increase over time, in 2004–7, foreign official holdings fluctuated between 27.6% and 30% of total foreign portfolio holdings, and it was not until the outbreak of the crisis when they reached 34% in 2008 and 40% in 2009. Therefore, the vast foreign purchases of US securities cannot be reduced to the issue of reserves accumulation by foreign central banks. Arguably, the massive outpouring of foreign capital into US securities is in and of itself a symptom of global overaccumulation,

[4] Data drawn from the US Bureau of Economic Analysis and the Federal Reserve Board of Governors.

as it points to falling rates of return on capital investment in the countries where the funds invested in various forms of US debt and derivatives originated.

Peripheral Fordism once offered transnational corporations from the core the opportunity to sustain high levels of capital accumulation without the need to share the profits with the local labour force. In time, however, the industrialisation of the periphery augmented global manufacturing capacity, often duplicating existing industries, thereby exacerbating the overcapacity in the core and beyond, while squeezing global prices and profits (Brenner, 2009). But overcapacity is only one sign of overaccumulation with others being falling profit rates, glut of commodities on the market, surplus of capital and eventually unemployment. Various signs of overaccumulation are now appearing in different places, but, arguably, nowhere more clearly than in China—the global manufacturing powerhouse with 700 million labourers, that is, close to one quarter of the global labour force (McNally, 2009). While in 1985–2003, the share of profits in China's GDP and industrial profit margins moved in a coordinated manner, this relationship has broken down since 2004. The profit share of GDP is still rising but profit margins have not kept pace (McKay and Song, 2010, pp. 15–6). Despite evidence of falling profit rates, China is still overinvesting in industry and manufacturing, thereby aggravating the existing overcapacity in its own economy and the global imbalances. China's investment rate, which peaked at 45% of GDP, has been only surpassed by its saving rate. In fact, China has been popularly portrayed as the epicentre of a savings glut. Said glut, however, is of peculiar character and merits closer scrutiny.

The notion of high and rising household savings in China has become so deeply embedded in the mainstream common sense understanding that few has endeavoured to question it. More recently, however, Chinese scholars have debunked the myth that rising household savings represent the key driver of rising total savings in China—a misleading conclusion produced by reliance on the household survey data. Analysing the flow of funds data, He and Cao (2007), among others, found that the household saving rate has actually declined since 1996, while the high national saving rate can be attributed to the growing shares of both government and corporate savings. More importantly, while the government saving rate has increased impressively since 2000, corporate savings have risen slowly since 1992, largely sustained by low wages and interest costs rather than by increased profitability (Yang and Jianfeng, 2009). Thus, the low and declining share of private consumption as a percentage of GDP has not been driven by the households' propensity to save, which has actually trended downwards, but by the persistent decrease in the households' share of national disposable income, which points to an increasing degree of labour exploitation. The latter is also evidenced by the fact that labour compensation as a share of corporate spending decreased by 8.14% between 1993 and 2003 (Yang and Jianfeng, 2009, p. 219, table 5). Rising government saving since 2000 has been mainly driven by an increase in government direct investment and, to a lesser extent, by the increased propensity to save. Overall, the rise in government and corporate savings, which reflects the rising *mass* of their profits, attests to the formation of surplus capital, whose productive placement is likely to constitute a significant challenge considering the already elevated levels of investment in the Chinese economy. These mountains of surplus capital have so far financed the acquisition of the largest foreign holdings of US securities, which stood at US$1.46 trillion[5] as of June 2009 (US Department of the Treasury *et al.*, 2010).

[5] This amount excludes the holdings of Hong Kong and Macau, which are reported separately.

The bulk of this amount (95%) consisted of debt securities, that is, China was in possession of 18.8% of the total foreign holdings of US Treasury, agency and corporate debt.

