FINANCIALISED CAPITALISM:
DIRECT EXPLOITATION AND PERIODIC BUBBLES

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1. Introduction: The many dimensions of financialisation

The storm that has gradually engulfed the US economy since August 2007 is a fully-fledged crisis of financialised capitalism. It is also the latest in a succession of financial crises during the last three decades: from Mexico in 1982, to Japan in 1990, to East Asia in 1997, the list is long. Bubbles and crises are a regular feature of financialised capitalism.

The US crisis has not sprung out of a malaise of production, though it could well lead to disruption of accumulation. Rather, it has resulted from the financialisation of personal income during the last two decades, that is, from the increasing penetration of formal finance into the transactions of ordinary life: housing, pensions, insurance, consumption, and so on. By the same token the crisis has revealed the extent to which contemporary finance relies on drawing profits directly from the personal income of working people and others across society. This is direct exploitation, a characteristic feature of financialised capitalism.

Banking and finance have been transformed during the last three decades. Banks have turned their attention to individuals while becoming more distant from industrial and commercial capital. Meanwhile, open financial markets have expanded, with the participation of vast non-bank financial intermediaries: pension funds, money funds, hedge funds, equity funds, and so on. For banks this has meant opportunities for financial market mediation, that is, for facilitating transactions and drawing fees. This too is a characteristic feature of financialisation, and related to direct exploitation.

The crisis and the preceding bubble have also cast a cold light on the social transformation wrought by financialisation. During the bubble, extravagant sums of money were paid to managers and other functionaries of finance, such as lawyers, accountants, technical analysts, and so on. The managers and shareholders of large corporations also benefited handsomely through dividends and capital gains. Financialisation appears to have brought back the rentier. But this is not the idle money owner of the past, drawing rents by clipping coupons. Instead, rents accrue mostly due to the position of rentiers relative to the financial system, and take the form of salaries, bonuses, and stock options. The modern rentier is the product of the structural changes wrought by financialisation, rather than the driving force of financialisation.

The crisis has further shown the transformation of relations between state and economy. It is apparent that central banks are the pre-eminent economic policy-making institutions of financialised capitalism. Protected from electoral scrutiny through legal and practical independence, they have focused on inflation targeting, while casting a benign eye on the speculative excesses of finance. Once the crisis burst out, they proved instrumental to mobilising social resources in order to rescue financiers, drawing on their monopoly over the issue of inconvertible legal tender. But the crisis has put the solvency of central banks in danger, thus making apparent the limits of their power. These pivotal institutions of contemporary capitalism ultimately depend on the state.

Financialisation has also altered relations among countries in the world market, positing the issue of imperialism afresh. Expanding international flows of capital have forced developing countries to hold vast international reserves in recent years. The result has been net lending by the poor to the rich in the world economy, particularly to the USA. On the one hand, private capital has flown into developing countries, earning sizeable returns; on the other, even larger funds from developing countries have flown into the developed countries, earning little. Most of the benefits were drawn by the USA as issuer of the main form of international means of payment. Financialisation has increased the complexity of imperialism.

Financialisation, finally, has allowed the ethics, morality and mindset of finance to penetrate into the deepest recesses of social and individual life. Social values have been affected by the outlook of the financier (calculating, distant from production, always looking for the main chance, constantly worried about liquidity) as well as the rentier (passive, distant from production, antagonistic to capital as function). The concept of 'risk' - often nothing more than a banal formalisation of the financier's practices - has become prominent in public discourse. Waves of greed have been released by the transformation of housing and pensions into 'investments', dragging individuals into financial bubbles. When these burst, the inherent callousness of finance comes to the fore. To be sure, there has also been resistance and search for social alternatives. But finance has set the terms across the world.

This paper and the entire special issue of Historical Materialism are small steps in dealing with the analytical challenges posed by financialisation. Guidance has been sought in the work of Marx and in the classical Marxist debates on imperialism at the turn of the twentieth century. In this light, the paper starts with an analysis of

the US crisis, turns to the transformation of banking and the rise of direct exploitation, considers the proliferation of open markets in finance, and concludes with a discussion of, first, rentiers and, second, the relevance of the Marxist concept of 'finance capital' to the current period.

2. Brief anatomy of a crisis of financialisation: The US housing bubble and its burst

2.1 Credit and the swelling of the bubble

The proximate causes of the current crisis are to be found in the US housing market. Mortgage lending increased rapidly and remained high from 2001 to 2006:

<Table 1>

During 2004-6, at the height of the bubble, total mortgage originations reached $9tr. The most rapid growth was in subprime mortgages, i.e. those at high risk of default, which amounted to $1.75tr, or 19.5% of originations. Borrowers were from the poorer sections of the US working class. They were frequently offered Adjustable Rate Mortgages (ARM), typically with an initially low rate of interest that was subsequently adjusted upwards. ARM amounted to $4.3tr during 2004-6, or 47.6% of originations. This apparent 'democratisation' of finance eventually became a disaster for banks, also putting millions at risk of homelessness.

The subprime market, despite its growth, is not large enough directly to threaten US finance. But it has been able to play this role because of securitisation: $1.4tr of subprime mortages were securitised during 2004-2006, or 79.3% of the total. This was considerably higher than the securitisation rate for originations as a whole, averaging 63.9% during the period. Securitisation is a key feature of financialisation, discussed in section 3.4. Suffice it to say that it involves parcelling mortgages into small amounts, placing them into larger composites, and selling the lots as new securities. Particles of subprime debt, therefore, have become embedded in securities held by financial institutions across the world. That is why $1.4tr of securitised US subprime mortgages could shake global finance to its foundations.

On the back of the housing boom there was growth in other forms of credit directed to individuals. Above all, as house prices rose, home owners were encouraged to re-mortgage and use the proceeds for other purposes. This so-called 'equity extraction' was a key feature of the bubble, and of financialisation more generally.

<Table 2>

Mortgage refinance and growth in individual indebtedness led to collapse of personal savings, which approached zero as percentage of disposable income (table 3). The decline in personal savings is a long-term aspect of financialisation, reflecting the increasing involvement of individuals in the financial system and the concomitant rise in individual debts. From 9-10% of disposable income in the 1970s and early 1980s, personal savings have declined steadily throughout the period. But the US drop to 0.4% is remarkable, and historically unprecedented for a mature capitalist country.

<Table 3>

As savings collapsed, individual consumption rose, sustaining GDP growth. Not surprisingly, imports also rose and the US balance of trade deficit, already very large, expanded to an enormous $762bn in 2006. Such were the foundations of the lauded period of growth and prosperity in the USA during 2001-6.

<Table 4>

2.2. Causes of the bubble

Interest rates were instrumental to the housing bubble and its burst. After the burst of the new technology bubble of 1999-2000, there was fear of recession, while the attack on the World Trade Centre in September 2001 brought panic. The Federal Reserve cut interest rates rapidly in 2001, and the effective Federal Funds rate remained very low throughout 2002-4, despite rising house prices. On the other hand, the upward turn of interest rates in 2005 eventually put an end to the bubble.

<Table 5>

But it was not only cheap credit from the Fed that fed the bubble. Around the middle of the 2000s, several developed and developing countries found themselves in possession of large trade surpluses. For some, such as Japan, Germany and China, they resulted from manufacturing exports, while for others, such as Russia and the Gulf countries, from rising commodity prices, chiefly oil. These trade surpluses corresponded to an excess of domestic savings over investment. Their counterpart was trade deficits and a shortfall of savings relative to investment in the USA and the UK (and less so in France, Italy, and elsewhere).

<Table 6>

In a rationally organised world economy, developing country trade surpluses would have supported domestic investment and consumption. But the contemporary world market is characterised by free capital flows and lacks a produced means of payment, the dollar acting as quasi-world-money. Consequently, since the late 1990s, exporters have been compelled to defend the stability of their exchange rates as well as protecting themselves against sudden outflows of foreign capital. Furthermore, international organisations, above all the International Monetary Fund, imposed on developing countries the strategy of controlling inflation through high exchange rates. The result was accumulation of foreign exchange reserves across the world, even by impoverished Africa. [1]

<Table 7>

Since international reserves are held primarily in US dollars, the central banks of the exporters bought US state securities. Thus, a large part of the trade surpluses flowed to the USA, despite relatively low US interest rates and the possibility of capital losses, were the dollar to fall. Developing countries became net suppliers of capital to the USA, keeping loanable capital abundant during 2005-6, despite rising

[1] See Paincera (2008). An estimate of the social cost of reserves was put forth by Rodrik (2006).

interest rates. This contributed to a paroxysm of speculation in housing and securitisation.

2.3 Burst

The housing boom was exhausted by 2006, and house prices fell by 5-10% in 2007. In the last quarter of 2007, 2.1 million people were behind with their payments, while the foreclosure rate rose to 0.83% - the highest number ever. The epicentre of the collapse was subprime ARM: 7% of total mortgages but 42% of all foreclosures. Prime (better quality) ARM were also vulnerable: 15% of the total but 20% of foreclosures. [2] Thus, the housing market crisis started in the subprime sector but then spread. The plain mechanics of the collapse are clear: rising interest rates and falling housing prices forced ARM holders to default in increasing numbers. It is an ironic feature of financialised capitalism that default by the poorest eventually led to failure of financial behemoths.

The financial storm broke out in the inter-bank money market in August 2007. This is the pivotal market of the credit system in which banks lend short-term funds to each other, thus becoming able to lend to others with requisite flexibility. [3] The more that banks are implicated in the money market, the more they come to depend on it for liquidity necessary to meet their short-term obligations. In August 2007 money market banks in the USA - but also globally - found it extremely difficult to obtain liquidity from each other. The fundamental reason was that banks held large volumes of mortgage-backed securities, or were obliged to support financial institutions that held them. As mortgage failures rose, these had become practically unsaleable, thus depriving banks of liquidity. Simultaneously, bank solvency was put in doubt, leading to a collapse of trust. Banks preferred to hoard available liquid funds, rather than lend them to others.

