

# *At the heart of the matter: household debt in contemporary banking and the international crisis*

54

This paper, drawing on Marxist political economy, conceptualizes the phenomenon of activities of banks as determinants of the current crisis. The main argument is the most significant aspect of recent changes in banking activities has been the turn towards individual wage income as a source of bank profits. This can be summarized in two ideas. 1) the conflict between households and financial firms that leads to an over-indebtedness of the former during a context of disadvantageous social relations for borrowers, and 2) the existence of theoretical reasons that argue that the economic recovery is difficult because the negative impact on the household consumption. Hence, it is argued that the recession will have an unprecedented length in the absence of a significant public intervention in the labour and financial markets.

Este trabajo se apoya en la economía política marxista para conceptualizar el fenómeno de las actuaciones bancarias como desencadenantes de la crisis actual. El argumento central es que el aspecto más relevante de los recientes cambios en las actividades bancarias ha sido el giro dado hacia las rentas salariales como fuente de los beneficios bancarios. Esto se resume en dos ideas: 1) el enfrentamiento entre las familias y las empresas financieras que lleva a un sobre-endeudamiento familiar en un contexto de relaciones sociales desventajosas para los deudores; y 2) hay razones teóricas que sostienen que haya dificultades para la recuperación ya que afecta a la demanda de los consumidores. De ahí se deduce que es probable que las recesiones muestren una duración inusualmente prolongada en ausencia de una intervención estatal importante en los mercados laboral y financiero.

*Lan hau politika-ekonomia marxistan oinarritzen da banku-eragiketak kontzeptualizatzeko gaur egungo krisiaren eragile gisa. Argudio nagusia da banku-eragiketetan azken aldian egon diren aldateten alderdirik garrantzitsuena bankuen irabazien iturria izateko soldata-errentetara egin den aldateta izan dela. Bi ideiatan laburbildu daiteke hori: 1) familien eta finantza-enpresen arteko liskarra, familiak gehiegi zorpetzea eragiten duena zordunentzat kaltegarria den gizarte-harremanen testuinguruan; eta 2) arrazoi teoriko batzuen arabera zailtasunak egongo dira berreskuratzeke, kontsumitzaileen eskaerari eragin zaiolako. Bertatik ondorioztatu da ziurrenik atzeraldiek luze iraungo dutela, estatuak ez badu esku-hartze garrantzitsurik egiten lan eta finantza-merkatuetan.*

## INDEX

1. Introduction
  2. The reorientation of banking
  3. On the social content of debt
  4. Debt, crisis and recovery
  5. Conclusions
- References

Keywords: marxist analysis, profits of debt, household indebtedness.

JEL classification: E44, E48, E52.

### 1. INTRODUCTION

The world economy is currently undergoing one of the most severe and distinctive crises in the history of industrial capitalism. The very idea that defaults on home mortgages by some of the poorest elements of the US working class would have wiped out leading international financial institutions, and triggered a worldwide recession, would have been unthinkable as recently as 25 years ago. The extent and uniqueness of the crisis have cast a sharp focus on the operations of leading international banks, and the economic and policy determinants of the US subprime mortgage implosion and its international spread.

A number of contributions have sought to conceptualize, on the basis of a pluralist range of analytical frameworks, both recent changes to the activities of banks and the determinants of the current crisis. The changes in banking have been long

documented. Berger et al (1995) provided early systematic evidence of the steady loss by US commercial banks of traditional business of lending to corporations and of captive deposit bases, attributing both developments to financial deregulation and increased competition, as well as technological developments. Allen and Santomero (2001) have noted the shift from net interest margins to various service fees in bank business models, interpreting the changes in banking as a shift in the relative importance of risk management services and traditional information gathering functions. Erturk and Solari (2007) have emphasized the importance of bank entrepreneurial alertness in the development of new bank business lines in a context of shifting financial landscapes and growing competition from capital markets.

The crisis has seen the rapid development of an extensive literature on its determinants, too numerous to examine in detail here. Broadly, mainstream

contributions have located the sources of the crisis in combinations of 'market failures' or 'regulatory failures', conceptualized in relation to ideal, perfectly functioning markets.<sup>1</sup> Heterodox and radical political economists have sought to identify deeper tendencies and processes inherent to capitalist markets and contemporary capitalism. Numerous contributions have emphasized and developed Hyman Minsky's conceptualization of endogenous tendencies in competition towards increasingly fragile financial structures by enterprises.<sup>2</sup> More recently, Foster and Magdoff (2008) have attributed the crisis to the structural shift in the US economy away from productive and towards financial activities. The authors identify this shift as an ultimately self-defeating capitalist response to the tendencies the authors find in contemporary capitalism towards chronic stagnation.<sup>3</sup>

Yet few contributions have sought out an integrated understanding of the current crisis as a distinctive result of specific contemporary banking practices.<sup>4</sup> This paper makes a modest contribution toward such an understanding drawing on Marxist political economy.<sup>5</sup>

It argues that the most significant aspect of recent changes in banking activities has

---

<sup>1</sup> Incentive problems posed in mortgage origination and securitization have been offered as causes of 'market failures', as has the absence of liquid markets for CDOs written over residential mortgages and the corresponding strong reliance on statistical models for the establishment of prices. A 'regulatory failure' conceptualization clearly underlies the extensive recent contribution offered in Brunnermeier et al (2009).

<sup>2</sup> These include Whalen (2007), Wray (2007, 2008), Kregel (2008).

<sup>3</sup> Laid out in Baran and Sweezy (1968).

<sup>4</sup> A notable exception is Kregel (2008).

<sup>5</sup> Based on research most recently reported in dos Santos (2009a), Dymski (2009), and Lapavistas (2009).

been the turn towards individual wage income as a source of bank profits. Bank lending has been reoriented away from loans to enterprises and towards various forms of consumption and mortgage loans to households. Investment banking business has also increased for all types of banks, significantly driven by the rise of retail investment fund services.<sup>6</sup>

These developments have been conditioned by a range of secular economic and financial changes in capitalism over the past three decades. Financial liberalization, the rise of institutional investors, and changing financial behavior by non financial corporations eroded traditional banking and forced banks to look for new business and funding sources. Wage stagnation, growing inequality and the steady expansion of private provision of basic necessities in housing, education, health and retirement, have increasingly forced wage earners to approach banks and other financial intermediaries in order to gain access to basic necessities and obtain some degree of protection against risks they now face individually. Although these processes are most clear in the US, their salient features are evident across a range of advanced and middle-income economies.

The current crisis may be understood as a crisis of the distinctive type of banking that emerged through these changes. First, it was triggered by the subprime meltdown, which developed as banks sought to extend household lending to historically oppressed segments of the US population. The meltdown had irreducibly financial causes related to securitization, access to money markets, high levels of bank leverage, and the potentially destructive nature of financial

---

<sup>6</sup> See Wilhelm and Morris (2007).

competition. Yet underpinning the resulting frenzy and bust lay lending to wage-earning households and the distinctive new social relations it defines.

And second, recent household lending has also given rise to record levels of household indebtedness across many economies. The current crisis has seen large numbers of overindebted households in those countries face increasing difficulties in servicing debt. Widespread financial distress by large numbers of final consumers represents a distinctive feature of the current international recession that is likely to condition significantly the prospects for economic recovery.

A Marxian approach to these developments affords two distinctive insights motivated in detail in this essay. First, by pitting households aiming to secure access to consumption against financial enterprises seeking to maximize profits, household debt has in the present context created social relations that are systematically disadvantageous to borrowers. Such disadvantages underpin the high effective interest rates realized by lenders and the sustained high profitability until recently enjoyed by financial intermediaries lending to ordinary consumers. High rates of profit, in turn, made this lending particularly well suited for the development of excessive lending and instability in the process of financial market competition.

