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Escaping the tyranny of earned income? The failure of finance as social innovation[*]

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Abstract

Before the crisis which started in 2007, the mass marketing of retail financial products in high income countries since the early 1980s was understood through rhetorics about individual emancipation as the 'democratisation of finance' and 'ownership society', where supporters and critics debated in a shared framework. From a post 2007 perspective, it is time to revalue these developments. This paper changes the frame around the debate and constructs the extension of credit and ownership as a major social innovation led by profit seeking retail banks. It then presents empirical evidence from the United States, which suggests that the extension of credit and asset ownership in an unequal society is self defeating because it does not abolish the tyranny of earned income and, indeed, it tightens the vice insofar as low income individuals and households accumulate debt but not assets. The implication is that finance as privately led social innovation has failed and it is time for fundamental rethinking of much that has been taken for granted.

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Introduction

This is a paper about what has been achieved through the mass marketing of retail financial products in the high income countries, especially the USA, since the early 1980s. Before the crisis which started in 2007, the outcomes of this process were understood through rhetorics about individual emancipation as the 'democratisation of finance' and 'ownership society', where supporters and critics debated in a shared framework. From a post 2007 perspective, it is time to revalue these developments more fundamentally and this paper does so in two ways. First, it changes the frame around the debate and constructs the extension of credit and ownership as a major social innovation led by profit seeking retail banks. Second, it presents empirical evidence from the United States, which suggests that the extension of credit and asset ownership in an unequal society is self defeating because it does not abolish the tyranny of earned income and, indeed, it tightens the vice insofar as low income individuals and households accumulate debt but not assets. The implication is that finance as privately led social innovation has failed and it is time for fundamental rethinking of much that has been taken for granted.

Before 2007, the extension of credit was rationalised from the right in the USA as the 'democratisation of finance'. This was presented as a positive, enabling development which meant that all could now enjoy what had once been the prerogative of the privileged few. Here, for example, is Allan Greenspan, chair of the Federal Reserve, accentuating the positive in 2005:

> Improved access to credit for consumers… has had significant benefits. Unquestionably, innovation and deregulation have vastly expanded credit availability to virtually all income classes. Access to credit has enabled families to purchase homes, deal with emergencies, and obtain goods and services… Credit cards and instalment loans are also available to the vast majority of households
>
> (Greenspan 2005).

The corresponding political agenda was summed up in the slogan 'ownership society' which was presented as more of a good thing. Here, again from 2005, is President Bush in his second inaugural promising to

> build an ownership society (to)… widen the ownership of homes and businesses, retirement savings and health insurance - preparing our people for the challenges of life in a free society. By making every citizen an agent of his or her own destiny, we will give our fellow Americans greater freedom from want and fear, and make our society more prosperous and just and equal
>
> (Whitehouse 2005).

Right up to the point when crisis broke, mainstream politicians, regulators and international, agencies welcomed every new development. Thus Adrian Blundell-Wignall of the OECD argued 'sub prime lending is a new innovation… the big benefit is that people who previously could not dream of owning a home share in the benefits of financial innovation' (2007: 2).

If this kind of claim was suddenly incredible within a few months of its publication, the democratisation of finance in the USA had, and still has, its serious academic supporters like Robert Shiller. After the crisis, Shiller (2008) has continued to argue for the wider use of derivatives as mass insurance against all the vicissitudes of life. Significantly, he has not renounced his earlier view that 'we need to democratize finance and bring the advantages enjoyed by the clients of Wall Street to the customers of Wal-Mart' (Shiller 2003: 2). And, equally, the democratisation of finance has always had its academic critics, like Manning (2000) and Schor (1998) who, long before the current crisis, emphasised the negatives and presented debt as subordination not emancipation. Here we have Manning's (2000) quasi populist arguments about a 'debt crisis' when debt has been irresponsibly oversold to the point where it hurts households; or Schor's (1998) more sociological analysis of the 'new consumerism' where an upscaling of consumer aspirations and spending leads to 'overspending'.

If the critics of the democratisation of finance have generally been vindicated by events since 2007, it is also true that the debate between critics and supporters was a very narrow one where both sides operated on the same intellectual terrain and selected empirics to accentuate the positive or the negative from a process which was mixed and ambiguous. We would not exempt our own earlier work from this criticism. Erturk *et al.*'s (2007) paper was entirely orthodox in that it worked by first laying out the promises of democratisation and then shifting to observe outcomes which were disappointing. The article was therefore set on the established terrain about individual choice and the message was that effective choice required conditions and subjectivity which did not exist and could not exist when 'the context is confusing, individuals lack calculative competence and (financial) products are opaque' (Erturk *et al.* 2007: 2). The financial services industry and regulators acknowledged such problems but were more optimistic about the scope for improving financial literacy which was consecrated as a policy problem with the 2005 publication of an OECD book on *Improving Financial Literacy*. Looking back from a post 2007 perspective, we think it is now time to be more radical and change the problem definition as well as challenging the overly optimistic answers about the benefits of democratising finance (and the possibility of improving literacy).

In our view, the problem definition can be interestingly shifted if we construct the extension of credit and asset ownership as a social innovation (not individual emancipation). This proposal for reconceptualising retail finance as social innovation must seem immediately paradoxical if we look at the standard definitions of social innovation. Authors like Mulgan (2006) classically defined social innovation as worthy attempts by non profit organisations to meet 'social needs'. His examples include Wikipedia, the Open University, hospices, micro credit, the fair trade movement and self help health groups (Mulgan 2006: 146). 'Business innovation' by profit seeking firms was here explicitly excluded from the sphere of 'social innovation':

> Social innovation refers to innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly diffused through organisations whose primary purposes are social. Business innovation is generally motivated by profit maximization and diffused through organizations that are primarily motivated by profit maximization
>
> (Mulgan 2006: 146)

This strict demarcation is questioned in journals like the *Stanford Social Innovation Review* whose slogan is 'strategies, tools and ideas for nonprofits, foundations and socially responsible business'. But this explicitly assumes that only a minority of socially and environmentally aware businesses can undertake social innovation or more precisely, that social innovation is a kind of optional extra (at management's discretion) for private sector business models. Murray *et al.* (2009: 5-6) add this qualification in their latest work where they give corporate social responsibility and the fair trade movement as examples of how 'the private economy engages in the social economy'.