Liquidity shortages appeared as divergences between interest rates in the money market. The three month LIBOR rate (at which banks offer funds to each other in the pivotal London market) and the three-month Overnight Indexed Swap rate (key to financial derivatives transactions among banks) are normally very close to each

[2] Mortgage Bankers Association; National Delinquency Survey.
[3] For analysis of the money market from the standpoint of Marxist political economy, see Lapavitsas (2003, ch. 4; 2007).

other. The reason is that the underlying debts are similar, except that the former is relatively riskier. After August 2007 the rates diverged significantly, the LIBOR exceeding OIS by 1% and even more in September 2007, December 2007, and March 2008 (Mishkin 2008).

And so the burst of the bubble led to an apparent paradox, much exercising the economic weather experts of the press: markets were awash with capital but short of liquidity. Yet, this phenomenon is neither paradoxical nor new. As Marx (1976; ch. 1) pointed out, in financial crises money becomes paramount: the capitalist economy might be replete with value, but only value in the form of money will do, and that is not forthcoming due to hoarding. This is precisely the condition that prevailed in the global financial system in 2007-8. Loanable capital was in ample supply, but there was shortage of liquid means to settle obligations - i.e. money - because financial institutions hoarded it.

2.4 Central bank intervention

Central banks have been at the heart of attempts to resolve the crisis. The Federal Reserve, in particular, has systematically provided emergency liquidity to money market banks since August 2007, even extending provision to others. As the shortages continued to recur, ever broader methods have been adopted. These included Open Market Operations (securities purchases), discount window lending (direct lending to banks against variable collateral), and Term Auction Facilities (a new mechanism that involves auctioning a pre-announced amount of credit against variable collateral).

Events took a dramatic turn in March 2008, leading to the collapse of Bear Stearns, one of the largest US investment banks. The bank's exposure to mortgage-backed securities made it hard to obtain fresh liquidity in order to meet its short-term obligations. Its stock price collapsed, eventually forcing it to seek emergency funding from the central bank. Bear Sterns was extensively implicated in derivatives transactions across the world: in August 2007 it held $12.1tr of notional value in outstanding derivative instruments.[4] Had it gone bankrupt, there would have been major and unpredictable repercussions in the financial markets. Thus, the authorities

[4] Bear Sterns, 2007, p. 55.

forced through an extremely rapid sale of the bank at a knock-down price. The buyer, JP Morgan, also received an extraordinary loan of $29bn from the Fed for the purpose.

The Bear Sterns episode does not stand for the rescue of a bank that was too big to fail, as has been misleadingly written in the press. Rather, it stands for the management of bank failure by the state. The bank was cannibalised by its competitors, helped by public resources. Large shareholders took losses - though still receiving significant amounts of money - while thousands of bank employees lost their savings and their jobs.

The episode also signalled a sharp peaking of the crisis, and forced broader intervention. Specifically, investment banks were allowed to borrow directly from the Fed; mortgage-backed were swapped for US government securities; and liquidity was injected into the money market through Term Auction Facilities and the discount window. At the same time, interest rates were brought down rapidly in order to boost bank profitability by lowering the cost of funds. Lower interest rates also aimed at preventing collapse of the stock market. Similar measures were taken by the Bank of England in April 2008, swapping mortgage-backed for UK government securities, though interest rates were not brought down.

It remains to be seen whether these steps will successfully deal with the liquidity shortage in the medium term. But the threat to the solvency of banks posed by illiquid mortgage-backed securities has remained. By May 2008 international financial institutions had written off $300-$400bn of bad debt associated with such securities. This has forced banks to seek fresh capital, while simultaneously requesting liquidity from the central bank. Since the end of 2007, banks have been selling blocs of shares to state-owned financial institutions from developing countries, while also issuing new shares, thus diluting their ownership.

The pressures on banks will persist as long as the US housing market generates default, thus placing mortgage-backed securities at risk. But banks must not get rid of their illiquid mortgage-backed securities through mass sales, for prices will then plummet and disaster will ensue. In the first instance, therefore, US banks will manage their assets conservatively within the breathing space given to them by the Fed. The result will be a constriction of bank credit - a credit crunch - gradually spreading throughout the economy and affecting real accumulation.

In this context, the extraordinary nature of Fed interventions cannot be overemphasised. The Fed has made liquidity available to banks at low interest rates, thus directly subsidising them with public credit. It has also swapped US government securities for mortgage-backed securities, thus assuming some of the risk of bad housing debt. The gambles made by financiers in the pursuit of private profit have already been supported by the highest form of public credit, while threatening to undermine it in the future.

Allowing investment banks to borrow directly from the Fed by depositing collateral of debatable value is a measure of similar character. These are not regular money market banks since their activities are focused primarily on facilitating transactions in open financial markets. Hence they are not subject to the same regulatory supervision as large commercial banks. In effect, the Fed has given to securities brokers direct access to the credit of the nation in order to protect them from their own frivolous speculations.

Nothing in the charter of the Fed suggests that it should have acted in these ways, and there is no doubt that Fed governors would object strongly if it was suggested the Fed credit should support public housing, welfare spending, or other public goods. The crisis has shown clearly what lies at the core of independent central banking: defence of financial interests at the expense of the public.

Nevertheless, the Fed cannot definitely solve the problem of mortgage-backed securities on the balance sheets of banks. For, if it acquired those directly, it would severely weaken its own balance sheet, thus putting monetary policy and the nation's money at risk. Therefore, it is likely that direct public support will eventually be necessary to rescue the banks from their predicament. To an extent this has already happened through Fannie Mae and Freddie Mac, the large government supported enterprises of the US housing market. These partake of roughly half the annual transactions of mortgage-backed securities, and typically buy only prime quality. In early 2008 steps were taken to recapitalise them, while also allowing them to buy lower quality securities. Even so, it is probable that public funds will in the end have to be made directly available to the banks. When that prospect arises, it is likely that there will be political and social friction.

This is a fully-fledged crisis of financialisation arising from the broad transformation of the capitalist economy in recent years. It has emanated from the bubble in the US housing market, led to a combined liquidity and solvency shock for

banks, and resulted in a credit crunch. Central bank intervention has been pervasive but not decisive, given that problematic mortgage-backed securities have remained on the balance sheets of banks. To grasp the content of financialisation, therefore, it is necessary to consider the transformation of the financial system. The main parameters of this are considered in the following sections.

3. The rise of direct exploitation

3.1 Period shift after 1973-4

Financialisation is part of the epochal change that followed the first oil shock of 1973-4, which signalled the end of the long post-war boom and ushered in a long downturn punctuated by repeated economic crises. [5] During this period there has been a technological revolution in information processing and telecommunications. [6] The impact of technological changes on the sphere of circulation has been great. Furthermore, neo-liberalism has replaced the Keynesianism of the long boom, drawing on profound institutional and political changes, above all, deregulation of labour markets and the financial system. [7]

Three aspects of these processes are particularly relevant to financialisation. First, productivity growth has been problematic from the middle of the 1970s to the middle of the 1990s, most significantly in the USA. [8] The new technology failed to generate the expected gains. It took two decades for productivity growth to begin to recover, and that mostly due to the microprocessor industry. After 1995, a broad foundation was gradually created for faster productivity growth to across several economic activities in the USA. [9] Productivity growth picked up even in the services

[5] There is an extensive political economy literature on this issue. The most recent, and widely discussed, contribution is by Brenner (1998, 2002), who argues that the downturn is due to intensified global competition keeping profitability low. For a critique see Fine, Lapavitsas, and Milonakis (1999).
[6] The political economy literature on these issues is extensive, including the debate on flexible specialisation as well as the debate on post-Fordism associated with the French Regulation School.
[7] Two recent prominent political economy contributions that discuss the rise of neo-liberalism are Dumenil and Levy (2004) and Glyn (2006).
[8] The measurement of productivity is a conceptual minefield, particularly in services. In this article mainstream measurements are used as reference points for discussion.
[9] There has been intense debate within the mainstream, but a consensus has emerged along these lines, see Oliner and Sichel (2000, 2002), Jorgenson and Stiroh (2000), Gordon (1999, 2004).

sector, including on financial trading (though not in banking). [10] Nonetheless, other major capitalist countries, including the UK, have not registered similar gains. The relationship between new technology and productivity growth, therefore, remains open to debate.

Second, the process of work has been transformed, partly due to technological and regulatory change, and partly due to bouts of unemployment at key junctures of the period. Casual labour and entry of women into the labour force have had a strong impact on work practices. [11] It is likely that there has been a rebalancing of paid and unpaid labour, while information technology has encouraged the invasion of private time by work, as well as growth in piece work and putting out practices. In Marxist terms, it is probable that labour has been intensified, and unpaid labour stretched. From the extensive literature on job satisfaction, for instance, it transpires that work intensification associated with new technology is a key reason for dissatisfaction with work in developed countries, together with loss of discretion over work choices (Green 2004a, 2004b; Green and Titsianis 2005).

Third, global production and trade have become dominated by multinational enterprises created through successive waves of mergers and acquisitions. The bulk of Foreign Direct Investment takes place among developed countries, but there have also been substantial flows to developing countries since the mid-1990s, rising significantly after 2000 (World Bank 2006). Competition has intensified globally, but without formal cartels or zones of exclusive trading and investment rights. The rise of the multinationals has been accompanied by a shift in the most dynamic sites of production growth away from the West - above all, toward China. There have even appeared sizeable South-South flows of FDI (UNCTAD 2006). To be sure, Germany and Japan continue to earn large manufacturing surpluses. Nonetheless, there has been a general shift of capitalist activity toward financial and other services in the West, typified by the USA and the UK.

Financialisation should be understood against the background of hesitant productivity growth, altered work practices, and global shifts in productive capacity. Since the late 1970s, real accumulation has witnessed mediocre and precarious growth, but finance has grown extraordinarily in terms of employment, profits, size of

[10] The literature on this is less extensive, see Triplett and Bosworth (2001, 2003).
[11] There is sizeable mainstream literature on the relationship between new technology and work. See, very selectively, Brynjolfsson and Hitt (2000, 2003) and Autor, Levy and Murnane (2003).

institutions and markets. There has been deregulation, technological and institutional change, innovation, and global expansion. Finance now penetrates every aspect of society in developed countries while its presence has grown strongly in the developing world. Perhaps the most significant development, however, has been the rise of direct exploitation of workers and others. While real accumulation has been performing indifferently, the capitalist class has found new sources of profits through the revamped mechanisms of finance.