Second and most significantly, there are good theoretical reasons to expect that a crisis triggered and characterized by over-indebtedness by wage earning households will pose distinctive difficulties to the process of recovery. At the broadest level, Marx (1909) identified a number of

mechanisms through which the devastation of capital values (including wages paid to variable capital) ushered by an industrial crisis creates the very bases for an eventual recovery of profitability. Such a recovery improves the solvency of indebted enterprises, facilitates financial stabilization, and fosters broader economic recovery. In contrast, a crisis sets into motion a range of macroeconomic processes that unambiguously deteriorate the financial position of wage-earning households. The very real reductions in wage rates upon which an eventual recovery is significantly predicated may plunge over-indebted households deeper into financial distress, creating further financial disruptions, and further limiting household demand. In such a setting, it is likely that recessions will prove unusually long lasting without significant state intervention into labor and financial markets.

The rest of the paper proceeds as follows. Section two documents the changes in the conduct of banks and the related reorientations of credit systems toward credit to households. It also offers a discussion of the broad policy, labor- and financial-market factors conditioning these developments. Section three offers a conceptualization of the different social relations associated with lending to capitalist enterprises and lending to individual wage earners, based on Marxian schemas of reproduction. On these grounds, the section identifies possible grounds for systematically higher effective interest rates in lending to wage-earning households for purposes of consumption.

Section four offers initial analytical considerations suggesting that recovery from a recession characterized by high levels of household indebtedness and

financial distress may pose distinctive and stubborn difficulties. Section five concludes.

## 2. THE REORIENTATION OF BANKING

Banking in the advanced capitalist economies has undergone significant transformations over the past 25 years. Lending has been reoriented away from loans to enterprises and towards various forms of consumption and mortgage loans to households. Investment banking business has also increased for all types of banks, driven most significantly by the rise of retail investment fund services. As documented in dos Santos (2009a) and Lapavistas (2009), these developments can be meaningfully understood as embodying an important shift in the sources of bank profits, away from the profits of productive enterprise and towards the wage income of ordinary people.

Record levels of household debt have followed these developments. Rising indebtedness has imposed higher debt servicing costs onto wage-earning households even in economies where interest rates have seen clear secular declines in the past 25 years. This growing debt burden has transformed growing shares of wage income into bank revenues and profits.

While these processes have been clearest in the US, many of their central aspects are evident in Britain, and other OECD economies. They are also evident in many middle-income economies, where leading US and European banks have led these transformations over the past 15 years.<sup>7</sup> This section briefly documents these

changes in bank behavior, their impact on the overall allocation of credit and the burden of debt on households, and offers a discussion on the determinants of these developments.

### 2.1. The New Bank Activities

Based on a study of corporate disclosures for nine leading international banks, dos Santos (2009a) offers a snapshot of a banking system geared towards the extraction of profits from individual wage revenue. Activities and revenues centre significantly on lending to individuals, money-dealing fees on retail accounts, and the provision of retail insurance and investment fund services. Lending to individuals is clearly a major lending activity for leading international banks, especially those from the US.

Yet even these figures understate the importance of this type of lending. The very organisation of Citibank, HSBC and Bank of America reveals their orientation to individual credit. Citibank's "Global Consumer" business segment generated profits of US\$12.1 billion, or 56 percent of all profits, in 2006. Revenues from credit cards and consumer lending stood at US\$13.5 billion, or 31.6 percent of all revenues. Citigroup also reported a total of US\$220 million in profits from its US student loans division alone.<sup>8</sup>

That same year HSBC's "Personal Financial Services" segment, which focuses on consumption and mortgage credit, generated US\$9.5 billion in profits, 42.9 percent of the total, ahead of commercial and investment banking divisions, which

---

<sup>7</sup> See dos Santos (2009b).

---

<sup>8</sup> All information on individual banks was obtained from corporate Annual Reports.

Table 1  
**Loans to Individuals as Percentage of Total Loan Portfolio,  
 December 2006**  
 (in %)

HSBC	CITIGROUP	Bank of America	RBS	PARIBAS	DRESDNER	SMFG
40.5	77.7	76.3	24.0	33.0	20.1	26.8

Source: dos Santos (2009a).

accounted for 27.3 and 26.3 percent of profits respectively. Central to this performance is HSBC's credit card network of over 120 million cards worldwide. Bank of America's "Global Consumer and Small Business" segment, which focuses centrally on consumption and mortgage credit and retail accounts, accounted for 65.6% of net interest income that year.

Money-dealing fees in retail accounts have also developed as a major source of bank revenue drawing on wage income. In 2007, Bank of America and Citigroup received almost US\$30 billion in such fees, with HSBC and Barclays US\$23.6 billion. Overdraft charges, late payment fees, credit card charges, etc are levied as fees but are costs of consumer lending. Bank of America attributed the significant rise in its non interest income between 2005 and 2006 to its purchase of British based credit card issuer MBNA, which resulted in increases in excess servicing, cash advance, and late fees. Similarly, Furnace (2004) reports that total US late credit card fees rose from insignificant levels in 1990 to over US\$1 billion in 1996, and to almost US\$9 billion in 2003. Other fees relate to access to new services, such as ATMs,

phone and internet banking facilities, whose high installation costs have successfully been passed to clients by banks.<sup>9</sup>

Finally, banks have benefited significantly from the growing reliance on private pension provision by developing new mass retail services in investment funds. Worldwide, managed funds held a total of US\$63.8 trillion in assets at the end of 2006.<sup>10</sup> Even small management fees on such volumes can lead to large revenues. In the US alone, mutual fund management fees have grown considerably since 1980.

In addition to these fees, fund managers stand in a highly advantageous position to profit from documented 'behavioural' tendencies by retail investors to buy while prices are high and sell when they are low.<sup>11</sup> As a result, fund management is remarkably profitable. In an international survey of money fund managers' performance in the lean year of 2002, Boston Consulting Group (2003) found that 64 percent of the funds reported pre-tax profit margins above 20 percent. A full 42 percent of the funds

<sup>9</sup> See Lapavistas and dos Santos (2008).

<sup>10</sup> dos Santos (2009a).

<sup>11</sup> *Ibid.*

Table 2  
**Total Mutual Fund Fees Paid by Holders in US**  
 (US\$ billion)

1980	1985	1990	2000	2001	2002	2003	2005	2005	2006
0.0	0.2	1.1	3.4	11.0	8.9	9.1	10.3	10.6	11.8

Source: Investment Company Institute.

reported profit margins higher than 30 percent. Funds targeting retail investors were reportedly the most profitable.

## 2.2. The growing burden and profits of debt

These activities have turned the debt of households into a major component of overall private debt across a number of economies. In Mexico, Estonia, Romania and Poland, where leading international banks have come to dominate banking markets, bank loans to households stood respectively at 40.0, 46.6, 49.8 and 54.1 percent of total bank credit by the start of this year.<sup>12</sup> In Britain household debt reached 78.9 percent of all private nonfinancial debt and 160 percent of gross disposable income by the end of 2007.<sup>13</sup> In the US household debt reached 58.3 percent of all private non-financial debt liabilities in mid 2006. It also peaked at a record 133 percent of disposable income in early 2008, remaining around 130 percent in the second half of 2008 despite aggressive cuts in base interest rates.<sup>14</sup>

<sup>12</sup> Calculated from respective central banks, except for Mexico where data from the CNBV was used.

<sup>13</sup> Calculated from United Kingdom National Accounts: Blue Book.

<sup>14</sup> Calculated from Flow of Funds of the United States.

All layers of the US population have been affected, with the heaviest proportional volumes of debt hitting households in the bottom 20 percent of the US income distribution, and the lightest on those households at the top 10 percent.