If we were to take these definitions seriously, retail finance by mainstream banks would not be social innovation. But the standard definitions of social innovation mix dubious assumptions about the nature of social innovation and highly contestable assertions and prescriptions about the sphere in which social innovation operates. We doubt whether there is a distinct sphere of 'social needs' and social production distinct from economic needs (and resources). Of course, the standard emphasis on innovation as the prerogative of non profit organisations reflects the neo liberal assumptions of the past twenty years. Mulgan's definition would confine social innovation to those areas (beyond the economy) where viable private sector business models do not exist; or envisages social innovation as an option exercised by some, socially responsible, businesses. The underlying political principle is one about the primacy of the market as the sphere of profit seeking and decision making by firms without any interference from social competition.

If we remove these political limits on the definition of social innovation, we can not only broaden the idea of social innovation but also challenge some preconceptions about innovation arising from the standard definitions of economic and financial innovation. All the way back to Schumpeter (1934), economists tend to define innovation positively as a broadly beneficial, welfare increasing process which may have narrow sectional costs for those who lose through 'creative destruction'. A broad idea of social innovation helps to detach innovation from these orthodox economic moorings and the identification of innovation with productivity increasing new ways of organising goods production or service delivery. From the 1980s financial economists like Miller (1986) and Merton (1986) borrowed this set of associations and defined financial innovation as that which made markets more efficient or extended the sphere of the market. The gains proved hard to measure empirically while the definition encouraged a preoccupation with Black Scholes algebra and 'financial engineering' in wholesale markets. Mundane retail innovations were neglected, except for those like ATMs or smart cards which measurably reduced transaction costs (Tufano 2002).

The supply side background to wholesale and retail innovations from the 1980s onwards is analytically described in a prescient article by Erturk and Solari (2007) on 'the reinvention of banking'. This article uses the concept of business model to analyse the interrelated changes in wholesale and retail. Investment banks shifted from merger and acquisition business to proprietary trading, while the retail banks shifted from intermediation to mass marketing of retail products and services so that loans from retail became the feedstock of the wholesale markets. A more recent submission to the Treasury Select Committee (Erturk *et al.* 2009) argues that the retail changes were driven by declining margins on intermediation as competition increased and nominal interest rates declined. But the demand side of these innovations and their broad social repercussions have never been described in this analytic and structured way. Our argument is that a broad concept of social innovation can be the cornerstone for such an analysis of retail financial innovation led by the profit seeking banks and which did not generally have major productivity increasing effects.

From this point of view, privately led social innovation in retail finance can be seen as the banks' offer of, first, income supplementation through credit and, second, security through property. These were then both rationalised as 'democratisation of finance' and 'ownership society' in the accompanying social and political narratives of purpose and achievement. This was a major innovation because in all earlier capitalist societies, the masses had been subject to the tyranny of earned income as unpropertied subjects, living off weekly or monthly earnings. In the twentieth century their wages were increasingly subject to state deductions and additions with (as the life cycle hypothesis recognised) some uncertain scope for saving for retirement. But after 1980, the banks delivered a large expansion of privately led income supplementation and property acquisition. This operated in parallel with, and in competition to, the earlier state led innovation of income maintenance through social security.

Income supplementation through credit and savings met the needs of those with not enough earned income. Credit cards for everybody worked by allowing individuals to draw down credit at their discretion, and to charge now and pay later, subject to a maximum limit on spending. Instant personal loans were subject to abstract rules of credit scoring but before 2007 sub prime lenders also offered loans so those with adverse predictors or bad records could get credit by paying a bit more. All this was separate form the funded savings system whereby pensions and insurance provided income in retirement.

At the same time, asset acquisition was offered through home ownership and funded savings plans. The banks offered mortgages which allowed borrowers to move in right away without conditions about prior savings or the provision of substantial deposits. Uncertain income or bad credit records were not an obstacle for borrowers prepared to pay higher rates. Variant products were designed to make payments easier as with British interest only mortgages or East European mortgages denominated in another currency; while buy to let mortgages made it easier to become a landlord. Private pensions and insurance promised citizens comfort in their final 20 years or so through funded saving and acquisition of interest bearing coupons.

These changes played differently in various high income capitalist countries. The development of private pensions was inhibited in European countries with effective earnings related pubic systems; while Australia converted to a system of compulsory funded saving. Home ownership boomed everywhere except in Germany. If the list of peculiarities and exceptions could be multiplied, the scale and scope of the changes is generally breathtaking as we can see if we briefly consider some factoids on just one aspect of the massification of retail finance in the USA in the 25 years before the crisis which began in 2007. The value of outstanding unsecured loans (credit cards plus personal loans) increased from $351 billion to $2.2 trillion between 1980 and 2005 (Federal Reserve G19). The value of credit outstanding on credit cards increased from $56 million to $815 million over the same years (ibid), and the average household balance outstanding on credit cards alone was $2,018 (Survey of Consumer Finances).

But our aim is not to write a comparative national history of retail finance or indeed a comprehensive national history for the US case. Instead, we focus on the question of what the privately led social innovations of income supplementation through credit and of security through property had achieved. Put simply, to what extent has this social innovation of credit and ownership released wage and salary earners from the tyranny of earned income? In the sections below we review some empirics on the USA and make a series of points which provide an answer to that question. The US case was chosen for two reasons. First, the USA represents a kind of pure experiment in privately led social innovation whose sphere of operation was not limited by a large public welfare apparatus state as was the case in many mainland, north European countries. Second, the USA was the country where the most extravagant claims were made for what democratisation of finance and ownership could achieve. And, in our view, the US empirics are devastating because they show how, against a background of increasing inequality, credit and ownership intensify, not ease, the tyranny of earned income.

(1) The tyranny of earned income has not been abolished and has increased for many households if we consider claims as well as sources.

The simplest way of conceptualising and measuring the tyranny of earned income is in terms of sources and claims on income. For an individual or a household, the tyranny of earned income means limited sources of income other than earnings and many peremptory claims on this limited (earned) income arising from the costs of social participation. Tyranny in this sense is a condition of middling and low income groups not the ‘working rich’. As Dumenil and Levy (2004) and other authors have pointed out, a redistribution upwards in the United States after 1980 benefited high earning investment bankers and corporate executives.