The parameters of this complex transformation are examined below. Analysis proceeds within the framework of Marxist political economy, deriving fundamentally from the work of Marx. Nonetheless, the output of subsequent Marxist political economy, above all, Hilferding (1981), is at least as important, and in some respects superior. In this spirit, discussion should begin with commercial banks, the pivot of the credit system.

3.2 Banking as mechanism of direct exploitation

Commercial banking during the post-war boom involved straightforward financial intermediation: banks mobilised cheap (or even free) deposits to finance loans to industrial and commercial corporations. Financial controls regulated interest rates and circumscribed lending activities.

However, since the late 1960s, there has been deregulation of interest rates and lending activities. Captive deposits are no longer available and banks have been obliged to create other liabilities in order to engage in lending. The result has been rapid financial innovation and a host of new financial assets. At the same time, large corporations have tended to obtain funds directly in open markets, thus relying less on banks for loans. Consider the following for the USA, Japan and Germany:

<Figure 1>

Increasing reliance of large corporations on open markets rather than banks for external finance is a characteristic feature of financialisation. There are differences among US, German and Japanese corporations in this respect, for instance, US corporations rely more heavily on bonds. These reflect the bank-based character of

the German and Japanese financial systems as opposed to the market-based character of the US system (briefly discussed in section 6). But the trend is not in doubt. Equally important is that large corporations across the developed world rely heavily on retained profits – rather than external funds – to finance industrial investment on a net basis.[12]

The response of banks to shrinking traditional lending outlets to corporations has been, first, to turn toward the personal revenue of workers and others, and second, to focus on financial market mediation. [13] The former includes lending for mortgages, consumer loans, credit cards, and so on. The latter refers to transactions of securities, derivatives, money trusts, insurance, as well as a variety of other services related to open markets. There are significant variations among leading countries according to their own historical and institutional development, but the general trend is not in doubt:

<Figures 2, 3, 4>

This represents a major transformation of capitalist finance. Economics typically treats banks as financial intermediaries that derive profit from the spread between interest on their assets and liabilities. Thus, bank profits ultimately derive from industrial and commercial enterprises, who are the main borrowers of banks. But financialisation has turned the personal income of workers and others into a major source of profits for banks.

A precondition for this has been increasing involvement of individuals in the operations of the financial system, in terms of both assets and liabilities. Once again, there are significant differences among leading countries, reflecting history, institutions, and plain custom with regard to housing, pensions, insurance, consumption and so on. But the trend is not in doubt. Individual workers and others have become increasingly implicated in the workings of the financial system – they have become 'financialised':

<Figures 5, 6>

[12] See Corbett and Jenkinson (1996, 1997).
[13] For fuller analysis of bank activities see Dos Santos (2008).

The result has been accrual of an increasing proportion of individual income to banks and other financial institutions as payment for loans and other financial obligations. This is most clearly seen in the USA:

<Figure 7>

In Marxist terms the extraction of financial profit out of personal income can be called direct exploitation. It is direct in the sense that it by-passes production – the normal venue of exploitation – and occurs in circulation. It is also exploitation, though the reasons are more complex. Commodity trading in the sphere of circulation is not natural terrain for exploitation since, typically, quid pro quo prevails. Only if traders were systematically misinformed about values, or extra-economic force was applied, could exploitation arise. But finance is about dealing in money or loanable money capital, rather than produced commodities. It involves the exchange of promises and obligations, based on trust, instead of direct application of quid pro quo. The final transfer of value between counterparties depends on institutional framework, legal arrangements, information flows and, even, social power. It is possible, in principle, to squeeze the borrower and extract usurious returns.

Moreover, finance directed at personal revenue is advanced to cover basic needs of workers and others – housing, pensions, consumption, and so on. This is in contrast to finance that is advanced to cover investment or circulation needs of capitalists. Specifically, recipients of the former focus on obtaining use values, while recipients of the latter aim at the expansion of value. Consequently, they have sharply different objectives, purposes, information, access to alternatives, and ability to 'economise'. Industrial and commercial capitalists are ultimately capable of by-passing or replacing the mechanisms of finance, if these prove too expensive. This is not easily available to individual workers and others, who have thus become objects of direct exploitation by finance.

3.3 Implications for bank solvency, liquidity and risk management

The shift toward direct exploitation has had major implications for the operations of banks, while creating fresh sources of instability and crisis. To analyse

those it is important to mention that, for Marxist political economy, banking capital emerges out of merchants' capital and specialises in handling money as well as making loans. Banks operate in the sphere of circulation, but also mobilise idle money lying outside circulation. Consequently, banks have an ambivalent attitude toward the turnover of the total social capital: they are necessary for advanced capitalist production, but retain a detached – and even predatory – stance toward it. [14]

To be more specific, banks offer both money-dealing and money-lending services, which raise the profitability of productive capital by reducing costs of circulation, accelerating turnover, lessening money reserves, and making available fresh capital to expand surplus value creation. But banks are peculiar capitalist enterprises that produce neither value nor surplus value (Marx, 1894, sec. 5). Essentially, banks acquire assets (promises of others to pay them) by creating liabilities (promises of banks to pay others). Thus, they are vulnerable to anything that disturbs the flow of liabilities. Banks also invest their own capital, but this is typically a small proportion of their assets, i.e. they are highly indebted enterprises.

The inherent vulnerability of banks is all the more pronounced as their liabilities tend to be very liquid, that is, they can be easily transformed into money by their holders. This is apparent for deposits, which are credit money. In contrast, bank assets are typically less liquid. To deal with this problem, banks have historically held liquid reserve assets. But this is expensive, since reserves earn very little for banks. Thus, at the instigation of banks, the years of financialisation have witnessed successive lifting of reserve controls and increasing reliance on fresh liquidity obtained through the financial markets.

It is apparent that banks are also vulnerable to borrowers not repaying loans. Since banks generally hold small amounts of capital relative to their assets, default by borrowers could lead to bank insolvency, and thus bankruptcy. To protect their solvency banks must, first, assess the risk of asset default and, second, hold sufficient capital to absorb losses. But the more own capital that banks hold for any given size of assets, the lower their profitability. Hence banks are obliged to walk a tightrope: they must judge the quality of assets well enough to keep the minimum of own

[14] For further discussion see Lapavitsas (2007).

capital. The need to strike a balance between liquidity and solvency is inherent to banking. [15]

Banks, then, are obliged to assess the risk of their assets (i.e., the reliability of promises made by others to pay the banks). The methods they employ depend on technology, information, long-term relations, institutional and legal framework, as well as plain bank custom. Financialisation has wrought dramatic changes in this respect, reflecting the shift of banks toward personal income and the introduction of new technology. [16]

More specifically, banks have adopted 'credit scoring'. These are 'arms-length' techniques that rely on collecting numerical information (income, age, assets, etc) and producing an individual score (Mester 1997). The results are statistically manipulated, using vast computer power and databases, which have been avidly acquired by banks (Triplett and Bosworth 2003). This gives to the process a scientific veneer, while loans are advanced if the individual clears a pre-determined threshold. Subprime mortgages were precisely loans for which the threshold was set deliberately low.

Banks have also begun to estimate the risk of default of their assets by applying mathematically-based models that utilise historical rates of default. The estimates are largely extrapolations from past trends, stress-tested within limits indicated by past data. Banks have also learnt to apply Value at Risk methods, which rely on correlations between asset prices (estimated historically) and on volatility (estimated from stock market prices). [17] On this basis, they can estimate their Daily Earnings at Risk (DEAR), that is, the probability that the value of their assets would decline below a certain level on a daily basis. Consequently, they can readjust the mix of their assets to bring DEAR within acceptable bounds. To this purpose, bank assets must reflect current market valuations, rather than historical prices. For this reason, the accounting practice of 'marking to market' has prevailed in the course of financialisation.

[15] The tightrope is as old as banking itself and has concerned classical political economists. Steuart (see, for instance, 1995, bk. IV, pt. I, ch. I) stressed solvency because he advocated banks making long-term, largely illiquid loans. Smith (1950, bk. II, ch. II), on the other hand, stressed liquidity because he saw banks as suppliers of short-term circulation funds. The way the balance is determined in each historical period depends on the needs of real accumulation, institutional structure, law, and customary bank practices.

[16] For fuller discussion see Lapavitsas and Dos Santos (2008).

[17] For standard analysis see Saunders and Allen (2002, pp. 84-106) and Duffie and Singleton (2003, pp. 31-42).

The spread of these risk management techniques owes much to regulation, above all, Basle I and Basle II capital adequacy rules instigated by the Bank for International Settlement (BIS). To be precise, Basle I regulations, formalised in 1988, stipulated that internationally active banks should maintain own capital equal of at least 8% of their assets. Basle II, on the other hand, began to take shape in the late 1990s, and essentially enforced the risk management practices briefly outlined above. Banks that operate VaR and related methods are deemed to have a better grasp of asset risk, thus are allowed to maintain lower capital ratios. This is a significant competitive advantage for some banks, encouraging others also to adopt computationally-intensive, statistically-based methods of structuring their balance sheets.

The crisis of 2007-8 has shown that the implications of Basle II are deeply problematic. Instead of deciding the level of their own capital in order to cover themselves from asset default, banks have tended to manage assets in order to avoid holding expensive 'surplus' capital. This has encouraged them effectively to by-pass regulations by undertaking off-balance-sheet activities, which have no capital adequacy requirements. Prominent among these has been securitisation, discussed below. Moreover, as the current crisis struck, Basle II continued to have negative implications. For, it forced banks to raise capital precisely when assets turned bad and illiquid, while also encouraging them to sell assets at the wrong time in order to restore capital ratios. Banks were thus pressed from two sides: on the one hand, declining asset quality and, on the other, expensive and hard-to-obtain capital.

3.4 Securitisation and the drift to crisis

The technique of securitisation has been around for several decades. But its rise to prominence is the outcome of financialisation and of the shift of banks toward direct exploitation. The reason why banks turned to off-balance-sheet securitisation is clear, in view of the developments outlined above. To support their loans (such as mortgages) banks must hold significant amounts of own capital (partly due to Basle regulations). But holding own capital is expensive, and hence banks have a strong incentive to take loans off the balance sheet, sell them to others in the form of

securities, and earn fees. In this way securitisation became a new source of systemic instability.