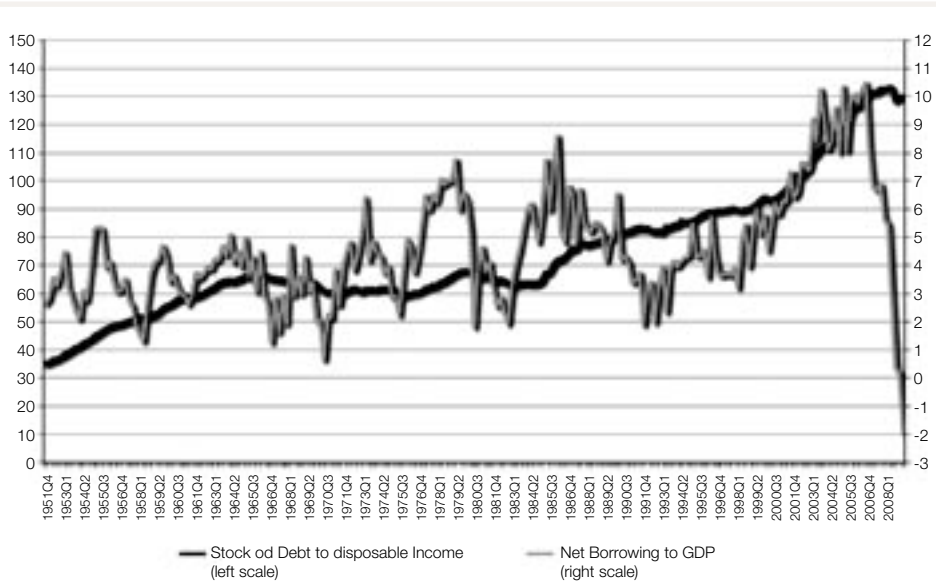
Despite recent secular trends to lower rates of interest, the cost to households of servicing this debt has increased considerably. The Federal Reserve's Financial Obligations Ratio, an estimate of the share of disposable income paid out as interest and for a series of housing-related services, reached a record 19.39 percent in the fourth quarter of 2007. Despite significant interest rate cuts since then, it still stood at 19 percent one year later, a level only reached during the height of the real estate boom in mid-2005.

The distribution of this debt burden can be quantified more exactly with data from the recently released US Survey of Consumer Finances. It shows this burden falling heavily on all households across the income distribution, save for those in the top 10 percent, with a slightly heavier relative burden on the two middle quintiles.

As the figures provided above on leading international banks suggest, they have developed very profitable business lines relying on appropriations of these growing



Figure 1  
**US HH debt and Borrowing 1951Q1 – 2008Q4**



Source: Made by the author.

Table 3

**US Mean Household Debt to Mean Income 1989 - 2007, by income percentile**

	0-20	20-39,9	40-59,9	60-79,9	80-89,9	90-100
1989	87.5	86.0	84.7	95.9	83.7	60.2
2007	258.5	154.8	170.2	182.5	178	86.7

Source: Made by the author.

household outlays. Ausubel (1997) provides robust evidence of the exceptionally high levels of returns on assets US banks received on credit-card lending compared with other lending activities. In Britain, Bank of England figures on realized effective interest rates show a consistent three

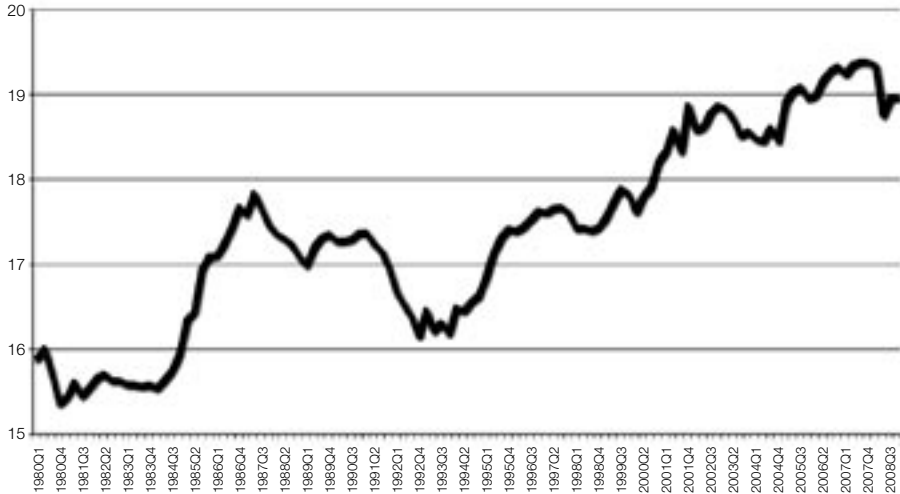
percentage point premium on returns on unsecured overdraft loans to households over equivalent loans to non-financial corporations between 2004 and 2008.<sup>15</sup>

<sup>15</sup> The gap has widened to five percent in the first three months of 2009.



Figure 2

**US Financial Obligations Ratio 1980Q1 - 2008Q4**



Source: Reserva Federal.

Table 4

**Average Debt Payments to Family Income 2007, by income percentile**

0-20	20-39.9	40-59.9	60-79.9	80-89.9	90-100
17.6	17.2	20.3	21.7	19.7	8.4

Source: Federal Survey of Consumer Finances, 2007 Report.

The profitability of this lending may also be inferred from the aggressiveness with which banks in the US have pursued acquisitions of independent firms engaged in this lending since the early 1990s. In 1995 they held no more than 25 percent of credit card receivables in the US.<sup>16</sup> As late

as 1999, the top ten US issuers controlled 55 percent of the market; many of them were independent credit card companies.<sup>17</sup> Since then large banks bought their way into dominant market share, acquiring Associates, Bank One, British-based MBNA, and Provident.

<sup>16</sup> Allen and Santomero (2001).

<sup>17</sup> Land, Mester, and Vermilyea (2007).

ten US issuers controlled over 90 percent of the market, and counted only one independent, non-bank enterprise.<sup>18</sup> During the real estate boom of the mid-2000s, US banks pursued similarly aggressive acquisitions of independent mortgage companies, paving the way for severe losses once the subprime crisis exploded.

### **2.3. The broad determinants paving way to crisis**

A series of secular and policy developments over the past 25 years have conditioned the development of household debt over the past 25 years and the build up to the current crisis. As above, these are clearest in the US, even though their central elements have been observed across most of the advanced and many middle-income economies.

On the demand side, a number of labor-market and social policy developments have helped push wage earners to access credit and other financial services in order to meet basic needs. From different analytical perspectives, Iacoviello (2008) as well as Barba and Pivetti (2008) have established empirical and conceptual linkages between rising levels of income inequality and rising household debt in the US economy. Lapavitsas (2009) and dos Santos (2009) emphasize a closely related aspect: that household indebtedness has risen against a background of stagnant incomes and the growing role of private provision in the supply of necessities in housing, health, education and pension

services. These developments have forced wage earners increasingly to borrow and to access various insurance, investment and risk-management services provided by banks and other financial firms.

On the supply side, scope for the traditional banking business of lending to enterprises has been greatly reduced. Financial liberalization intensified capital-market competition for banks, while the rise of private pension savings contributed to an explosion in the issuance of corporate bonds starting in the US since the early 1980s. Non-financial corporations have increasingly been able to rely on bond markets and retained earnings to meet their investment needs. Further, their real fixed investment has tended to fall in relation to GDP, while various measures involving the repurchase of outstanding equity through buybacks, mergers, and leveraged buyouts, often financed through bond issuance, have increased in significance.<sup>19</sup>

Banks were thus forced to develop new lines of business, which they found in the provision of investment banking services and by turning to the individual. In this technological and technical developments such as credit scoring methods and programs were instrumental. They permitted the extension of retail credit to large numbers of borrowers, including those at considerable geographical removes from banks' head offices, on the basis of 'hard' quantitative estimates of creditworthiness.<sup>20</sup>

As discussed above, the high relative profitability of this type of lending compelled banks increase market share and market size, often by aggressively offering

---

<sup>18</sup> JP Morgan, Citigroup, Bank of America, the independent Capital One, HSBC and Washington Mutual held the top seven spots at the time. See Akers et al (2005).