Significantly, this new stratum of 'working rich' relies more on earnings and less on rentier income than its precursors. In our view, the working rich are not subject to the tyranny of earned income whatever their self pity about the cost of the right address, heli-skiing and elite private education. It is the interaction of limited (earned) income and hard to reduce costs of living which establishes tyranny of income in the middle and especially the lower income groups.

To begin with, what are the sources of income other than wages and salaries for the middle income groups in the USA? The answer can quickly become hugely complicated. The actual sources of income include government transfer payments and many kinds of profit or rent on capital assets of one sort or another. There are also a whole series of accounting complications about such matters as imputed income on the benefits of owner occupancy where the occupier pays a mortgage but saves rent and acquires an appreciating asset. Practically, if we are interested in earned income, the largest single complication is retirement because the twentieth century created a stage of life, or more exactly a stage in most lives, where individuals withdraw from the workforce to live as rentiers on private pension funds or as welfare clients on state transfers. According to the US census, just under 12.5 per cent of the US population is over 65 in the early 2000s. And this can be taken as a proxy for the cadre of those who have withdrawn from earning, even though some will actually retire earlier and others will never do so.

Table 1 shows how we can cut through these complications to tell a strong, simple story about the overwhelming dependence of middle income groups on earned income. It reworks Internal Revenue Service (IRS) income tax data to show earned income as a percentage of gross income for different income quintiles. We can begin by discarding the two outlying quintiles. In quintile 1 (Q1), the lowest income group, average wages and salaries are actually higher than earnings because Q1 is dominated by low income welfare recipients so that those earning wages are a kind of aristocracy of the poor in this bottom quintile. Those in Q5, the high income quintile, have substantial sources of unearned income from assets which typically account for one third or more of gross income. As the inset table in the lower half of table 1 shows, there is a neat linear relation between rising gross income and decreasing dependence on earned income as we move through the average in Q5, which is currently just below $200,000. In 2006, for example, wages and salaries accounted for 61 per cent of gross income for those with between $200,000 and $500,000 annual gross income. But for those with gross income over $10 million, wages and salaries comprise only 16 per cent. The USA may not have a rentier *class*, but its high income elite are distinctive because they have more assets.

Table 1: Analysis of gross and earned income in the United States (nominal data) (Quintiles based on ranking individual's gross income)

	Average gross income ($)		*Wages and salaries (average) ($)*		*Wages and salaries share of gross income (%)*	
	2001	***2006***	***2001***	***2006***	***2001***	***2006***
Quintile 1	2,030	1,434	4,236	4,621	208.6	322.2
Quintile 2	15,502	17,131	11,643	13,106	75.1	76.5
Quintile 3	33,508	31,533	27,480	26,047	82.0	82.6
Quintile 4	61,190	56,182	47,544	44,874	77.7	79.9
Quintile 5	140,152	183,861	95,584	108,953	68.2	59.3
Average (all taxable income tax returns)	47,373	58,029	35,048	39,520	74.0	68.1
Sub-category						
$200,000 under $500,000	286,663	286,771	182,548	174,478	63.7	60.8
$500,000 under $1,000,000	677,313	678,101	354,999	320,400	52.4	47.2
$1,000,000 under $1,500,000	1,207,226	1,210,147	538,788	466,585	44.6	38.6
$1,500,000 under $2,000,000	1,716,426	1,721,871	706,830	587,590	41.2	34.1
$2,000,000 under $5,000,000	2,971,181	2,989,440	1,176,035	907,103	39.6	30.3
$5,000,000 under $10,000,000	6,809,025	6,863,171	2,447,405	1,763,225	35.9	25.7
$10,000,000 or more	25,598,155	28,357,677	6,459,571	4,505,854	25.2	15.9

Source: *IRS*

However, the real interest is in the middle three quintiles (Q2, Q3 and Q4). In these quintiles, the position varies by quintile and by year but, as a general rule, between 75 and 80 per cent of income comes from wages. This is a remarkably high share if we recall some of the complications. A disproportionate number of US non-earners are low income welfare recipients in Q1, but we guesstimate that on average just under 10 per cent of the total number in the middle income quintiles are retirees with no earned income. If we consider gross income in 2001 and 2006, the mean for all individuals is just over $40,000 and the Q4 income average is substantially higher at more than $55,000. So the story is straight forward, all those low and middle income individuals with earnings up to and beyond the mean are overwhelmingly dependent on earned income as away of generating and distributing welfare. For the majority, this is an economy where welfare depends on a short list of employment related considerations such as wage differentials, trends in real wages, continuity in employment and the number of wage earners in the household. Despite the invention of retirement, the rise of government transfers and many differences in standard of living, these employment-related considerations are as relevant to the middle classes in US cities in the early twenty first century as they were in working class York, England when BS Rowntree (1901) pioneered income and expenditure analysis of the poor.

The task of analysis remains to explain how these variables fit together to make the difference between comfort and pressure in the individual household, Thus, one of Rowntree's key findings about the life cycle poverty focused on the number of wage earners in the household where the male bread winner struggled to provide for unwaged housewife and children before the children became adolescent wage earners and the family became temporarily comfortable. This issue of the number of wage earners in the household is relevant in a different way in the USA now because of the distinctive trajectory of the US economy over the past thirty years. Private sector jobs have been created but many of them are low skill and/or low wages jobs in service and personal care. They drag down average earnings towards wage stagnation even though the educated middle classes may be doing much better. Hence any kind of average of real earnings since 1970 tends to show stagnation or decline of real earnings. We constructed an indicator by calculating average private sector (gross) earnings for the one month of January every year since 1970. When nominal earnings are deflated, the real trend is downwards from $315-335 per month in the early 1970s to $275-280. If president Hoover promised affluence with 'a chicken in every pot and car in every back yard', President Reagan should have added 'only with two wage earners in the household'.