To securitise, say, mortgages, banks create Special Purpose Vehicles (SPV), which take possession of mortgages and issue mortgage-backed securities. These securities are 'originated', that is, effectively managed, by specialist financial institutions, typically investment banks; their creditworthiness is ascertained by ratings organisations; they are also guaranteed ('credit enhanced') by specialist credit insurers. They are then ready for sale in open financial markets. Banks receive the proceeds, recovering their original advance and restoring their capital. They are then able to repeat the process, continually churning over their capital. Meanwhile, originators, ratings organisations and insurers earn substantial fees which ultimately come out of the personal income of mortgage holders.

For banks, therefore, the act of advancing loanable capital is transformed into mediating borrowing in open markets. Since they appropriate individual income through fees rather than interest, banks have a strong incentive to accelerate origination of mortgages. When the process boomed in the mid-2000s it appeared that banks were offering a social service by making mortgages widely available, even to the poorest. In reality they were churning their capital in order to earn fees, eventually ruining great numbers of the poor.

Securitisation could easily be extended to other bank assets, such as credit card receivables, automobile loans, home equity loans, and so on. In this vein, banks created Collateralised Debt Obligations (CDOs) against a mix of underlying assets, such as mortgages, consumer credit, regular bonds, and so on. In essence, the CDO holders were given a claim on the payments of interest and principal made on the underlying debt. The price depended on risk, which was estimated by ratings organisations using their computationally-intensive models. Compounding things further, the ratings organisations often made these models available to investment banks in advance, which then adjusted the mix of the assets in the CDO in order to obtain the requisite 'excellent' ratings. Both investment banks and ratings organisations earned substantial fees for their efforts.

Banks might have been spared the worst, had they been able to keep away from the witches' brew they were concocting and selling to others. But, during the bubble, mortgage-backed securities paid high returns and credit was cheap. Thus, banks began to set up Structured Investment Vehicles (SIV), that is, financial

companies that raise funds in the money market to purchase securitised assets, including CDOs. Banks also set up, or lent heavily to, hedge funds for the same purpose. These are similar to SIVs, but have a very broad remit for their investments and are under little obligation to reveal what they are doing. In effect, banks were using the money of others in order to purchase the elaborate and ill-founded securities that they had themselves created.

To provide some cover for their recklessness, banks began to trade actively in Credit Default Swaps (CDS). These are derivatives in which one party (the seller) promises fully to reimburse the other (the buyer) for the value of some underlying debt, provided that the buyer pays a regular premium. At the peak of the bubble, their growth was astonishing:

<Table 8>

CDS are similar to insurance contracts and they also lower capital adequacy requirements since they make assets appear less risky. But they are also excellent vehicles for speculation. If, for instance, a bank thought that one of its borrowers was in trouble, it could buy a CDS on the borrower's bonds. Assuming that the company indeed defaulted, the bank would be able to buy the bonds at a discount in the secondary market, subsequently selling them to the issuer of the CDS at the originally agreed price, and thus reaping a profit. Variations on this theme are legion. Speculation became the prime purpose of trading in CDS, involving commercial banks, investment banks, hedge funds, and so on.

For a brief period, therefore, securitised assets appeared a fail-safe way of making profits for banks. But they suffer from two related weaknesses. First, they are not particularly liquid and, second, their prices are determined mostly through mathematical formulae, rather than regular buying and selling. These are the prices that appear on the balance sheets of the institutions that hold them, in a parody of the 'mark to market' principle. The omniscient market works very badly in this respect.

And thus disaster eventually ensued for banks. Once defaults on subprime mortgages started in full earnest in 2006, securitised assets became very risky. They could not be easily sold, and their prices declined. For SIVs and hedge funds this meant that their assets worsened in price and quality, making it impossible to borrow in the money market. Confronted with bankruptcy, they had to call on the banks that

were obliged to support them. Consequently, banks began to take losses, making it necessary to replenish their capital as well as restricting their credit. Naturally, they also became extremely reluctant to lend to each other in the money market.

In September 2007 this deadly combination caused a run on Northern Rock, a relatively small British bank, which avoided collapse only after the Treasury guaranteed its deposits. In March 2008, it finished off Bear Sterns, one of the most avid innovators in this field. But the bulk of securitised assets has remained on the balance sheet of banks.

3.5 What is the social and economic role of banks in financialised capitalism?

Securitisation poses profound questions about the broader social and economic role of banks in financialised capitalism. The classics of Marxism stressed that banks played an integrating role in the capitalist economy by collecting information on borrowers and transferring available resources. [18] But financialisation has wrought significant changes in this respect as the banks have shifted toward direct exploitation and financial market mediation.

Some insight can be obtained from mainstream economics, according to which banks acquire information in qualitative ('soft') and quantitative ('hard') ways. [19] The former involves regular contact with borrowers, personal relations, visiting the site of borrower operations, and placing staff on company boards. The latter involves analysis of quantitative data on companies, the stock market, other markets, and the economy as a whole.

Direct exploitation has changed the focus of banks from 'soft', 'relational' methods towards 'hard', statistically-driven techniques. To operate the latter, banks require computer power and huge databases on individuals, enterprises, and the economy as a whole. Thus, banks have become memory stores of economy and society, reaching far into personal, social and economic life. In financialised

[18] Lenin (1964, p. 223) thought that banks had become institutions of a truly 'universal character' in capitalist society, while Hilferding 1981, p. 368) imagined that the German economy could be controlled through 'six large Berlin banks'.
[19] These are clumsy terms, but the meaning is clear. See Berger and Udell (1995), Berger, Klapper and Udell (2001).

capitalism, private capital has arrogated to itself the right to collect huge volumes of personal information, subsequently to use it for the purposes of profit making.

But there are two sides to this coin. Reliance on 'hard' information has increased the distance between banks and their borrowers, probably entailing a loss of 'soft' information. The more that information collection becomes formal and numerically-based, the less that bank managers rely on personal knowledge and experience about their borrowers.

This has a bearing on the management of risk. Historically, the assessment of borrower creditworthiness has depended on the layering of markets and institutions within the credit system. [20] Creditworthiness acquired an increasingly social and objective character the higher the financial institution was placed in the successive layers of credit relations. The network surrounding money market banks, for instance, allowed them to arrive at a more socially-based - and therefore objective - judgement of risk than specialised local banks, or even investments bank. By the same token, the central bank applied the most social of criteria, thus commanding public credit.

The spread of inference-based computationally-intensive techniques of risk management has transformed this process by placing managerial judgement below the mechanical manipulation of data. Some academics interpreted these changes as showing that deeper function of banks in contemporary capitalism is to manage risk in formal ways (Allen and Santomero, 1998, 1999). During the bubble, less sophisticated ideologists clamed that banks had become experts in 'slicing, packaging and pricing' risk. By so doing, apparently, they allowed risk to be held by those who truly wanted it, thus increasing financial stability.

It is now evident that the shift toward inference-based management of risk has increased instability. For one thing, it relies on past prices to calculate correlations, which hardly works in times of unprecedented co-movements of prices that characterise crises. Furthermore, these techniques may have increased the homogeneity of decision making by financial intermediaries, thus exacerbating price swings and general instability (Persaud 2002).

But more fundamentally, during the bubble, banks originated mortgages purely in order to securitise them and earn fees. This seemed a 'hard' practice, based on quantitative information, as well as being cheap and very profitable. In practice,

[20] See Lapavitsas (2003: ch. 4.)

banks were advancing loans without due diligence, having seconded it onto credit rating organisations. The latter evidently lacked the relational knowledge that bank managers had of (their far fewer) mortgage borrowers in the past. Even worse, banks proceeded to acquire securitised assets without assessing, or even understanding, the risks involved.

Thus, the turn toward direct exploitation has produced systemic banking failure to collect information and assess risk. [21] Banks are certainly capable of acting as the nerve system of the capitalist economy when their focus is on collecting idle funds to lend to productive capitalists. But when it comes to meeting the financial needs of large numbers of individuals, banks appear to be ill-equipped and badly disposed to dealing with the informational requirements. They approach the task from the narrow standpoint of their profit making, which encourages them to seek computationally-intensive, pseudo-scientific techniques. However, housing, private consumption, and so on, are social needs. The recipients are not 'economising' capitalists and the knowledge that is required to make funds available to them has strongly social and 'relational' aspects. It would be impossible for banks to acquire such knowledge on the requisite scale, even if they were disposed so to do. This is an inherent limitation of direct exploitation: social needs can be met only very partially through private finance and require social answers.

4. Open financial markets and direct exploitation

The counterpart to the transformation of banks, and a hallmark of financialisation, is growth of open financial markets (in shares, bonds, derivatives, and so on). These mobilise idle money in parallel with the structured credit system that mostly comprises banks. But they operate on different principles and give rise to different financial intermediaries. They also offer fresh opportunities to banks to make profits through financial market mediation and direct exploitation.

4.1 Open financial markets and 'shareholder value'

[21] To call this 'mispricing of risk' is uncharacteristically lame by Goodhart (2008). The real issue is systemic failure to apprehend risk altogether.

The counterpart to the transformation of banks, and an obvious hallmark of financialisation, is growth of open financial markets (in shares, bonds, derivatives, and so on). These mobilise idle money in parallel with the structured credit system that mostly comprises banks. But they operate on different principles and give rise to different financial intermediaries. They also offer fresh opportunities to banks to make profits through financial market mediation and direct exploitation.

Stock markets are markets for equity, i.e. for property rights over corporations that give a legal claim to future profits. Share prices represent the discounted value of future profits and the benchmark discount rate is the rate of interest (adjusted for risk).[22] This process was called by Marx (1894, ch. 29) the formation of 'fictitious capital'. Share prices, in other words, are formed at considerable distance from value creation in production; they reflect rational estimation of enterprise prospects, but also expectations, rumours and plain manipulation of buyers. Consequently they allow for capital gains and offer natural scope for speculation.