---

<sup>19</sup> See dos Santos (2009a).

<sup>20</sup> See Lapavitsas and dos Santos (2008).

consumption and mortgage credit.<sup>21</sup> In the setting of low interest rates and an incipient real-estate bubble of the mid-2000s, this evolved into predatory lending to historically oppressed and excluded sections of the US population,<sup>22</sup> fuelled by the adoption of investment banking funding and investment techniques.<sup>23</sup> The lure of high returns, the very nature of financial competition, and hubris concerning the descriptive power of various new risk management techniques and instruments, paved the way for the extension of such practices into previously excluded 'sub-prime' market segments—with disastrous effects.

Finally, governments actively supported household indebtedness as an increasingly central tenet of macroeconomic policy. In the US, fixed productive investment and the income of the bottom 90 percent of households started to experience significant falls relative to GDP in the mid 1980s.<sup>24</sup> Household debt offered an easy macroeconomic solution to the consequent demand problems. As admitted by Alan Greenspan (2007), it has been pursued as such since at least the early 1990s. Borrowing has risen steadily since then, as shown in figure 1, while the share in GDP of household consumption grew from a 1952-1982 average of 62 percent to over 70 percent by 2002. While the dot.com bubble offered a brief respite, the falling trends in investment and income resumed quickly

from 2001. From then on, as Greenspan himself candidly notes,

“Consumer spending carried the economy through the post 9/11 malaise, and what carried consumer spending was housing. In many parts of the United States, residential real estate, energized by the fall in mortgage interest rates, began to see values surge.... Since 1994, the proportion of American householders who became homeowners had accelerated.... The gains were especially dramatic among Hispanics and blacks, as increasing affluence as well as government encouragement of subprime mortgage programmes enables many members of minority groups to become first-time home buyers. This expansion... gave more people a stake in the future of our country and boded well for the cohesion of the nation....

“Capital gains, especially gains realized in cash [through home equity withdrawals], began burning holes in people’s pockets. Soon statisticians could see a bulge in consumer spending that matched the surge in capital gains. Some analysts estimated that 3 percent to 5 percent of the increase in housing wealth showed up annually in the demand for all manner of goods and services.”<sup>25</sup>

Meanwhile, US households were financing ever growing levels of their consumption and residential investment with borrowings, which reached record between 2003 and 2006.

Concerns about the mounting significance and magnitude of household borrowing and debt were dismissed by Federal Reserve officials, who thought they had discovered a perpetual motion machine in rising house prices. Rising house prices appeared to improve household net worth and were argued to render rising levels of debt sustainable. No attention was given (at least in public) to the fact that it was in fact

---

<sup>21</sup> Pre-approved credit cards have long been aggressively awarded to students and young adults since the early 1990s. Through such strategies issuers seek to profit from documented tendency for consumers to continue using the first card they ever obtained, regardless of its comparative interest rates. See Gruber and McComb (1997).

<sup>22</sup> See Lapavitsas (2009b) in this volume.

<sup>23</sup> See Lapavitsas (2009b) in this volume.

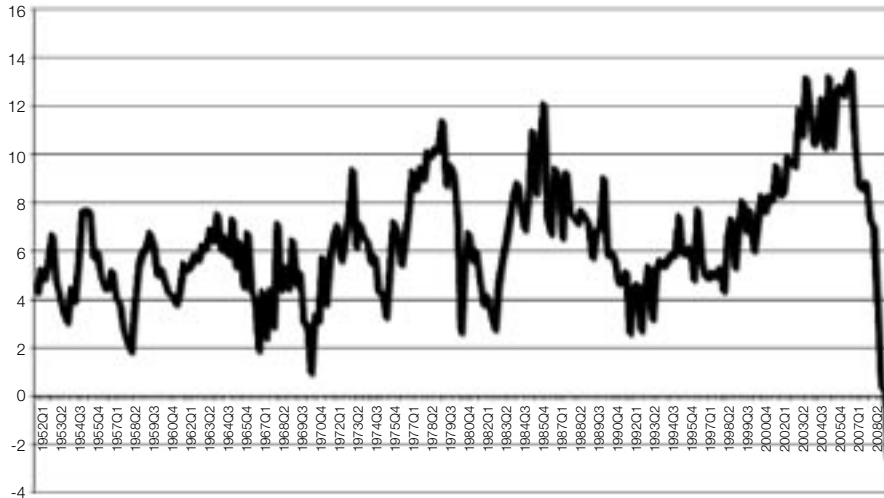
<sup>24</sup> See NIPA and IRS data, which document these tendencies respectively.

---

<sup>25</sup> Greenspan (2007), p 229 230.

Figure 3

**US HH Borrowings to Consumption and Housing Investment**



Source: Made by the author.

rising indebtedness that helped inflate home prices, as can be seen in the Fed's Monetary Report to Congress of 2004.

Against this backdrop the current crisis appears as a crisis of contemporary banking, and of the broader economic and policy regime that conditioned its development. At the heart of these processes lay a new set of credit relations that have become central to contemporary capitalism: Lending to wage-earning households. Its distinctive social content and likely impact on crisis and recovery are pursued in the next two sections.

**3. ON THE SOCIAL CONTENT OF DEBT**

Classical Marxist analysis of bank lending is founded on the distinctive concept of

interestbearing (or loanable) capital. Loanable money capital (LMC) is a peculiar type of capital that is distinct from industrial and commercial capital. It originates from idle pools of money capital that appear in the first instance over the course of the circuit of industrial and merchant capital.<sup>26</sup> Such pools are mobilised and transformed into loanable money capital by the credit system, which channels it back into circulation, in the first instance as loans to capitalist enterprises.

Trading in LMC involves credit relations, that is, the advance of value against a promise of repayment with interest. In this light, banks and other financial intermediaries are capitalist enterprises that specialize in all

<sup>26</sup> See Itoh and Lapavistas (1999).

aspects of dealing in LMC, accruing revenues from the difference in the price paid for deposits and that paid on loans. LMC commands repayment with interest, and the entire aim of its circulation is its return to its origin augmented by interest payments. Its successful reproduction may be described schematically as,

$$M - F - M' \quad (1)$$

Where  $M$  denotes the value of the original LMC,  $F$  is the financial claim it becomes once it is advanced, and  $M' > M$  denotes the value returning to the owner of LMC. Notably, process (1) is characterized by the qualitative identity and quantitative difference between its starting and ending points.

As intermediaries dealing in LMC, banks are specialists in overseeing success in the process described in (1) on both asset and liability sides of their balance sheets. In this specialization they must address difficulties related to the peculiar character of interest rates as a price of LMC. To Marx (1909),<sup>27</sup> the rate of interest contains an element of irrationality. It is a peculiar price: an expression of value in money, of a future flow of money. It also reveals no underlying socio economic relationship or inherent material aspect of social reproduction, not least because it is not the price of a produced commodity. Interest is most generally determined simply through the interaction of supply and demand. Its relative detachment from the material realities of production makes relations defined over LMC highly susceptible to the influence of broader patterns of socio-political power.<sup>28</sup>

<sup>27</sup> Chapter 22.

<sup>28</sup> Lapavistas (2003).

As a result, the extension of LMC to different classes of borrowers entails fundamentally different social and economic relations. This includes differences in the bases for repayment with interest, differences in the relationship between the value advanced through the loan and the borrower's reproduction, and in the different reproduction aims and imperatives governing borrowers' need for credit. This section illustrates these differences with a comparison, at the highest level of abstraction, of the social content of lending to capitalist enterprises and that of lending to wage-earning households based on classical Marxist analysis of LMC and the process of reproduction of each class of borrower.