Elizabeth Warren's (2007) analysis of income and expenditure differences between one and two wage earner US households has much the same elegance and force as Rowntree's analysis of the difference between one and many wage earner households nearly one hundred years earlier. In the USA now, the addition of a second wage earner dramatically boosts household income because the median income of two earner households is $76,250, against $42,310 for single households. The single income household, classically the lone parent, has 'slipped down the ladder'; but the two earner household has not climbed the ladder because the fixed costs of workforce and social participation are higher for two income families. For example, a two wage earner household with two young children needs pre school child care and schooling, which Warren calculates will cost $1,048 per month. The decisive comparison is then made between a median single income household of the 1970s and a median two income household of the 2000s, which has a higher income but also much higher fixed costs (mortgage, child care, health insurance, car, taxes). The median single income household of the 1970s spends half its income on these fixed costs whereas the two income household of the 2000s spends three quarters of its much larger income on such fixed costs. The discretionary spend after fixed costs has actually declined from $19,000 to $18,000 dollars; or, in sources and claims terms, the tyranny of earned income has increased.

(2) Easy availability of revolving credit produces mass credit reliance without guaranteed availability, plus credit dependence which tightens the constraints on earned income when debt congeals

In the democratisation rhetoric of the mid 2000s, the extension of credit was represented as a benefit; as in Greenspan's speech where, thanks to credit, families would be able to afford homes and manage emergencies. Against the background of constraint described in the previous section, the extension of credit was an ambiguous development. As credit is extended downwards, it is most immediately attractive to those who are income poor and aspire to participation and to those who have exceptional calls on income arising from medical bills, life transitions and income changes (most notably the downwardly mobile, the unemployed and sick, students and young consumers, older persons and those retiring). On the one hand credit enables some of these households to self manage within a limited or interrupted income. On the other hand, the results can be credit reliance without guaranteed availability and credit dependence as revolving debt congeals into an outstanding principal.

The downsides of easy credit were performed by the egregious practices of selling sub- prime mortgages on teaser rates to low income households, which in due course produced worthless paper in the wholesale markets, defaults and repossessions of homes and the subsequent withdrawal of mortgage credit. All this has been described elsewhere by Montgomerie (2008) and others like Langley (2008). Therefore, we prefer to describe two different and less familiar cases of revolving credit extension from the mid 2000s. Credit reliance is examined by considering the on/off switching of credit availability in the US car market; and credit dependence illustrated by analysing the vintage of credit card debt in the US. The cases are instructive in two ways. First, both cases show how revolving credit by the 2000s was operating outside the responsibility frame of borrowing to repay within three years. This had been standard in the personal loans or hire purchase agreements on cars and white goods in an earlier period of democratisation in the 1960s and 1970s. Second, the cases together show that, if we leave sub prime and housing out of the picture, the extension of credit was creating accumulating social problems about credit reliance and dependence in many other areas.

The US car market is an interesting case for several reasons. The car is a necessity for workforce and social participation in urban communities predicated on automobility. Households are credit reliant for car purchase or lease because a new car or a middle aged second hand is a big ticket item: the average loan on a new US car in the mid 2000s is for around $25,000 (Federal Reserve Bank, G19 Statistical Release). In mature car markets like the USA, most demand is replacement demand, which is volatile because replacement can be postponed by holding and fixing an existing car. Cyclical market fluctuations are inherent in any mature car market but they are accentuated by turning the credit tap on and off. In the mid 2000s, some 16 million new cars and light trucks were being sold each year in the USA; but by early 2009 the car makers were adjusting to sales which were running at an annualised rate of no more than 10 million units. This current downturn is sharper and will last longer than previous cyclical downturns in the 1970s and 1980s because of the way in which the market was first forced by credit after 2000 and then starved of credit after 2007. The extension of credit turns out to be not secular and beneficial, but cyclical and double edged for households and other actors.

The story of car credit up to 2007 is about how easy terms were used to bring forward sales for car makers with excess capacity, without regard for the problems being stored up for households or the industry. The story begins in the 1990s with the development of leasing as a way of lowering monthly repayments. By 2007 some 20 per cent of new cars were leased (*Wall Street Journal*, 30 July 2008) and credit reliance had ratcheted up because the lease customer does not own the vehicle at the end of the agreement and immediately needs another contract. After 9/11 the car market was kept going and cyclical downturn was postponed by a combination of price rebates and cheap credit. In the five years from 2003-7, the average rate of interest on new car loans by auto finance companies was 4.9 per cent on deals where the average loan to value ratio was 92 per cent and the average term was 61.4 months (Federal Reserve Bank, G19 Statistical Release). This was car credit but not as an earlier generation had known it with a more prudent 20 per cent down and repayment over three years. Many of the risks then fell on households who were ‘upside down’ on new style auto loans because they owed more than the car was worth. According to a trade source, Kelley Blue Book, 29 per cent of consumers were upside down on their vehicle loans in the fist quarter of 2007 before the financial crisis started. This problem was being managed by rolling over outstanding balances into new loans because, on average, people traded in cars on which they still owed loans of $3,600.

Like much else this was unsustainable and credit reliant households then paid the price when the car credit tap was turned off in 2008 and many households found that a replacement lease or loan was not available so that they would have to manage as best they could from earned income. In July 2008 Chrysler withdrew from car leasing (*Wall Street Journal*, 30 July 2008) while GM, Ford and other manufacturers had restricted access to car loans by raising the FICO credit score requirement where the median credit score for all US consumers is 723. Before 2007, (sub prime) borrowers with scores of 620 were eligible for loans; by autumn 2008 minimum scores of 700 out of 850 were typically required (*Financial Times*, 11 October 2008). These higher score requirements excluded about 40 per cent of US consumers who have FICO scores of 700 or less (*Wall Street Journal*, 16October 2008) and materially restricted access because the domestic makers relied on low score purchasers. Thus, GM calculated that it was 'cutting off two thirds to three quarters of all potential GM customers' (*Wall Street Journal Europe*, 31 December 2008). The auto makers then lobbied for government support of finance subsidiaries so that cheap loans could be resumed and, after retreating from leasing, they tried to refresh the bait of low monthly repayments by extending the term of loans so that, for example, Chrysler introduced a 72 month loan (*Wall Street Journal*, 30 July 2008). While the industry worked on hybrid products which would be less polluting, Chrysler was perfecting the submarine loan which transferred risk to households.