Bond markets, on the other hand, are markets for long-term debt by enterprises, banks, and the state. They generally carry less risk than the shares issued by an enterprise. The fictitious aspect of their prices allows for capital gains but, since they are debt, less than for shares. Financialisation has turned bond markets into major sources of funds for corporations. In recent years bond markets have also surged in developing countries as international reserves increased in recent years, thus providing foreign capital with the opportunity to extract large profits (Painceira, 2008).

Derivatives markets have grown enormously during the last three decades, but they do not involve transfer of loanable capital (or idle money) to those who intend to employ it. Rather, derivatives are essentially bets that allow for the management of risk, of for outright speculation.[23] They can be simple, as in forward contracts in foreign exchange, or complex, as in various Interest Rate Swaps. All have an underlying asset, which can be real or financial (or even imaginary, such as the weather). The complexity and size of derivatives markets is in inverse proportion to their broader economic significance. Industrial and other enterprises, facing risks

[22] Hilferding (1981, ch. 8) advanced the original, and still most powerful, analysis of share prices within Marxist political economy.

[23] Very little guidance on derivatives can be found in the corpus of Marxist political economy. Some steps in forming an analytical framework were taken by Bryan and Rafferty (2007), though they erroneously think of derivatives as money.

associated with production and trade, make limited use of derivatives. The heaviest users are financial institutions aiming to cover themselves from the risks of other financial transactions, or to speculate.

There is a fictitious element to derivatives prices, but it is different to shares and bonds. Derivatives prices are remote from value creation, and are formed through values attached to a number of elements that underpin the bet, above all, the volatility of the underlying security. Volatility estimates incorporate the expectations of buyers and sellers about the future behaviour of the underlying asset. Such a process can become homogeneous only through the institutional practices and norms of trading. In this respect, financialisation has been decisive due to the rise of the Black and Scholes model of derivatives pricing. General adoption of the model (or variants of it) by market participants has given to derivatives prices an air of objective reality. [24]

Stock markets have been fundamental to financialisation, but not due to providing capital for investment by industrial enterprises (Corbett and Jenkinson 1996, 1997). Rather, equity has been the main lever for the centralisation of capital, the stuff of mergers and acquisitions (M&A). Equity creates distance and opposition between shareholders (capital as property) and managers (capital as function). Inevitably, shareholders acquire an aspect of the rentier, though this must be understood complexly, as is shown in section 5. Consequently, the governance of large joint-stock enterprises has become a major issue in financialised capitalism. [25]

In this regard, financialisation has witnessed the ideological ascendancy of 'shareholder value' as appropriate principle of corporate governance. This theory emerged gradually in the 1970s and 1980s, formulating the opposition between managers and shareholders in game-theoretic, principal-agent terms. [26] Essentially it claims that corporations would be run most efficiently if managers were obliged to maximise the rate of return on shares. Stock markets are mechanisms for disciplining managers, ultimately through the threat of takeover.

'Shareholder value' prompts corporations to be run with an eye constantly on the stock market, thus aiming for short-term results rather than long-term performance. More complexly, corporations during the last three decades have been

[24] Penetrating sociological analysis of this process has been provided in a series of papers by MacKenzie (e.g. 2003, 2004) and MacKenzie and Millo (2003).
[25] The literature on governance is vast, and has a long pedigree. It originates partly in Marxist political economy (Marx, 1894, pp. 512-4; Hilferding, 1981, ch. 7).
[26] The key references are Ross (1973) and Jensen & Meckling (1976).

encouraged to 'downsize and distribute', that is, to cut costs and distribute profits to shareholders, rather than 'retain and reinvest' earnings (Lazonick and O'Sullivan, 2000). It is possible that this has had an impact on the indifferent performance of real accumulation.

In the sphere of ideology 'shareholder value' has succeeded in reversing Keynes's old dictum of the 'euthanasia of the rentier' (Froud, et.al., 2006). But the glorification of shareholders has not been constraint on managers, their putative 'agents'. On the contrary, 'shareholder value' has become a vehicle for the enrichment of the managerial layer, which has awarded to itself several ways of appropriating surplus value through the stock market, including stock options. 'Shareholder value' has supported the creation of rentiers in more complex ways than it appears at first sight, as is briefly discussed in section 5.

4.2 Open market profits, institutional investors and direct exploitation

Open financial markets have provided banks with fresh fields of profitability associated with financial market mediation (for which banks earn fees) and with trading on own account. Typical are investment banking services, which involve collecting information about counterparties, placing securities with buyers, reducing transactions costs, underwriting securities, and so on. Of decisive importance has been the abolition of the Glass-Steagall Act in the USA in 1999, and of similar regulations in other countries (such as Article 65 in Japan), which prevented commercial banks from engaging in investment banking. In the course of such activities banks often advance loanable capital, but that is aimed at securities transactions and the receivers frequently are other financial institutions.

The source of profits made by financial institutions in open financial markets poses difficult problems for political economy. Hilferding (1981, pp. 128-9) suggested that banks appropriate a part of 'promoter's' or 'founder's' profits, that is, the value of shares discounted at the rate of interest minus their value discounted at the (higher) rate of profit. This difference is the future profit of enterprise accruing in a lump sum to the seller of equities at the time of an IPO. But this is not very persuasive since different rates of discount could not be systematically applied to the same flow of expected returns without financial markets becoming segmented.

Moreover, the future profits of enterprise would accrue to those who continue to run the enterprise, not the sellers of shares.

It is more plausible that the source of such profits is to be found in the re-division of loanable money capital (and plain money) that is mobilised through open financial markets. To stock of idle money formed as the total social capital goes through its turnover is mobilised either indirectly through banks, or directly through open financial markets. [27] Direct mobilisation is still facilitated by banks and other financial institutions, remunerated through a share of the sums traded. Since this process takes place on the basis of fictitious prices, it is susceptible to sentiment, rumours, and manipulation, thus creating a further field of direct exploitation, as is briefly shown below.

The growth of open financial markets, contrary to what might have been expected, has led to a proliferation of financial intermediaries. Dominant among them are institutional investors - insurance companies, money trusts, unit trusts, money funds, hedge funds and, above all, pension funds. [28] There are significant differences among them. Insurance companies, for instance, collect premia and seek relative secure returns on assets, while pension funds collect long-term savings and seek growing returns on assets. However, they all intermediaries since they concentrate idle money across capitalist society and make it available for investment in open financial markets.

Despite being financial intermediaries, institutional investors are critically different from banks. The latter are an essential part of the credit system and become established by providing credit to real accumulation. Furthermore, through the money market, a banking system is formed capable of interacting with real accumulation as an integral whole. Last, but far from least, banks create credit money through loans and the subsequent extension of their liabilities, the latter often covered by insurance guaranteed by the state.

The remarkable growth of institutional investors during the last three decades is a further hallmark of financialisation, and integral to direct exploitation. Two factors are fundamental to it. First, there has been partial withdrawal of the state from welfare provision, particularly pensions, forcing workers and others to plan for retirement through private placement of savings. This has been exacerbated by the

[27] For further analysis of this see Lapavitsas (2000).
[28] Felicitously called by Toporowski (2000), 'pension fund capitalism'.

gradual aging of the population and longer periods of survival after retirement. Second, deregulation of interest rates that has encouraged savings to flow away from banks in search of higher returns. State policy has promoted and encouraged the placement of savings with institutional investors.

An event of catalytic importance in this respect has been introduction of regulation 401K in the USA in 1978, which made pension funds available for stock market investment. In the UK there has been systematic introduction of Personal Equity Plans (PEP) and Individual Savings Accounts (ISA) since the 1980s, receiving favourable tax treatment and channelling savings to open financial markets. Such measures are part and parcel of the 'financialisation' of the individual: on the one hand, financial assets have grown through pension funds, insurance policies and so on, while, on the other, financial liabilities have increased through mortgages. The net result has been that increasing proportions of personal income have been paid to financial institutions as fees for mediating transactions (Dos Santos, 2008). The growth of financial markets has increased the scope for direct exploitation.

5. Instead of a conclusion: Is this a new era of the rentier?

Financialisation, then, represents a transformation of the capitalist economy pivoting on the financial system and involving fundamental changes in the extraction of profit. The concluding sections of this article explore broader social and political aspects of financialisation, rather than recapping earlier arguments. One such aspect is the prominence of rentiers, often associated with high incomes and wealth accruing through the financial sector, and contributing to the remarkable growth of inequality of the last three decades. Is financialisation a new era of the rentier and, if so, in what way?

Much of the recent economic writing on financialisation assumes (sometimes tacitly) that the ascendancy of the idle rentier is a malaise of contemporary capitalism.[29] This is a heart a Keynesian approach, attempting to show that the rentier deprives the active capitalist of funds - or makes them expensive - and thus slows down the rhythm of accumulation. However, the ascendancy of contemporary rentiers

[29] See, very selectively, Stockhammer (2004), Crotty (2005), Epstein and Jayadev (2005), Pollin (2007), Orhangazi (2008).

is far too complex an issue to be dealt with by simply counter-posing idle rentier to functioning capitalist.

The rentier is also found in Marxist literature, with some references coming directly from Marx (1894, ch. 22). The strongest impact on Marxist political economy was through Lenin's (1964, pp. 276-285) discussion of 'parasitical rentiers' in his classic theory of imperialism. Lenin took the idea from Hobson (1938, ch. 4), the liberal critic of imperialism. The bulk of Lenin's economic analysis, on the other hand, drew on Hilferding, in whose work there is no mention of the 'parasitical rentier'. Instead - and based on Marx - Hilferding stressed that the financial system emerges necessarily to sustain real accumulation. Hilferding also had no truck with the notion that real accumulation runs into difficulties because idle rentiers constrain active industrialists.

Analysis of the rentier in Marxist political economy hinges on the concept of interest-bearing (or loanable) capital, originally put forth by Marx (1894, Pt 5). Despite its importance, there is ambiguity in Marx's discussion of the sources of interest-bearing capital. In places, Marx (1894, ch. 21, 22, 23, 24) treats interest-bearing capital as belonging to 'moneyed' capitalists, a subsection of the capitalist class. 'Moneyed' capitalists avoid the trouble of managing enterprises. Instead, they lend capital to others, and are satisfied with interest, which is a share of future profits. Though Marx does not use the term in this context, 'moneyed' capitalists are essentially rentiers, in contrast to active capitalists who borrow capital to generate profits.