### 3.1. Lending to capitalist enterprises

The process of social reproduction of capitalist enterprises in Marxist political economy involves the self-expansion of value through the appropriation of surplus value. This is achieved as capital is transformed into commodities labor power and means of production,  $C(lp, mp)$ . Those are combined in the production of new commodities, whose sale allows the capitalist to realize profits. Central to the process is the appropriation by the capitalist enterprise of value created by labor power over and above the value represented by wages.

Schematically,

$$M - C(lp, mp) - M' \quad (2)$$

Success in this reproduction requires that  $M' > M$  and defines the rate of profit, taken here with reference a single turn over time,

$$\rho = \frac{M' - M}{M} \quad (3)$$

The rate  $\rho$  provides the central concern for all aspects of the reproduction of capital. Expectations about its level govern the operations of every stage in process (2). They also drive investment plans and demand for inputs, as well as the broader process of allocation of capital. Significantly, it depends on the *quantitative* relationship between  $M$  and  $M'$ . In order to succeed in its reproduction, capital must of necessity deal with all aspects of combining inputs to produce outputs and all *qualitative* transformations it entails. But narrow technical or engineering issues are not the central imperative of the process. That is provided by the quantitative expansion of value.

When extended to finance a capitalist enterprise, the interest payments on LMC represent a division of profits realized by the enterprise. While shaped by the unanchored interaction of supply and demand for LMC, this division must yield certain general regularities if overall reproduction is to be successful. The rate of interest typically lies below the general rate of profit, ensuring repayment with interest can proceed without the loss of capital values by the borrowing enterprise.

During normal business, the systematic basis for the payment of interest is the increased turnover of total capital achieved by the mobilisation of idle money and its application to functioning circuits of capital through lending. More concretely, individual firms will be able to increase the returns on their own capital by leveraging it through borrowing, so long as the return on applied capital exceeds the rate of interest. In either case, the advanced LMC helps generate the source of its own repayment with

interest, by circulating in the borrower's circuit and expanding through the appropriation of surplus value.

In times of crisis the rate of interest may generally exceed the rate of profit, posing a very different potential set of relations between lender and borrower. Debt proves destructive of capital and disruptive of accumulation.<sup>29</sup> Its repayment poses elements of borrower expropriation, as repayments may require the liquidation of assets and the transfer to lenders of value secured by the borrowing enterprise independently of the loan.

Finally, in the social relation posed by LMC advanced to enterprises the borrower approaches the loan on the same basis as banking capital: seeking to secure the quantitative augmentation of capital  $M$  into  $M'$ . The resulting social relations are defined between social equals who, at this level of abstraction, have comparable expertise in seeking the expansion of value.

### 3.2. Lending to wage-earning households

Matters are fundamentally different in credit relations between banks and wage-earning households. Under capitalist conditions wage earners have no means other than the sale of their own labor power as the means to secure access to necessary consumption. Schematically, their reproduction may be represented as,

$$C - M - C' \quad (4)$$

Here wage earners sell labor power  $C$ , in order to obtain an equivalent quantity of value as money  $M$ , which allow the

<sup>29</sup> Itoh and Lapavistas (1999).

purchase of equally valued consumption commodities  $C'$ .

This reproduction is fundamentally different from that of LMC and industrial capital. Its purpose does not relate to changing quantitative magnitudes, which stay constant at every step. It lies in the qualitative difference between the original commodity and the commodities accessed. The governing imperative in this process is the fulfillment of consumption needs. Significantly, the development of such needs, norms, habits and expectations takes place through complex non-economic, social processes.<sup>30</sup>

Debt plays a distinctive role here. It may allow wage earners to access commodity values  $C'$  in excess of the value of their current earnings and any possible savings. The rationales for the payment of interest are far more complex here than in the debt of industrial enterprises, and require considerable separate analysis. Mainstream contributions like those inspired by Milton Friedman's (1957) Life Cycle or Permanent Income hypotheses, point to the gains in borrower welfare arising from consumption smoothing by consumers facing uneven or stochastic income paths. In addition to not inquiring into the determinants of consumption preferences, such views imply a long-term individual calculus that bears little resemblance to the actual behavior of the mass of wage earners towards debt and an uncertain economic future.<sup>31</sup>

A perspective far more likely to yield fruitful research has been recently advanced by Cynamon and Fazzari (2008), who argue

---

<sup>30</sup> See, for instance, Lapavistas (2003), Saad-Filho (2002), or Cynamon and Fazzari (2008).

<sup>31</sup> See Miles (2004), Campbell and Cocco (2003), for illustrations.

that, as with consumption habits, 'financial preferences evolve as social norms [and] interact with both cultural trends and institutional changes in household finance'.<sup>32</sup> Under this light, the motivations and social content of household debt and consequent flows of interest payments should be understood with reference to the concrete evolution of consumption habits, norms and expectations and their relationship to wage levels.

Two distinguishing general features of borrowing by wage-earning households condition its social content. First, it inherently poses an element of expropriation. Money loaned out to individuals for consumption or mortgages does not ordinarily generate the value from which it is to be repaid with interest.<sup>33</sup> Interest payments are generally made from subsequent wage receipts by borrowers, representing an appropriation of value borrowers have secured independently of the loan.

Second, in this borrowing wage-earning households are primarily concerned with the satisfaction of qualitative consumption needs, as represented by (4). And while in this pursuit these households generally ensure the maintenance of quantitative equality across trades, trading over LMC poses serious difficulties due to the indefiniteness of its value in exchange. In such trades they face profit-maximizing lenders, specialized in the expansion of value given by (1), who will approach the relationship from a clearly advantageous position.

---

<sup>32</sup> Cynamon and Fazzari (2008), p 1.

<sup>33</sup> The obvious exceptions relate to equity and residential real estate bubbles.



In the concrete setting of stagnant wages, rising inequality, and growing reliance on private provision of housing, health, and education, wage earners have been increasingly forced onto debt relations in order to secure their own reproduction. The distinguishing general features of consumption debt and this element of social compulsion suggest that the transfers of wage income in the form of interest payments may be usefully understood as usurious and containing an important exploitative element.

They also help identify the general class and concrete historical bases for the high profitability generally associated with this type of lending. High rates of profit, in turn, made this lending particularly well-suited for the development of excesses in the process of financial market competition, and helped pave the way to the current crisis. At the broadest level, the usurious and exploitative elements of this lending helped condition the vulnerabilities that burst open in August 2007 in the US.

#### 4. DEBT, CRISIS AND RECOVERY

The evolution of debt, its burdens on borrowers and its sustainability have been long and widely understood to be an important factor in the origin and propagation of capitalist crises. Hyman Minsky's Financial Instability Hypothesis,<sup>34</sup> most notably, identifies in the competitive economic process endogenous tendencies for increasingly fragile corporate debt structures, advancing them as the basis of capitalism's inherent and recurring crises. Fisher's (1933) debt deflation advances

corporate over indebtedness not only as the trigger, but also as the central transmission mechanism of economic depressions, leading to distress asset selling, falling asset prices, and a contraction of credit, confidence, profits, and output.<sup>35</sup> Even neoclassical economists have sought to identify in debt and its associated 'transactional problems' potential sources for the propagation in time of one-off exogenous shocks.<sup>36</sup>

These and related contributions have helped offer insights into a number of important elements of the current crisis.<sup>37</sup> But in themselves, they provide scant bases for approaching the potentially distinctive role and origins of *household over-indebtedness* in the development and potential recovery from a crisis. This section offers initial elements for a conceptualisation of such possible differences drawing on Marxist political economy.

The analytical emphasis in Marxist approaches to crises lies not on the evolution of debt, interest rates or financial structure, but on various tendencies inherent to the process of accumulation that periodically reduce rates of profit.<sup>38</sup> Recurring systemic reductions in profitability not only inhibit investment and trigger industrial crises, but also compromise the ability of enterprises to service debt, potentially creating significant financial disruptions that augment the size, duration and scope of the crisis.