If we turn now to consider credit card debt, we know that the majority of card holders do not use their card as a charge card, which is paid off in full monthly or at regular intervals, but instead accumulate outstanding balances. But it is then generally difficult to know more about the pattern of repayments and the vintage of credit card debt outstanding. In the UK, for example, no such information is publicly available. But the widespread use of securitisation by credit card lenders in the USA has incidentally released information about debt vintage. Securitization entails bundling together millions of outstanding loans into a master trust which has to disclose its asset profile in an SEC 424B(5) filing before issuing special purchase vehicle bonds as claims on the outstanding receivables. Table 2 presents the master trust asset profile in 2007 for the three largest issuers of credit card asset-backed securitizations in the US: MBNA (purchased by Bank of America), Citibank and Capital One. Between 33 and 70 per cent of credit card receivables by the individual issuers are from accounts over 60 months (five years) old. There are significant firm level variations in vintage of debt, depending on the customer base. But, if we aggregate and average the age of receivables, we find that 58 per cent of all credit card receivables in three major issuers are more than 5 years old.

Table 2: United States: Three Largest Issuers of Asset-Backed Securities in 2007

	Year of account origination		*Receivables outstanding*	*Percentage of total number of accounts*
			$mill.	*%*
MBNA (Bank of America)	2006		5,278	3.8
	2005		7,607	7.8
	2004		8,832	10.4
	2003		8,510	11.2
	2002		6,594	8.8
	2001 and before		48,063	57.0
		Total	84,884	100.0
Citibank	2006		1,934	2.6
	2005		4,378	8.0
	2004		4,929	6.5
	2003		3,563	4.8
	2002		5,528	8.2
	2001 and before		55,255	70.0
		Total	75,587	100.0
Capital One	2006		5,118	8.9
	2005		6,195	14.4
	2004		5,491	12.7
	2003		6,186	14.4
	2002		5,890	13.7
	2001 and before		14,214	33.0
		Total	43,095	100.0

Source*: Securities and Exchange Commission, 424B(5) filings for credit card master trust for Bank of America, Citibank and Capital One.*

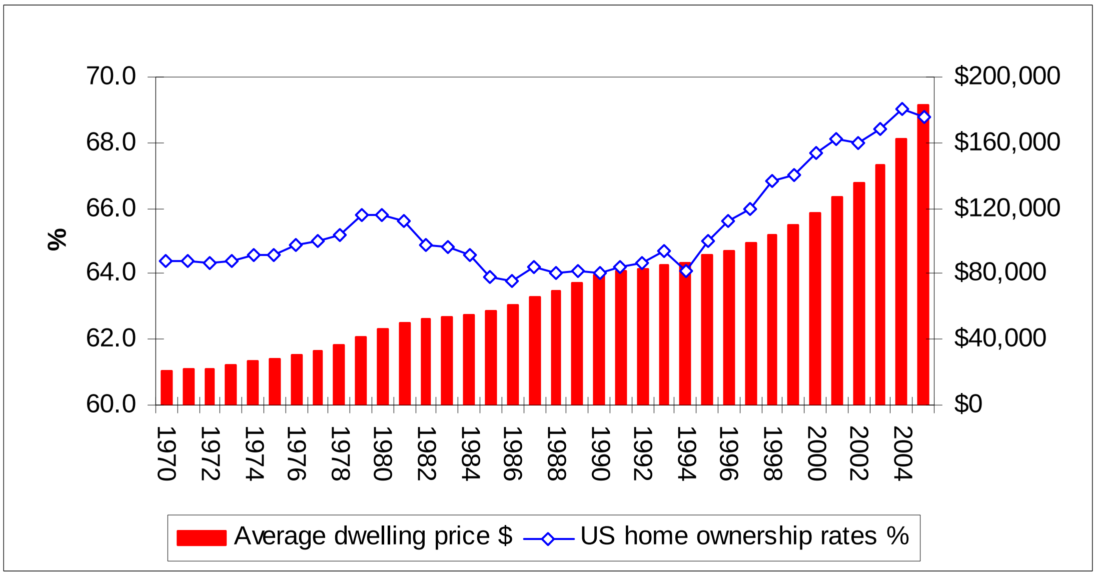
This is an expensive form of borrowing because (excluding promotional rates on switched balances) the average rate of interest on credit card debt was nearly 20 per cent in the first half of the 2000s. On the supply side, congealed debt must be highly profitable for bank lenders who can cover higher rates of default by maxed out consumers through charging higher rates of interest. On the demand side, congealed debt indicates a big discrepancy between how credit cards should be used (as a way of managing cash flow) and are being used by households. Logically, household borrowers should use expensive credit card debt for short term cover of income fluctuations or financing of a big consumer purchase (if they cannot obtain a cheaper unsecured personal bank loan). Household borrowers (or at least a substantial group of those borrowers) are using credit cards to draw down balances which may never be paid off while the credit card company charges 20 per cent APR rates of interest. When revolving debt becomes congealed, there is once and for all income supplementation in one initial period of time when the balance is drawn down, but this then becomes a stream of deductions from income in subsequent periods to cover interest charges on the outstanding balance. Here again, in the long term credit can tighten the constraints on income.

(3) The arithmetic of funded savings for security in old age is discouraging for those earning low and middle incomes, whose efforts to build a large fund from small savings are subject to asset price hazard

The adverts for pension and insurance products focus on outcomes through images of retired individuals and couples from different demographics all enjoying active, healthy, financially secure lives thanks to funded saving. By implication, gender, race, sexual orientation and income are no obstacle provided the individual buys the right product. In this section we deconstruct this promise by focusing on the process of funded saving which is, in principle, very simple. The process is that a fund of assets is built up by regular saving over thirty or forty years of a working life; during this period of build up, income from assets is reinvested and the saver hopes for a boost via rising asset prices. Classically, the assets would be coupons, mostly ordinary shares since the 1970s, but they could also be property or a mixed portfolio. After retirement, probably at age 65, there is a phase of draw down where an unwaged individual lives by spending capital and/or drawing income from an individual fund. Classically, individuals would on retirement purchase an annuity which converts the capital in an individual fund into an insurance promise to pay income until death. This simple model provides an excellent basis for demonstrating how the arithmetic of funded savings is discouraging for those earning low and middling incomes. who must hope that small, regular savings out of limited income will eventually build a large fund.