In other parts of Capital, however, Marx suggests that loanable capital arises out of idle money generated in the normal course of the operations of industrial and commercial capital. [30] It follows that loanable capital does not belong to a distinct subsection of the capitalist class, but is constantly recreated as capitalist enterprises complete their turnovers. The main function of the credit system is to mobilise idle funds generated through the turnover of capital, transforming them into loanable money capital and channelling them back to accumulation. Hilferding's (pp. 70-81) work further specifies the sources of idle money and the complex ways in which it becomes loanable capital.

[30] For instance, Marx (1885, p. 165, 203, 248-61, 355-9, 423, 569; 1894, ch. 30, 31, 32).

One merit of this approach is that it cuts through the confusions surrounding the current debate on rentiers and financialisation. For one thing, the income of contemporary rentiers does not arise merely (or even mainly) from possessing and lending loanable capital. The managers of hedge funds, for instance, draw extraordinary incomes, typically amounting to 20% of annual profits. These often take the form of salary, and derive from using the money of others in order to speculate on financial assets. Managers of corporations also draw large incomes in the form of stock options and other stock-market-related mechanisms, often masquerading as salaries. Rents appearing as payment for services, finally, accrue to accountants, lawyers and others who provide the technical support necessary for securitisation and other trading.

Such financial rents are due mainly to position and function of the recipient relative to the financial system, rather than to ownership of loanable money capital, or even idle money. Modern rentiers, in other words, are not money holders who avoid the grubby business of profit generation. They might own loanable capital, but their ability to command extraordinary income is mediated primarily through their relationship to the financial system and its interaction with real accumulation. The managers of large industrial and commercial corporations have become adept at extracting such rents during the last three decades.

The limited relevance of the rentier as owner of loanable capital and at loggerheads with the industrial capitalist is even more apparent in relation to institutional investors. Pension funds, insurance companies, investment funds, and so on, collect idle money leaked from the personal income of broad layers of people, not from a small group of 'moneyed' rentiers. These intermediaries engage in financial investment in order to generate returns for those who ultimately own the funds, thereby creating scope for direct exploitation. It is apparent from their activities that receipt of financial returns does not define a well demarcated social group of rentiers. Instead, interest accrues across social classes to 'financialised' individuals, and is also paid to capitalist enterprises.

It is erroneous, therefore, to treat the profits of financial institutions as a measure of rentier income. Financial institutions - above all, banks - are not parasites subsisting on the profit flows of industrious productive capitalists. In principle, they are capitalist enterprises, offering necessary services in the sphere of circulation, subject to competition, and tending to earn the average rate of profit. Their profits

originate in a variety of activities: money-lending, financial market mediation, money-dealing, trading on own account, speculation, and so on. It was shown above that financialisation has entailed a shift toward exploiting personal income as well as financial market mediation. But to obtain this insight it is necessary to avoid treating financial institutions as rentiers.

The income, role, and influence of rentiers in the era of financialisation have resulted from the development of the financial system. The ability to extract rents through financial techniques is a by-product of the transformation of finance, not its driving force. Put differently, contemporary rentiers are able to draw extraordinary incomes mostly because of their position relative to the financial system, rather than through their ownership of loanable capital. The ascendancy of finance has systemic origins, while its outcomes are far more complex than a putative squeeze on industrialists by rentiers. By the same token, confronting financialisation does not mean supporting hard-working industry against idle finance.

6. Instead of a conclusion: Is this a new era of finance capital?

A further aspect of financialisation that merits analysis in this connection is the similarity with capitalism at the turn of the twentieth century. That was also a period of ascendancy of finance, explored in the classical Marxist debates on imperialism, including Hilferding (1981), Lenin (1964), Luxemburg (1951), Bauer (2000), and Bukharin (1972).

Hilferding (1981, p. 225) made a decisive contribution with the concept of finance capital. This represents an epochal change induced by the altered relationship between productive and banking capital. As the scale of production grows, industrial enterprises and banks become increasingly concentrated and form monopolistic cartels. Furthermore, industrial capital needs ever-larger volumes of fixed capital investment, which makes it heavily dependent on banks for credit. The result is creation of finance capital, that is, an amalgamation of industrial and banking capital, with banks in the ascendant. Finance capital dominates the economy, progressively restricting competition and 'organising' economic affairs to serve its interests.

On this basis, Hilferding analysed imperialism, thus providing foundations for Lenin's (1964) subsequently canonical formulation of the issue. Bauer (2000) had

already claimed that cartels demanded aggressive tariffs in order to create exclusive trading areas for themselves. Partly in consequence, cartels exported money capital to less developed countries to take advantage of lower wages. Thus ended 'laissez-faire' capitalism, represented by nineteenth century Britain. The model countries of finance capital were Germany and the USA. To support the rise of finance capital, these late developers relied on the power of the state, hence spurring militarism and imperialism, with attendant racism. Lenin's theory placed more emphasis on monopoly, also introducing parasitical rentiers and the territorial re-division of the world among imperialist powers. But the underlying economics came from Hilferding. [31]

Hilferding's and Lenin's analysis of finance capital and imperialism is a masterpiece of political economy, shedding light on the rise of finance and its implications for economy, society and politics. Still, it looked frayed during the long post-war boom as finance was strongly regulated, US imperialism subsumed divisions with other powers under its struggle against the Soviet Union, and a wave of liberation movements destroyed the old empires. But the rise of financialisation has injected fresh life to it. Does financialisation represent a return of finance capital? The short answer is no, but the analogy casts light on the current period for the following reasons.

First, banks and large industrial or commercial enterprises have not come closer together in recent decades, and nor is there evidence that banks hold the upper hand in relations with industry. As was shown above, large corporations have become more distant from banks, even though they participate strongly in financial activities, both in terms of assets and liabilities. Rather, the financial system has become more autonomous. Banks seek profits through direct exploitation of 'financialised' personal incomes as well as by continually churning loanable capital in open financial markets. These phenomena have little to do with classical finance capital.

Second, the rising autonomy of finance has transformed the character of financial systems in ways incompatible with the theory of finance capital. Implicit in the discussion of financialisation in sections 3 and 4 was the view that all financial systems have common elements, primarily a credit system (comprising mostly banks) and open financial markets. However, the balance between them - and thus the overall

[31] In contrast to Luxemburg (1951), who ignored Hilferding's concept in her analysis of imperialism.

outlook of the system - depends on each country's stage of development, history, institutional structure, law and politics. A useful distinction is between market-based, or Anglo-American, and bank-based, or German-Japanese financial systems. [32] Broadly speaking, in market-based systems, the weight of open financial markets is greater, while banks and industry have arms-length relations. In contrast, bank-based systems are characterised by prominent credit systems as well as close relations between banks and industry, often involving exchange of personnel and mutual share holding.

Hilferding's theory of finance capital is one of the earliest analyses of bank-based financial systems. It follows from his analysis that financial systems would become progressively bank-based as finance capital emerged. However, the rise of open financial markets, and the turn of banks toward direct exploitation and financial market mediation in recent decades are not consistent with such a trend. On the contrary, there has been a global shift toward market-based systems, though bank-systems have not disappeared by any means.

Third, both Hilferding and Lenin stress the creation of exclusive trading zones, and the associated emergence of territorial empires. But financialised capitalism has not produced phenomena of this type. Instead, steps have been taken to lower tariffs and homogenise the institutional framework of trading. The process has certainly been uneven and contradictory, typically involving discrimination against developing countries. The state has also been used to create barriers to trade across the developed world, not excluding the USA. Finally, trading blocs have been created – the European Union and NAFTA, above all – but these are not generally exclusive. There has been nothing comparable to the competitive imposition of tariffs that characterised the era of finance capital.

Fourth, Hilferding's theory has little to say on the intervention of the state in the sphere of finance. [33] But the state is pivotal to the operations of contemporary finance, despite the ideological triumph of deregulation. The state is the power behind the central bank. It supports central bank liabilities with its own securities and proclaims them legal tender, thus increasing their acceptability as money. The state is also the unspoken guarantor of central bank solvency. Without the state's backing

[32] Also used in mainstream economics, for instance, Allen & Gale (2001).
[33] The same holds for Bukharin (1972), despite his strong emphasis on 'organised' capitalism.

central banks would have been unable to intervene effectively in the crises of financialisation.

Central banks are essential to financialisation, and encapsulate several of its contradictions. They are public institutions at the heart of privatised finance; they monopolise the supply of legal tender in the midst of unprecedented competition in the supply of credit; they have to take the public interest into account, but act primarily in defence of finance; they proclaim exclusive concern with the stability of the value of money, but are forced to deal with the instability of credit. Central banks are constantly torn between the conflicting pressures resulting from financialisation.

Finally, fifth, financialisation has been accompanied by extraordinary turbulence in the international monetary system following the collapse of the Bretton Woods Agreement in 1971-3. Gold - the world money of Hilferding's and Lenin's day - has become marginal to the international monetary system, a reserve of last resort. In the absence of a genuine anchor, the US dollar has gradually emerged as quasi-world-money. It was shown in section 2 that this has forced developing countries to accumulate unprecedented international reserves in recent years. This has benefited primarily the USA since poor countries have been supplying it with capital, thus allowing it to sustain substantial trade deficits. But the leading imperialist country has already paid a price through the crisis of 2007-8.

Financialisation, in short, does not amount to dominance of banks over industrial and commercial capital. It stands rather for increasing autonomy of the financial sector. Industrial and commercial capitals are able to borrow in open financial markets, while being more heavily implicated in financial transactions. Meanwhile, financial institutions have sought new sources of profitability in personal income and financial market mediation.

This has been a period of unstable and low growth, punctuated by repeated financial bubbles. Booms and crises occur in the financial sphere, sometimes with little impact on real accumulation but often leading to major disruption of economic and social life. The need for a rational organisation of economic activity in the interests of the majority of people could not be more apparent.