When considered from the standpoint of the current crisis, Marx's understanding of

---

<sup>34</sup> Laid out succinctly in Minsky (1992).

<sup>35</sup> Fisher (1933), p 342.

<sup>36</sup> See, for instance, Kiyotaki and Moore (1997).

<sup>37</sup> See in particular Kregel (2008).

<sup>38</sup> See Day (1981) and Sweezy (1970) for summary discussions.

profits and their role in the origins and recovery from crises afford two important insights. First, the current crisis did not immediately originate as a result of disruptions to the profitability of capitalist enterprises. Its spread followed from the severe international financial disruptions that followed unexpected bank losses in highly leveraged investments in claims on US wage-earning households. It is historically novel in that regard.

Second and most significantly, recovery from a crisis triggered and characterised by unprecedented levels of household debt poses a range of distinctive difficulties. The depression in the values of all forms of capital during a classical industrial crisis helps create the conditions for the eventual recovery of profit rates, financial stability, and aggregate demand. Capitalist enterprises able to pursue operational and financial restructuring, or simply capable of securing access to funds, may find attractive pickings amid the general carnage of a depression. Wage earners, in contrast, face no analogous vulturous opportunities. Deflation in consumer goods does not in itself facilitate 'restructuring', the development of new income sources, and eventual boosts in demand. In fact, improvements in their financial situation generally rely on reductions in consumption and increases in wages, both of which stand opposed to the needs of a market-based recovery.

This section offers preliminary considerations on these matters. First, it considers Marx's own analysis of possible sources of restored profitability amidst the devastation wreaked by a general crisis. It then considers the situation of a crisis characterized by household overindebtedness.

#### 4.1. **Traditional crises, enterprises and recovery**

For Marx, capitalism is incapable of sustained and stable accumulation and the corresponding development of productive capacities and living standards. Competition, individual appropriation and the corollary economic anarchy help render the system vulnerable to disruptions to profitability, its very organizing principle. Marx and subsequent contributions to Marxist political economy have advanced a number of inherent processes that tend to erode profitability in contemporary capitalism. Those include tendencies present in competitive accumulation to over-investment and over-production, the possibility of sustained and significant gains in average wages, and possible difficulties in the realization of the value of produced commodities due to demand problems.<sup>39</sup>

Whatever its immediate causes, a decline in profitability may quickly ripple throughout the system as cuts in investment and employment disrupt the myriad interdependencies upon which previous investment, production, consumption plans had been made. In the ensuing economic decline, capitalist society finds itself with an overabundance of the entire social process of *capital*: means of production and labour power organized according to the imperatives of profit extraction, the various claims on the resulting surplus, and all attendant social relationships. This overabundance of capital generates losses to all those with claims on it. To Marx, crises set in motion competitive struggles between capitalists over the distribution of these losses,

---

<sup>39</sup> See Day (1981) or Sweezy (1970).

'the loss is not equally distributed over all the individual capitalists, but according to the fortunes of the competitive struggle, which assigns the loss in very different proportions and in various shapes by grace of previously captured advantages or positions, so that one capital is rendered unproductive, another destroyed, a third but relatively injured but momentarily depreciated, etc.'<sup>40</sup>

The goal of this competitive process is to ensure 'equilibrium is restored by making more or less capital unproductive or destroying it.' The chief mechanisms for this destruction involve not so much the physical destruction of capital, but the destruction of the various forms of capital value, including those contained in financial claims and capital goods.

'That portion of the value of capital which exists only in the form of claims on future shares of surplus-value of profit, which consists in fact of creditor's notes on production and its various forms, would be immediately depreciated by the reduction of the receipts on which it is calculated. One portion of the gold and silver money is rendered unproductive, cannot serve as capital. One portion of the commodities on the market can complete its process of circulation and reproduction only by means of an immense contraction of its prices, which means a depreciation of the capital represented by it. In the same way the elements of fixed capital are more or less depreciated.'

Variable capital also depreciates through reductions in wages, as 'The stagnation of production would have laid off a part of the working-class and thereby placed the employed part in a condition, in which they would have to submit to a reduction of wages, even below the average.' Finally,

---

<sup>40</sup> All quotes from Marx in this section are found in Marx (1909), p 297-299.

Marx understood quite well that these processes set into motion monetary and financial disruptions that compounded and extended the original crisis.

While Marx included the recurrence of such devastating crises in his general indictment of capitalism, he identified them not as terminal systemic crises but as part of a continuous and disruptive process of crisis and recovery in capitalism. In fact, much as he identified in successful accumulation the seeds of crisis, Marx also pointed to the elements of crises that helped pave the way for an eventual recovery.

'the fall in prices and the competitive struggle would have given to every capitalist an impulse to raise the individual value of his total product above its average value by means of new machines, new and improved working methods, new combinations, which means, to increase the productive power of a given quantity of labour, to lower the proportion of variable to the constant capital, and thereby to release some labourers.... The depreciation of the elements of constant capital itself would be another factor tending to raise the rate of profit. The mass of the employed constant capital, compared to the variable, would have increased, but the value of this mass might have fallen. The present stagnation of production would have prepared an expansion of production later on, within capitalistic limits.

'And in this way the cycle would be run once more.'

In contemporary terms, a setting of falling prices for capital goods, labor inputs, and corporate securities, create opportunities for restored rates of profit for some enterprises. Firms that happen to be in better financial states, or simply to possess better access to finance, will generally be in a position to implement operational and

financial restructuring measures that buttress their profitability, improve their solvency, and boost demand.

In addition to the operational measures noted by Marx, some enterprises may divest themselves of particularly problematic areas of operations. Such measures potentially yield significant present losses, but pave the way for higher expected profit rates, on the basis of which new investment may be undertaken.<sup>41</sup> Similarly, a setting of depressed asset prices offers particularly auspicious opportunities for profitability for those enterprises capable of developing and undertaking production of new product lines, particularly when they are capable of defending monopolistic rents.<sup>42</sup>

Falls in prices for corporate securities open further possibilities for financial and economic stabilization and eventual recovery. Depreciated debt claims on corporations may be bought up by stronger investors or financial intermediaries. Such purchases may entail significant for even fatal losses for incumbent holders, diminishing or eliminating their capacity to extend additional credit and compounding the crisis. But capital losses also ensure new holders face considerably better yields, possibly placing them in better positions from which eventually to help restore credit activity.

Falling equity prices may facilitate corporate takeovers and other types of mergers and acquisitions. These may be undertaken in conjunction with the pursuit of the various operational restructuring measures laid out above. They may also be associated with the concentration and

centralization of capital, through which the resulting corporation may enjoy enhanced economies of scale or market power. In either event, the purchase of equity may facilitate an eventual restoration of profitability.

In sum, the destruction of capital values in their various forms facilitates processes of operational and financial restructuring by some productive enterprises. These measures lay the basis for the eventual recovery of profitability, solvency, and levels of activity across productive capitalist enterprises. They also contribute to the recovery of financial stability and levels of activity, paving the way for the new upswing in accumulation.