To begin with, in the build up phase, the low income saver is unusually dependent on rising asset prices which lever small savings into a larger fund. The problem is that, as they admit in the small print at the bottom of the adverts, the value of assets can go down as well as up. We would also add that different asset classes, like shares or property, can behave differently, so there is an allocation problem which is difficult to solve because nobody knows whether the future will be like the past. Consider the record of the past thirty years. As figure 1 shows, in retrospect, funds could have done very well if they had invested in house property, which shows continuous increases in nominal asset prices over 35 years. These gains accelerate from the early 1990s, so that the price of the average US house had doubled to $180,000 in 2005, since when house prices have of course fallen sharply and nobody knows where they will go after the present ‘correction’ is over. Most savings funds did worse because they were invested long in the stock market, where share price appreciation was much more ragged as bull market alternated with bear market. As figure 2 shows, the 35 year pattern is one of recovery from a low point in share prices in the 1970s. However, after this there is no pattern of continuous acceleration in equity values. Share prices did rise by 10-15 per cent per annum in the 1990s bull market, but the tech stock crash of 2000 inaugurated a bear market and the partial recovery was extinguished after 2007 with sharp, sustained falls in market prices.

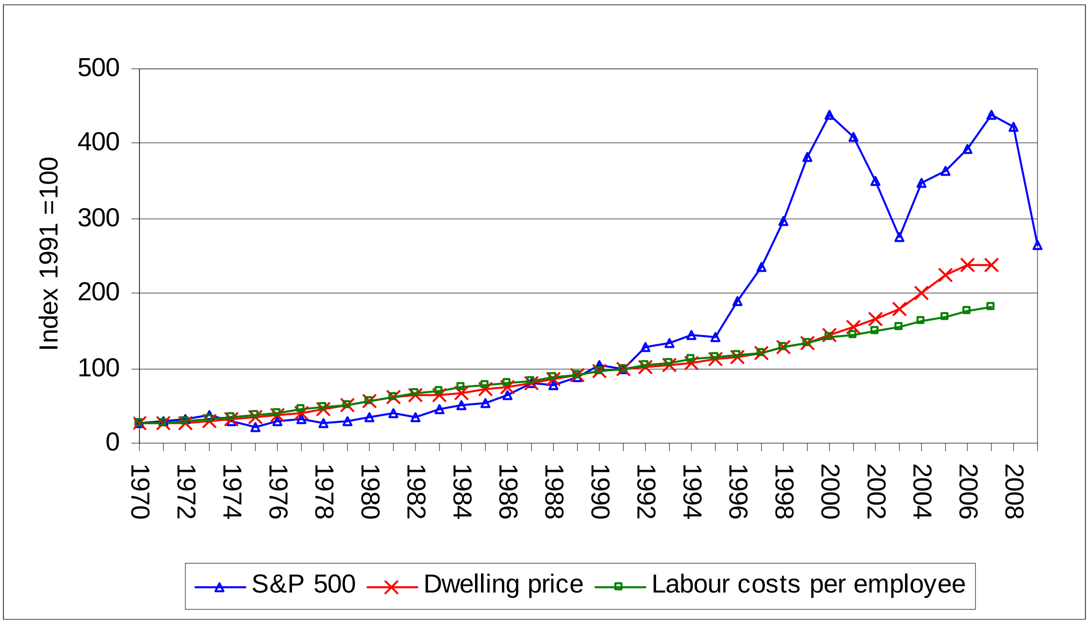
Figure 1: US: Home ownership rate and nominal house price



Source: *Housing Vacancies and Homeownership (CPS/HVS), U.S. Census Bureau*
http://www.census.gov/hhes/www/housing/hvs/historic/files/histtab7.xls and
http://www.census.gov/hhes/www/housing/hvs/historic/files/histtab14.xls
(accessed 27-2-2009).

Note: Data excludes vacant houses.

Figure 2: US: Indexes of S&P 500, average house price and pay
(1991 =100 Nominal prices)

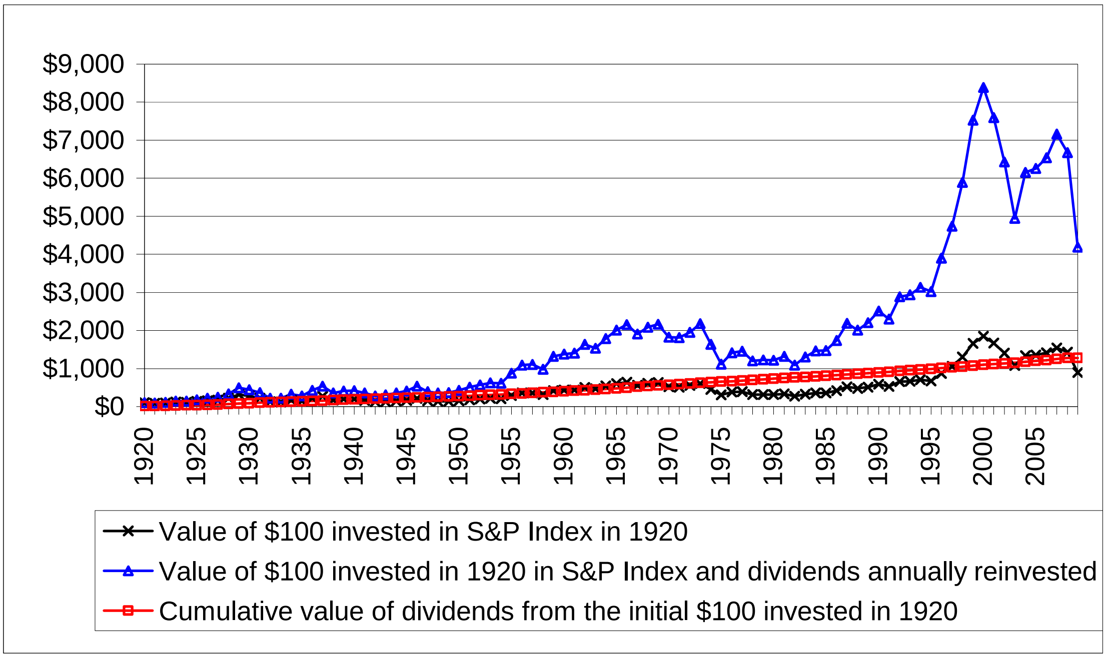


Source: *Housing Vacancies and Homeownership (CPS/HVS), U.S. Census Bureau, Industry Economic Accounts, Bureau of Economic Analysis and Shiller, R. http://www.econ.yale.edu/~shiller/data/ie_data.xls (Accessed on 26-2-2009)*