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TABLES AND FIGURES

Table 1. US Mortgage Lending, 2001-6, $bn

Year	Originations	Originations Securitisation Rate (%)	Subprime	Subprime Securitised	Subprime Securitisation Rate (%)	ARM
2001	2215	60.7	160	96	60.0	355
2002	2885	63.0	200	122	61.0	679
2003	3945	67.5	310	203	65.5	1034
2004	2920	62.6	530	401	79.8	1464
2005	3120	67.7	625	508	81.3	1490
2006	2980	67.6	600	483	80.5	1340

Source: Inside Mortgage Finance; Mortgage Origination Indicators, Mortgage Originations by Product, Securitization Rates for Home Mortgages.

Table 2. US Mortgage Refinance, 2000-7

Year	2000	2001	2002	2003	2004	2005	2006	2007
Originations ($tr)	1.1	2.2	2.9	3.8	2.8	3.0	2.7	2.3
Refinance (%)	20.5	57.2	61.6	66.4	52.8	52.0	48.6	49.8

Source: Mortgage Bankers Association; Mortgage Origination Estimates, updated March 24, 2008.

Table 3. Personal Savings, USA, 2000-7

Year	2000	2001	2002	2003	2004	2005	2006	2007
Savings ($bn)	168.5	132.3	184.7	174.9	181.7	44.6	38.8	42.7
Savings as % of Disposable Income	2.3	1.8	2.4	2.1	2.1	0.5	0.4	0.4

Source: Federal Reserve Bank, Flow of Funds, various.

Table 4. Balance of Trade Deficit, USA, 2000-7, $bn

Year	2000	2001	2002	2003	2004	2005	2006	2007
	379.5	367.0	424.4	499.4	615.4	714.6	762.0	708.6

Source: Federal Reserve Bank, Flow of Funds, various.

Table 5. Effective Federal Funds Rate, 2000-7

Year	2000	2001	2002	2003	2004	2005	2006	2007
	6.24	3.88	1.67	1.13	1.35	3.22	4.97	5.02

Source: Federal Reserve Bank, Interest Rates, various.

Table 6. Excess of Savings over Investment as % of GDP

Year	2002	2003	2004	2005	2006	2007
USA	-4.2	-5.1	-5.5	-6.0	-5.9	-5.1
UK	-1.6	-1.3	-1.6	-2.5	-3.9	-4.9
Germany	2.0	1.9	4.3	4.6	5.0	5.6
Japan	2.9	3.2	3.7	3.6	3.9	4.8
Developing Asia	2.4	2.8	2.6	4.1	5.9	6.8
Commonwealth of Independent Countries (CIS)	6.4	6.3	8.3	8.6	7.4	4.5
Middle East	4.8	8.3	11.8	19.7	20.9	19.8
Africa	-1.7	-0.4	0.1	1.8	2.8	0.3

Source: IMF, World Economic Outlook 2008

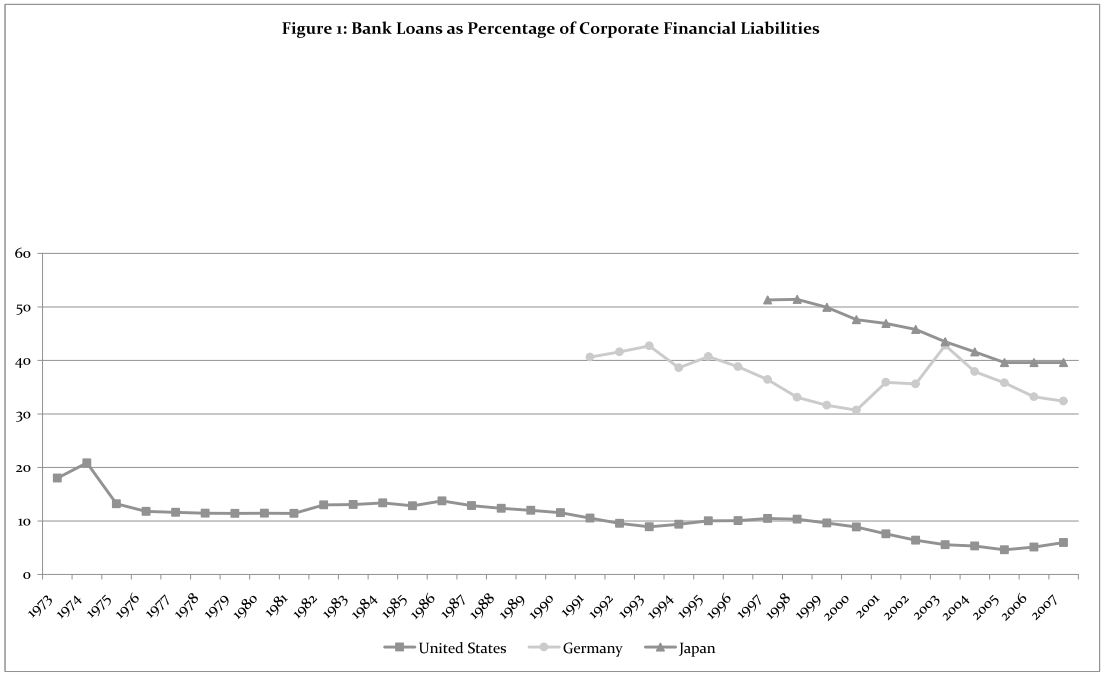
Table 7. Reserve Accumulation, Selected Developing Countries and Areas, $bn

Year	2000	2001	2002	2003	2004	2005	2006	2007
Total of which:	800.9	895.8	1072.6	1395.3	1848.3	2339.3	3095.5	4283.4
China	168.9	216.3	292.0	409.0	615.5	822.5	1069.5	1531.4
Russia	24.8	33.1	44.6	73.8	121.5	156.5	296.2	445.3
India	38.4	46.4	68.2	99.5	127.2	132.5	171.3	256.8
Middle East	146.1	157.9	163.9	198.3	246.7	351.6	477.2	638.1
Sub-Saharan Africa	35.0	35.5	36.0	39.9	62.3	83.0	115.9	144.9

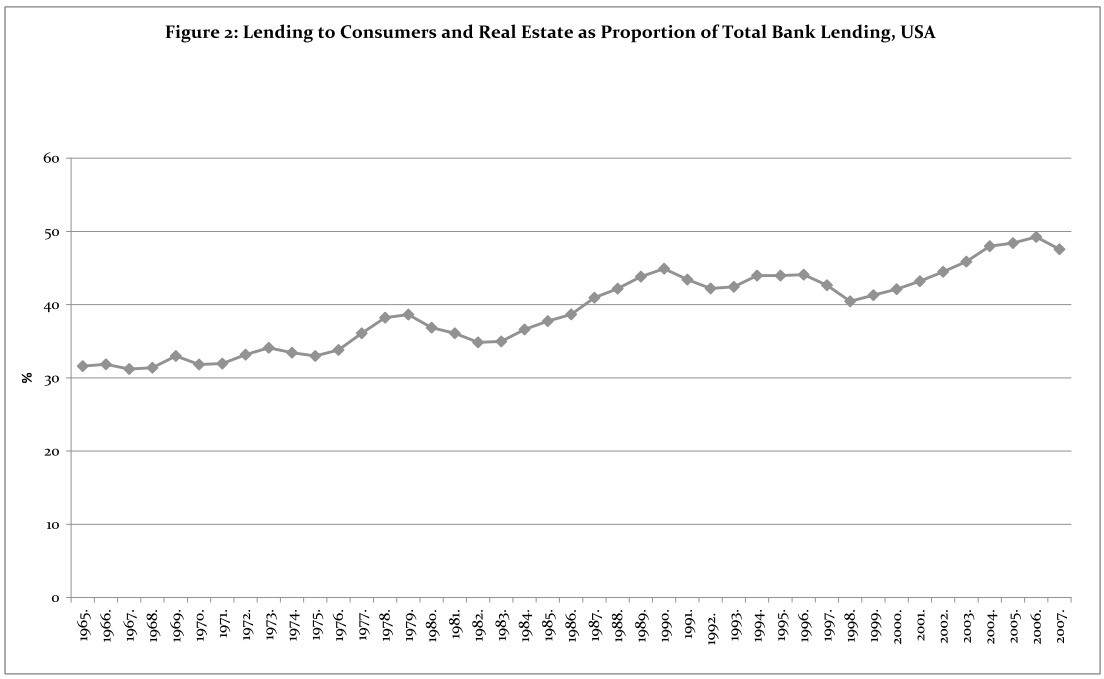
Source: IMF, World Economic Outlook 2008

Table 8. Credit Default Swaps, Notional Amount Outstanding, $bn

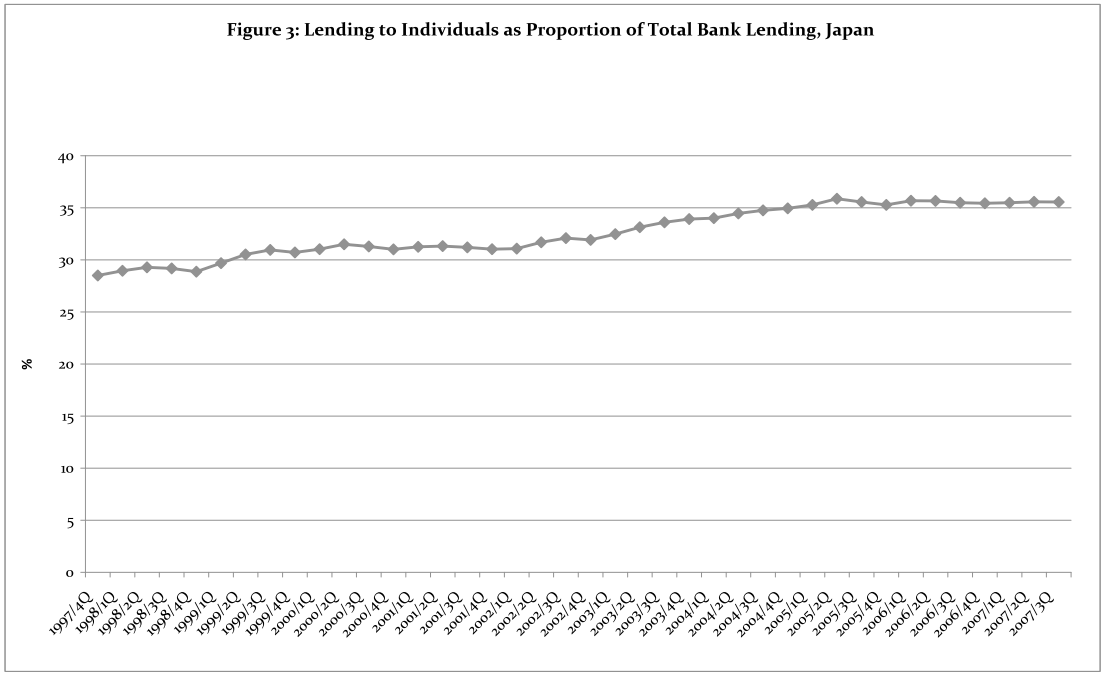
Jun 2005	Dec 2005	Jun 2006	Dec 2006	Jun 2007
10211	13908	20352	28650	42850