#### 4.2. Household debt and the current crisis

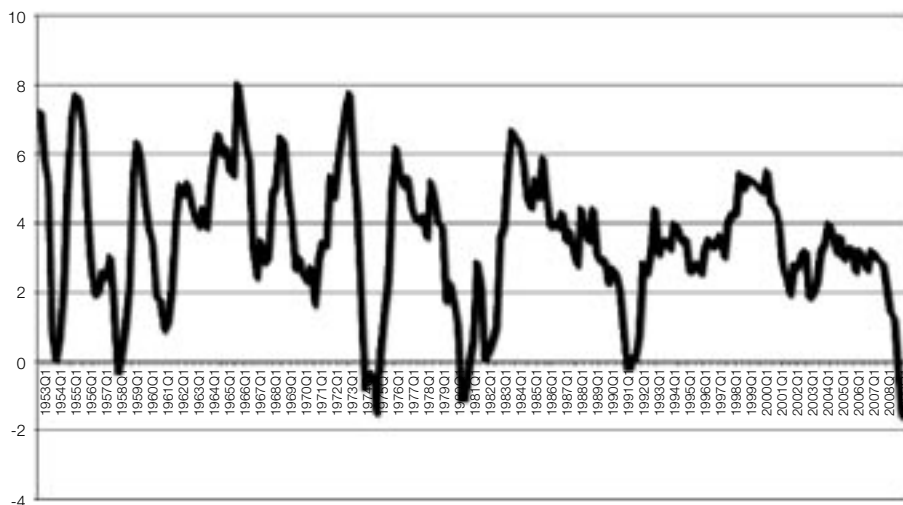
There are compelling theoretical reasons to expect the prospects for market-based recovery to be considerably dimmer during the current recession. The unique social and economic content of household indebtedness throws up distinctive obstacles to the process of economic recovery unlikely to be surmounted without significant state intervention.

The crisis has placed millions of households under considerable financial distress. Wholesale funding and securitization of loans to households have all but disappeared, while on-book bank lending has also contracted severely. This has cut credit flows that were increasingly central to sustaining household consumption. As shown in figure 3, US net household borrowing as a share of consumption and residential investment had reached record levels in mid-2005. As

<sup>41</sup> See Donaldson (1994).

<sup>42</sup> As emphasized by Schumpeter (1976).

Figure 4

**Year on Year growth rate of SA US HH consumption 1952Q2-2009Q1**

Source: US NIPA.

a result, the collapse of credit has triggered staggering falls in consumption, which dropped by a record 1.58 percent on real, year-on-year terms in the final quarter of 2008.

Such record falls in consumption have taken place despite the exhaustion of expansionary monetary policy, which has taken the Fed Funds rate to an average of 0.15 percent in April 2009.<sup>43</sup> And while the reduction of base rates has doubtlessly improved the financial position of many indebted households, overall debt and servicing costs measured in relation to personal disposable income are yet to fall

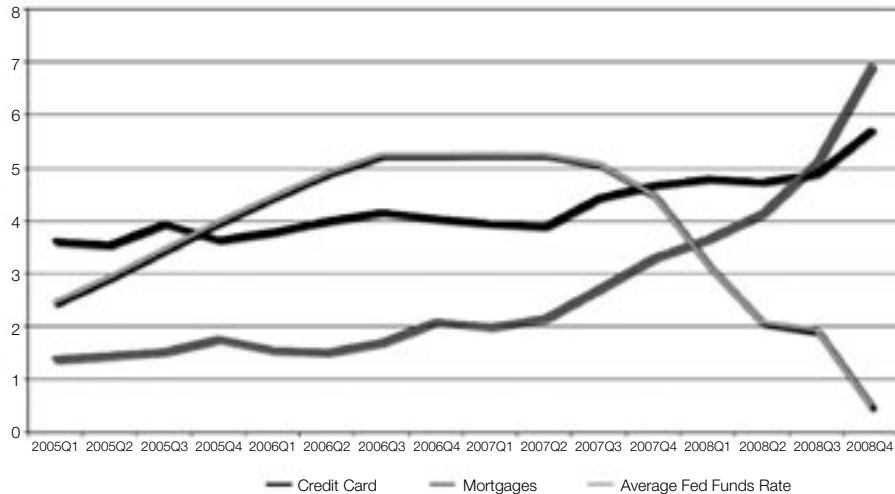
<sup>43</sup> It is notable than in the two previous episodes of significant contractions in consumption, in 1973-74 and 1980, US base interest rates were rising significantly.

significantly, as suggested by figures 1 and 2 above.<sup>44</sup> Similarly, default rates on carried commercial bank loans to households have continued to rise.

While this evidence is doubtlessly preliminary and the evolution of these variables requires ongoing monitoring, it points unambiguously to severe household financial distress. Based on the discussion in section 4.1 above, it is possible to identify a number of considerations that suggest financially distressed households create distinctive difficulties to the process of market-based recovery.

<sup>44</sup> Despite the cuts and actual deflation, US average credit card rates stood at 13.5 percent by the end of 2008, only slightly below the recent peak of 15.2 in September 2007 or the 14.7 percent average of 2006-2007. In Britain realized returns on credit card loans stood at 12.4 percent, the highest rate since 2001.

Figure 5

**Default Rates and Fed Funds Rate 2005Q1 - 2008Q4**

Source: US NIPA.

As with productive capitalist enterprises, a recession directly affects the incomes of wage-earning households. Unemployment and falling real wages tends to reduce the sector's labor income, while falling asset prices further limit consumption capacity and forces potentially dramatic falls in household net worth. Yet unlike productive enterprises, these processes do not in themselves offer wage-earning households new opportunities to increase their revenues and improve financial solvency.<sup>45</sup>

At the broadest level, there is limited scope for operational and financial restructuring of households.<sup>46</sup> Fundamental

<sup>45</sup> The obvious possible exception involves the unlikely inflation of a new housing bubble.

<sup>46</sup> Current difficulties with selling securitized claims on the debt of households also point to difficulties in restructuring financial claims on households.

adjustments in consumption are likely to be much more difficult and socially disruptive than corporate restructuring. Further, consumption is an inalienable process, and individual consumers cannot be 'taken over' and 'restructured' by other consumers. Finally, even when entrepreneurial discovery takes place among final consumers, it is inherently limited in its scope to various economies in consumption unlikely to provide boosts to broader economic activity.

As a result, improvements to the situation of financially distressed wage-earning households will rely exclusively on reductions in consumption and increases in wages, both of which stand opposed to the needs of a market-based recovery. Most significant for the purposes of this essay, a recovery led by productive capitalist

enterprises is premised, most significantly among several factors, on general reductions in the real wage. In fact, the persistence and depth of the Great Depression have long been attributed in considerable part to the downward inflexibility of wages.<sup>47</sup>

Herein lies a distinctive paradox posed by recovery from a recession characterized by financial distress by wage-earning households. A recovery led by capitalist enterprises is predicated on reductions in the real value of wages. Even if such reductions succeed in fostering eventual economic recovery, in the short run they would further erode the capacity of households to service debt, compounding financial stresses. Yet further financial stresses would also arise from a failure to reduce the real value of wages, which, without additional state interventions, would quickly translate into rising rates of unemployment.

An eventual return of inflation, often looked to as an aid to the process of deleveraging, also poses distinctive difficulties. Rising price levels may reduce real debt burdens, but this will depend on the capacity of lenders to maintain the real value of debt, and the capacity of borrowers to maintain the real value of their incomes. Particularly in a recessionary setting, wage earners will generally not be very successful in maintaining the real value of money wages in relation to consumption commodities sold by functioning capitalists and to claims on households by financial enterprises.

At the broadest level, during typical industrial crises falling wages and inflation

effect transfers and shifts of value from financial enterprises and wage earners to productive capitalist enterprises. Because those enterprises monopolize the appropriation of new value, and some of them may be able to found their economic plans on the yields this value represents on levels of investment depressed by recession, such transfers may help pave the way for an eventual recovery.

The current crisis presents a more complex picture. The return of financial and economic stability poses the need for transfers from financial and productive enterprises to wage earners. Such transfers are unlikely to take place on market terms, either through higher wages or through inflation. Without significant state intervention, the process of household deleveraging is likely to continue to involve weak levels of consumption, ongoing losses on household credit, and consequent disruptions to broader processes of economic recovery.