It is difficult to find assets whose price will continuously rise. The fundamental cause is that most large scale asset classes connect with mundane streams of income that do not grow rapidly for long periods of time As we demonstrate in *Financialization and Strategy* (Froud *et al.* 2006), the shares of the giant firms in the Standard and Poor's (S&P) index are effectively a lien on national income in the USA and other high income countries, so that giant firm sales (and profits in the long run) grow no faster than GDP. Within this limit, share prices arc up and down when the economy moves between decades of prosperity and crisis and when animal spirits on the market bid the price/earnings ratio up or down. So the two considerations are, collectively, whether a specific generation has a good or bad thirty years on the stock market and, individually, whether the individual finally sells the fund when prices are high or low. The depression generation who joined the workforce in the late 1920s got very little out of the stock market because the S&P index did not exceed 1929 levels until 1952. The baby boomer generation who joined the workforce in the early 1970s did much better if they began contributing to equity invested funds around the 1970s trough and benefited from the 1990s bull market. In hindsight they should have sold out in 1999 but of course hindsight is no basis for decisions about the timing of entry and exit into funded savings. Typically, funded savers have no choice about the point at which they sell out, as in most pension schemes this is determined by retirement age.

Thus funded saving is subject to asset price hazard which makes it very difficult to calculate how much to save when generations and individuals cannot predict asset prices or even avoid selling out the fund when prices are low. Interestingly, in the very long run of 80 to 100 years, the stock market works much like a savings bank because the most important driver of real returns is compound interest, if all dividends are reinvested. Figure 3 presents the very long run real returns from investing $100 in shares in 1920 and it also breaks down this return into different elements .After more than 80 years, the original $100 worth of shares have appreciated to $1,000 and some $1,000 of dividends have been received. However, if dividends are reinvested, but cumulative value of the fund is more than $4,000. This is the magic of compound interest at work for the regular saver in the very long run. And, as a society, the USA could obtain this benefit at less cost in terms of asset price hazard by creating new classes of social investment coupons where there was transparent connection between a modest, secure return of 5 per cent and the income flow from worthwhile projects like infrastructure and social housing. But, if asset price hazard were taken out of the equation, small savers would even more clearly face the dilemma that they could not build a large enough fund for retirement over a forty year working life.

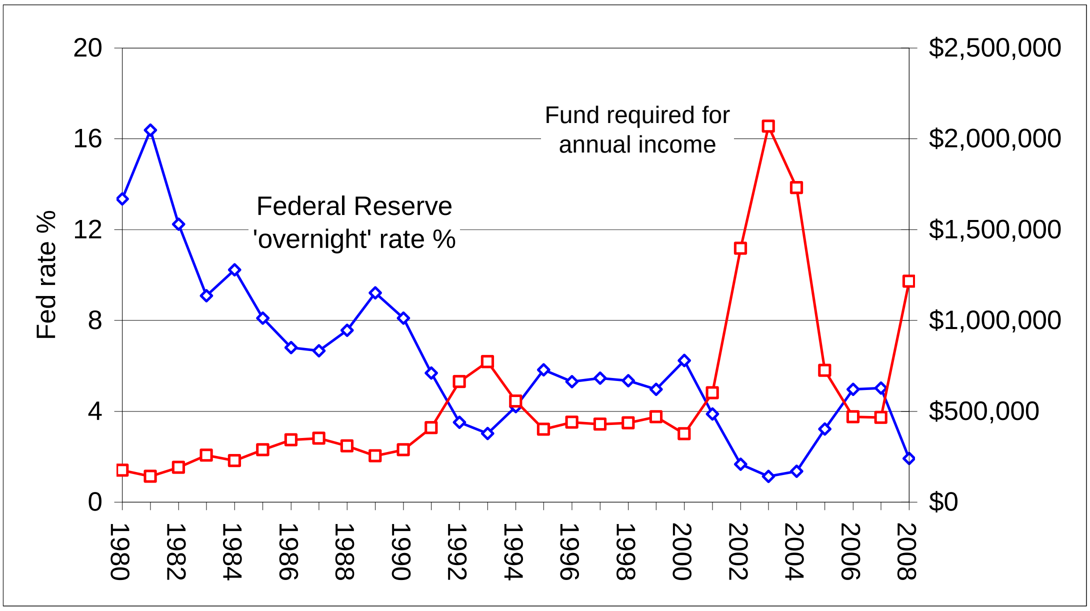
Figure 3: The value of $100 invested in the S&P Index in 1920 (Real values)



Source: Adapted from Shiller, R. http://www.econ.yale.edu/~shiller/data/ie_data.xls (Accessed on 26-2-2009)

The size of fund required to produce security in old age is a technical matter which practically depends on the kind of annuity product purchased at retirement, on rates of interest and on life expectancy. Annuities can now offer a retirement income which is fixed or variable according, for example, to stock market performance; ceteris paribus, a fall in interest rates or an increase in life expectancy will reduce the value of any annuity. We can remove many of the complexities and focus on the basic issue by asking one simple question: what size of fund would be required to produce an individual income equal to half the US median wage of $40,000, if the assets were invested in some kind of savings account which offered security of principal and a rate of return equal to the prevailing Federal Reserve overnight rate. The results of this simulation are presented in Figure 4 below; and, to assist with interpretation, this graph also shows the (nominal) Federal Reserve overnight rate.

Figure 4: Size of pension fund required to generate $23,379 annual retirement income



Source: *Federal Reserve, http://www.federalreserve.gov/releases/h15/data/Annual/H15_FF_O.txt (Accessed 28-2-2009)*

The first most important point is that the size of fund required on this simulation is unfeasibly large for any individual on or around median income (and would become surreally large for any two income household trying to build a fund that would replace a much larger joint income). In every year of the 2000s, the value of the required 'half of median' fund was near or above $500,000 and, at the peak in 2003, the required fund was more than $2 million. The variation in size of fund required shown in this graph *entirely* reflects changes in the rate of interest, because that is the only variable which changes from year to year. The simulation therefore demonstrates how the decline in nominal rates of interest after 1980 (and in real rates from the early 1990s) was a great misfortune for modest income earners trying to save for retirement. The post 2000 Greenspan and post 2007 Bernanke monetary policies of stabilising and stimulating the US economy by reducing interest rates towards zero were then a catastrophe for low and middle income savers. Such policies completely undermine the rationale for long term saving through pension, insurance or deposit account because no feasible level of saving from limited income will generate a large enough fund.