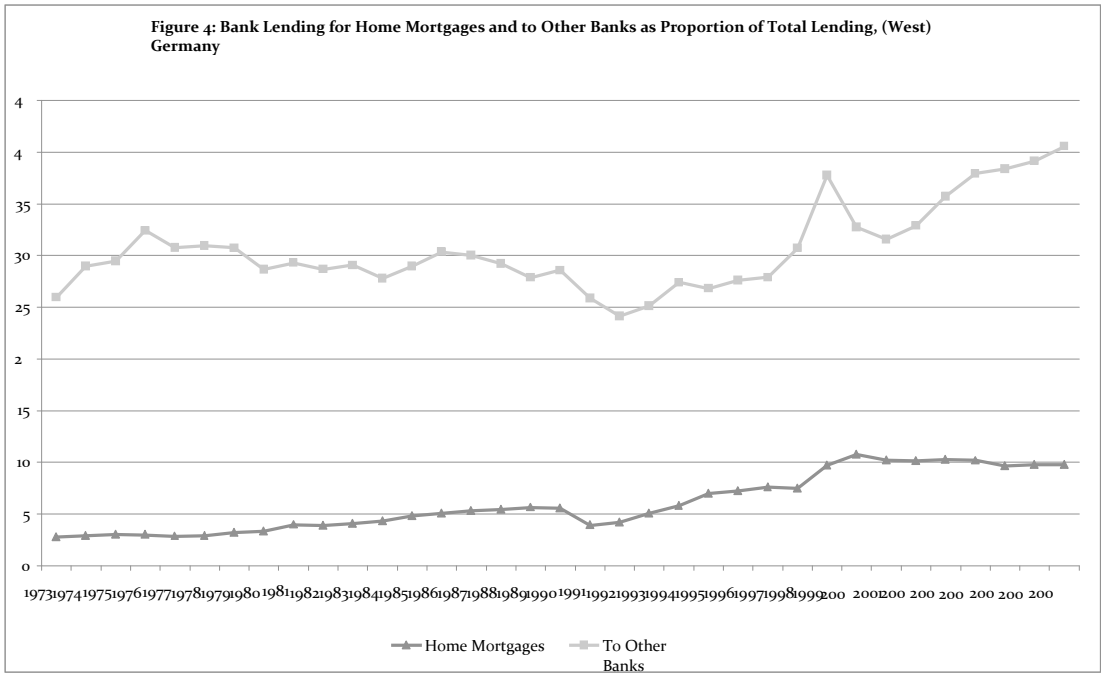
Source: Flow of Funds Accounts, USA, Japan and Germany



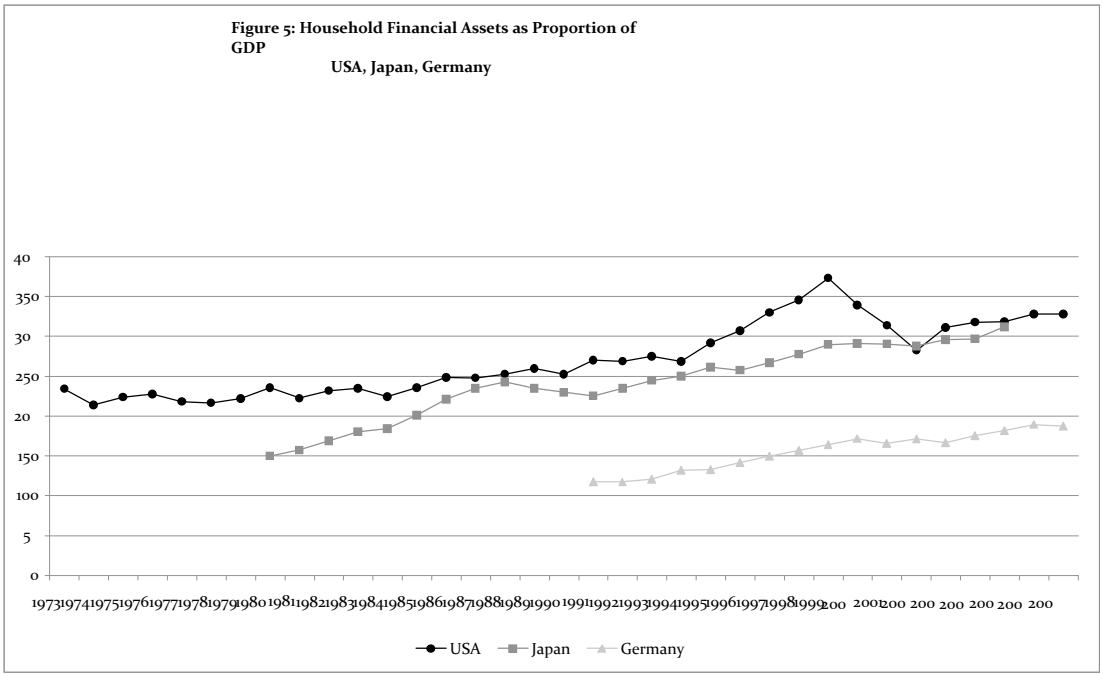
Source: Flow of Funds Accounts, USA, Federal Reserve



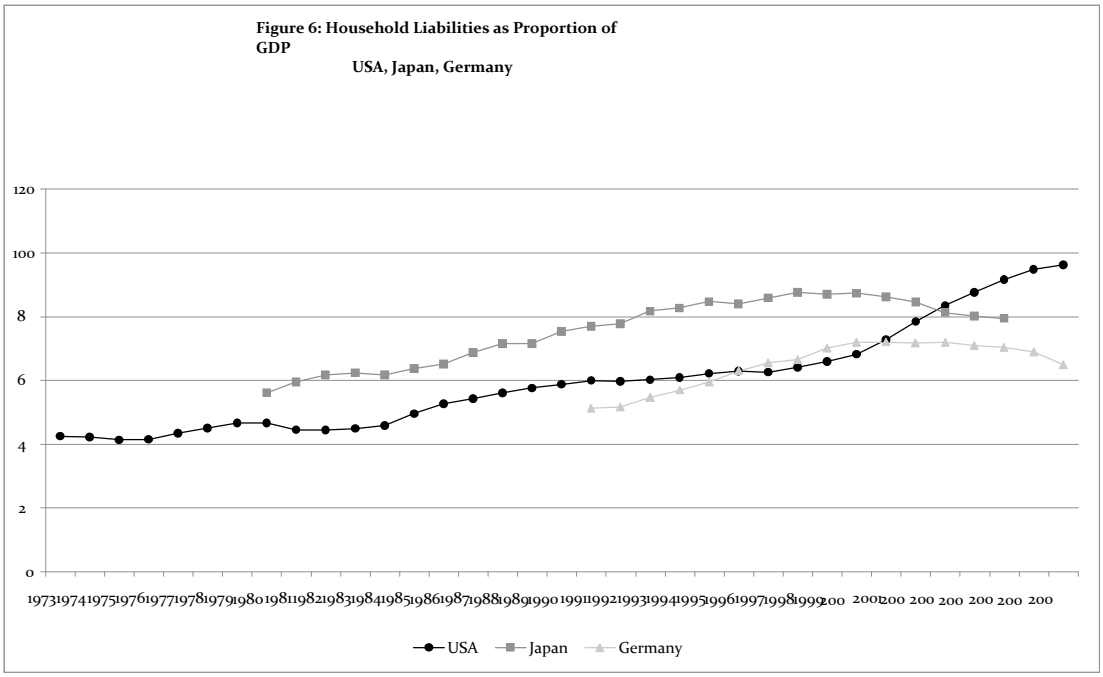
Source: Bank of Japan, Assets and Liabilities of Financial Institutions



Source: Financial Accounts for Germany

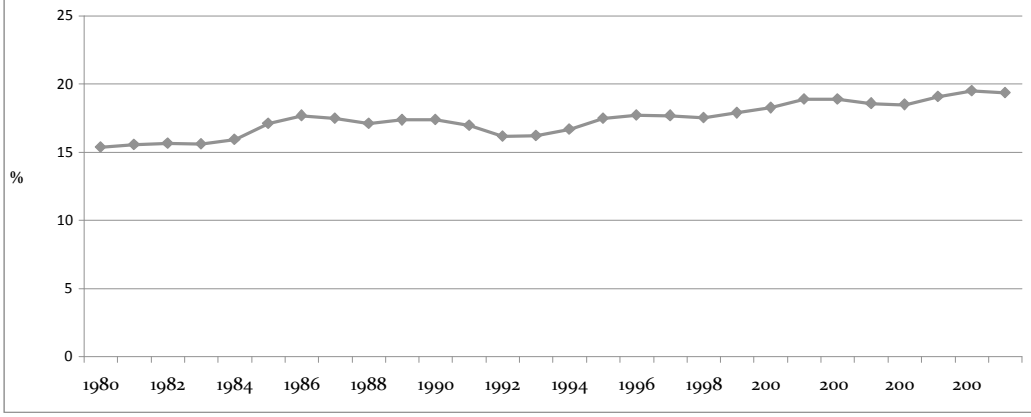


Source: Flow of Funds Accounts of the USA, Financial Accounts for Germany, OECD



Source: Flow of Funds Accounts of the USA, Financial Accounts for Germany, OECD

Figure 7: Mortgage, Consumption, Auto and other Loan Payments plus Insurance and Other Housing-Related Payments as Proportion of Individual Disposable Income, USA



Source: Household Debt Service and Financial Obligation Ratios, Federal Reserve Bank