The accumulation of surplus capital in the major manufacturing centres of the periphery and credit expansion, financial innovation and institutionalised speculation at the core are like the two sides of a coin. They were born by the same force—the emergence of a global labour market and the sharp increase in the effective labour supply, strongly boosted by the addition of China and India to the global labour force (Jagannathan *et al.*, 2009). By 2000, China, India and the former Soviet bloc had added 1.47 billion workers to the existing 1.46 billion workers in the global system of production and consumption, thereby effectively doubling the global labour force and shifting the balance of power in the global economy away from workers and toward capital (Kaplinsky, 2006; Freeman, 2010; Yueh, 2010). Super-exploitation in the periphery supported by slave-level wages—wage repression of the magnitude prevalent in China cannot be credibly explained by the popular accounts of currency manipulation (Hung, 2009)—has generated super-profits, which were channelled to prop up US consumption via sophisticated credit infrastructure. The circuits of capital are intertwined. The existence of a system of globalised production necessitated the formation of a global superstructure of credit and finance grafted onto fictitious world money—the irredeemable dollar—and powered by the trade in US government debt—a negative quantity packaged and sold as commodities. Persistent trade imbalances require stable financial flows and thus a proactive credit system that stands ready to accommodate deficits and surpluses. The resultant credit expansion aggravates overaccumulation as surplus capital augmented by credit creation desperately seeks profitable outlets, thereby creating speculative bubbles, which eventually burst.

In the world of appearance, the recent crisis was triggered by a rupture in the global mechanism of credit and debt recycling, whose underlying source of liquidity—the US CAD—peaked at US$803.5 billion in 2006. But the crisis did not take the form commonly anticipated by those warning of the dangers of the global imbalances—a run on the dollar triggered by unsustainable US deficits and followed by high interest rates. On the contrary, the breakdown started not in the international mechanism of dollar deficit recycling, but in the domestic mechanism of credit recycling (Wade, 2009). The ballooning external deficits reflected a corresponding rise in domestic private indebtedness, which ultimately reached unsustainable levels considering the slow to non-existent income growth for 95% of the US population (Ivanova, forthcoming, table 1). Household borrowing and, correspondingly, debt–income ratios reached unprecedented levels in the early 2000s—household leverage peaked at 136% of disposable income in 2007. Despite formidable housing price appreciation, the median net worth of the middle three quintiles actually declined between 2001 and 2004 due to the enormous increase of debt (Wolff, 2007). But consumption on credit cannot be sustained *ad infinitum*—the limits of production based on capital are inevitably revealed. Ultimately, the Great Recession comes to bear on the fantastic debate as to whether crises arise out of underconsumption or out of the tendency of rate of profit to fall that has galvanised Marxist circles for decades. It turns out that these two phenomena are nothing but manifestations of the same underlying cause—'the drive of capitalist production to develop the productive forces as if only the absolute consumption capacity of society set a limit to them' (Marx, 1991[1894], p. 615; see also Harvey, 2006, pp. 195–6).

4. Conclusion

This article argues that the financial form of the recent crisis was merely a reflection of deeper tendencies epitomised in the persistent global imbalances that have been underway in the 'real' economy of globalised production for quite some time. Thus, an analysis in a Marxian framework can offer valuable insights as to the factors that enabled the US-based overproduction of housing as part and parcel of a general crisis of overproduction of capital and commodities, simultaneously affecting numerous branches of production domestically and globally. Unlike the typical and more manageable recession that habitually concludes the capitalist business cycle, the general and global character of the crisis renders it highly unlikely that it could be resolved by traditional crisis management policies and, in particular, by the policies actually implemented.

Two consecutive US administrations in tandem with the Federal Reserve have done the utmost in terms of fiscal stimuli, massive bailouts of insolvent firms, quantitative easing and relaxation of accounting standards to halt the collapse of asset values and restore corporate profits. A milestone on the way to profit recovery was the suspension of mark-to-market accounting rules in March 2009, which allowed banks to use internal models instead of market prices and take into account the projected cash flow of securities by calculating their earnings. This enabled banks to immediately report profits, which boosted their stock and led to further profits, which, admittedly, were no more of a purely accounting nature but derived from outright speculation in currencies, commodities and derivatives. Since the end of 2009, an impressive recovery of corporate profits has seemed to materialise, notwithstanding the expectations of rising foreclosures, subpar demand and persistently high unemployment in the months and years to come. However, despite all the smoke and mirrors, the ultimate success of the desperate effort to preserve the status quo is far from certain; for this is the same status quo where all problems originated. So far, none of the underlying structural problems of the globalised US economy that account for the systemic character of the crisis have been addressed.

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