## 5. CONCLUSIONS

Drawing on Marxist political economy, this essay has sought to document the economic significance and distinctiveness of rising levels of debt by wage earning households, advancing them as a defining feature of contemporary banking, macroeconomic policy, and of the current crisis. Household debt is at the centre of the turn by banks to individual income as a source of profits. It provided the staple for the speculative binge that triggered the current crisis, and it lies at the heart of the broader economic and policy regimes that appear to be unraveling as a result.

From this perspective, the essay advanced preliminary analytical discussions

<sup>47</sup> 47 See, of course, Keynes (1973), and Bernanke (1995) or Bordo et al (2000).



that afforded two broad insights on contemporary banking and the international crisis that help inform policy and research efforts in relation to the unfolding international recession. First, it was the usurious and exploitative character of lending to wage-earning households, as it developed in the concrete setting of rising inequality and privatization of the past three decades, that made it highly profitable. High profitability made it a natural locus for destructive processes of financial competition and instability.

Second, record levels of household indebtedness pose distinctive difficulties for the process of recovery from the current recession. In the first instance, they compromise consumer demand. But more importantly, they create a conflict between the need for lower real wages to support restored profitability of capitalist enterprises and the need for higher wages to restore

financial stability to households and broader economy. There is no reason to expect financial and labor markets to resolve this conflict in a timely and socially desirable fashion.

Analytically, the preliminary discussions offered here point to the need for robust conceptualizations of credit relations in the process of accumulation, including the distinctive social content of credit to wage earning households. At the level of policy, this essay points to the need for a series of state interventions to facilitate transfers to wageearning households—through gains in real wages, reductions in inequality, and growing scopes for social provision of basic necessities—as central to economic recovery. In the current context it is increasingly clear that addressing basic issues of socioeconomic equity is indispensable to the restoration of economic growth and stability.

## REFERENCES

- AUSUBEL, L. (1997): 'Credit Card Defaults, Credit Card Profits, and Bankruptcy', *The American Bankruptcy Law Journal*, 71, 249-270.
- ALLEN, F. and SANTOMERO, A. (2001): 'What do financial intermediaries do?', *Journal of Banking and Finance*, 25, 2: 271 – 94.
- BARAN, P. and SWEEZY, P. (1968): *Monopoly Capital, An Essay on the American Economic Order*, London: Pelican.
- BARBA, A. and PIVETTI, M. (2009): 'Rising household debt: Its causes and macroeconomic implications—a long-period analysis', *Cambridge Journal of Economics*, 33(1): 113-137.
- BERGER, A., KASHYAP, A. and SCALISE, J. (1995): 'The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been', *Brookings Papers on Economic Activity*, 1995(2): 55-200.
- BERNANKE, B. (1995): 'The Macroeconomics of the Great Depression: A Comparative Approach', *Journal of Money, Credit and Banking*, 27(1): 1-28.
- BORDO, M., ERCEG, C. and EVANS. C. (2000): 'Money, Sticky Wages, and the Great Depression', *The American Economic Review*, 9(5): 1447-1463.
- BOSTON CONSULTING GROUP (2003): *Navigating the Maze, Asset Management 2003*, Boston, Boston Consulting Group.
- BRUNNERMEIER, M., CROCKETT, A., GOODHART, C., PERSAUD, A. and SHIN, H. (2009): *The Fundamental Principles of Financial Regulation*, Geneva Reports on the World Economy 11.
- CAMPBELL, J. and COCCO, J. (2003): 'Household risk management and optimal mortgage choice',

- Quarterly Journal of Economics*, 118(4): 1449-1494.
- CYNAMON, B. and FAZZARI, S. (2008): 'Household Debt in the Consumer Age: Source of Growth—Risk of Collapse', *Capitalism and Society*, 3(2).
- DAY, R. (1981): *The 'Crisis' and the 'Crash'*, London: NLB.
- DONALSON, G. (1994): *Corporate Restructuring*, Boston: Harvard Business School Press.
- DOS SANTOS, P. (2009a): 'On the Content of Banking in Contemporary Capitalism', *Historical Materialism*, 17(2), forthcoming.
- 2009b: 'A Policy Wrapped in 'Analysis'—The World Bank's Case for Foreign Banks', in B FINE, K BAYLISS, E VAN WAENBERGE (2009).
- DYMSKI, G. (2009): 'Racial exclusion and the political economy of the subprime crisis', *Historical Materialism*, 17(2), forthcoming.
- ERTURK, I. and SOLARI, S. (2007): Banks as Continuous Reinvention-, *New Political Economy*, 12(3): 369-388.
- FISHER, I. (1933): 'The Debt-Deflation Theory of Great Depressions', *Econometrica*, 1 (October): 337-357.
- FOSTER, J and MAGDOFF, F. (2008): 'Financial Implosion and Stagnation: Back to the Real Economy', *Monthly Review*, 60(7).
- FRIEDMAN, M. (1957): *A Theory of the Consumption Function*, Princeton: Princeton University Press.
- FURNACE, D. (2004): 'Why Overdraft Income is Growing for Financial Institutions?', *Kentucky Banker Magazine*, March 2004, Louisville: Kentucky Bankers Association.
- GREENSPAN, A. (2007): *The Age of Turbulence*, New York: The Penguin Press.
- GRUBEN, W. and MCCOMB, R. (1997): 'Liberalization, Privatization, And Crash: Mexico's Banking System in the 1990s', *Federal Reserve Bank of Dallas Economic Review*, First Quarter: 21-30.
- HILFERDING, R (1981): *Finance Capital*, London: Routledge & Kegan Paul.
- IACOVIELLO, M. (2008): 'Household Debt and Income Inequality, 1963-2003', *Journal of Money, Credit and Banking*, 40(5): 929-965.
- ITO, M. and LAPAVITSAS, C. (1999): *Political Economy of Money and Finance*, London: Macmillan.
- KEYNES, J. (1973): *The General Theory of Employment, Interest and Money*, London: Cambridge University Press.
- KIYOTAKI, N. and MOORE, J. (1997): 'Credit Cycles', *The Journal of Political Economy*, 105(2): 211-248.
- KREGEL, J. (2008): 'Changes in the U.S. Financial System and the Subprime Crisis', *Working Paper*, no 530, The Levy Economics Institute of Bard College.
- LAPAVITSAS, C. (2003): *Social foundations of markets, money, and credit*, London: Routledge.
- 2009: 'Financialised Capitalism: Crises and Financial Expropriation', *Historical Materialism*, 17(2), forthcoming.
- LAPAVITSAS, C. and P DOS SANTOS, P. (2008): 'Globalization and Contemporary Banking: On the Impact of New Technology', *Contributions to Political Economy*, 27: 31-56.
- MARX, K. (1909): *Capital*, Volume III, Chicago: Charles H. Kerr & Company.
- MILES, D. (2004): *The UK Mortgage Market: Taking a Long-term View*, London: HM Treasury.
- MINSKY, H. (1992): 'The Financial Instability Hypothesis', *Working Paper*, no 74, The Levy Economics Institute of Bard College.
- MORRISON, A. and WILHELM, W. (2007): *Investment Banking, Institutions, Politics, and Law*, New York: Oxford University Press.
- SAAD-FILHO, A. (2002): *The Value of Marx—Political Economy for Contemporary Capitalism*, London: Routledge.
- SCHUMPETER, J. (1976): *Capitalism, Socialism & Democracy*, London: Routledge.
- SWEEZY, P. (1970): *The Theory of Capitalist Development*, New York: Monthly Review Press.
- WHALEN, C. (2007): 'The U.S. Credit Crunch of 2007: A Minsky Moment', *Public Policy Brief*, no 92, The Levy Economics Institute of Bard College.
- WRAY, R. (2007), 'Lessons from the Subprime Meltdown', *Working Paper*, no 522, The Levy Economics Institute of Bard College.
- 2008: 'Financial Markets Meltdown-What Can We Learn from Minsky?', *Public Policy Brief*, no 94, The Levy Economics Institute of Bard College.