Under these circumstances, the question of whether and how low and middle income groups should be encouraged or compelled to save more is practically irrelevant because (unless there is some miraculous sustained increase in asset prices over a working life) they can never save enough. In an intuitive way, household savers in the USA recognised that was the logic of the conjuncture because (discretionary) household savings declined towards zero after 2000 as debt ballooned. American households voted with their plastic cards about what to do in a period of easy credit, asset appreciation, low interest rates and full(ish) employment. After the change of conjuncture in 2007, we would expect a sharp recovery in savings rates because precaution dictates higher saving in uncertain times.

From a tyranny of income point of view, we would make one important supplementary point. Savings rates will vary cyclically, but high income households in the USA consistently save a larger proportion of their income and, unsurprisingly, acquire a disproportionate share of funded saving assets These points emerge from tables 3 and 4 below. First, table 3 shows that households with higher incomes save a larger percentage of that income: in 1996-7, Q5 households saved 36 per cent of income when Qs 1-3 all saved less than 10 pre cent. Here again the tyranny of earned income operates because low income groups have many fixed claims against limited income, while Q5 households have discretion to save as well as spend. Second, table 4 shows the outcome corollary which is that the top two quintiles have the lion's share of savings assets acquired for exchange value. The distribution of equity in usable assets like home and motor car is more equal, but the top 40 per cent in Qs 4 and 5 own 75-85 per cent of the stocks and shares and 401k plans. The tyranny of earned income ensures the USA will continue to live in this kind of 40/60 society and so ownership and funded saving does not so much abolish the tyranny of earned income as simply reproduce it in retirement.

Table 3: Distribution of income and savings in the United States, 1996-97

	Quintile group					***Q4 and Q5 as a % of total***
	Q1	***Q2***	***Q3***	***Q4***	***Q5***	
Gross income	$16,331	$24,169	$33,625	$48,477	$98,396	66.2
Disposable income	$16,252	$23,811	$32,542	$44,510	$86,613	64.4
Savings and investment	$371	$1,122	$2,604	$6,552	$30,917	90.1
Savings and investment as a % of disposable income	2.3%	4.7%	8.0%	14.7%	35.7%	

Source: *Consumer Expenditure Survey, table 45, Bureau of Labor*

Note: Gross income is income income before tax and includes wages, salaries, self employment income, private and government retirement income, interest, dividends, and other income. Disposable income is income after tax and benefits. Savings and investments include life and other personal insurance plus pension contributions and other savings.

Table 4: Distribution of assets by type for US households, 2000

	% of total household assets by income quintile					
	Quintile group					*Quintiles 4 and 5*
	Q1	*Q2*	*Q3*	*Q4*	*Q5*	
Equity in own home	11.5	14.9	17.0	21.3	35.3	56.6
Equity in motor vehicle	9.4	14.7	18.7	23.9	33.3	57.2
Equity in own business	3.9	7.2	12.3	17.4	59.2	76.6
Interest earning assets	7.1	14.7	16.4	19.9	41.9	61.8
Other interest earning assets	1.6	5.7	10.9	16.2	65.6	81.8
Stocks and mutual fund shares	3.2	9.6	12.1	20.3	54.8	75.1
IRA and Keogh accounts	5.9	13.9	14.9	21.1	44.2	65.3
401K and thrift saving plans	2.2	4.2	10.3	22.5	60.8	83.3

Source: *Adapted from Household Economic Studies, May 2003, Bureau of the Census.*

Notes:
Households are divided into quintiles by income where Q1 are the poorest 20% and Q5 the richest.

Defined benefit schemes guarantee retirement income typically with the pension set as a % of the final three years salary. In defined contribution schemes, retirement income depends on the contributions made and the growth of the investments. In both schemes the employer matches the employee contribution up to a predefined cap. The latter also includes 401K plans and 403B plans for nonprofit organisations with a significant portion of the investment that is self-directed. Keogh plans are designed for the self-employed and employees of small businesses. Individual retirement accounts (IRA) are funded with post-tax income.

Conclusion

The rhetorics of ‘democratisation of finance’ and ‘ownership society’ are no longer credible because they make promises which will not be delivered. Since 2007, many have registered their disappointment with the effects of the extension of credit and in the UK this has led to a public debate where prominent churchmen have criticised an indebted society, just as politicians struggle to restart the economy by getting the banks to lend again. Analysis of the tyranny of earned income takes the debate a bit further and has implications for policy and political agendas because it clearly identifies the central fallacy in the old rhetorics about democratisation and ownership. These rhetorics implied that the extension of credit and ownership would ensure that many could now enjoy what had been benefits reserved for the few. Against this, our tyranny analysis shows that in an unequal society, where the poor can get loans and all are encouraged to buy assets, what is smart for some may be dumb for all. This echoes the phrase that Robert Frank (2000) used when discussing 'luxury fever'. But, in the case of funded saving and security through property, the circuits of individual and collective frustration are considerably more complex than Frank supposed when discussing conspicuous consumption.

The empirics on the sources of income and claims on income show that the prospect of a rentier society (as distinct from rentier individuals and classes) remains impossibly remote and utopian. The political implication is that an extension of cheap credit in rising asset markets is no substitute for growth in earned incomes and adequate social protection. If property does not bring security for low and middle income groups who cannot acquire a large enough stock of assets, the political implication is that state sponsored protection cannot be displaced by funded saving without leaving many low and middle income earners disadvantaged in retirement by a combination of low savings and asset price hazard. All long term savings plans involve some kind of temporal redistribution which is hazardous. If we consider the long term under pay as you go social security, the outcome depends on political hazard and what children as tax payers decide to give you back in return for a lifetime of contributions; or from the children's point of view, whether all their taxes should go for the undeserving parents. This is at least a matter of explicit public, political debate an decision rather than private misfortune as in the case of asset price hazard and under saving.

Social protection should include constraints on finance as social innovation. This kind of re-regulation is necessary because our analysis shows that the easy availability of many kinds of credit increases credit reliance and credit dependence in ways that tighten the constraints on earned income. It also increases unpredictability and scrambles decision-outcome connections in ways that undermine the visions of mainstream economics or liberal governmentality, which put the calculating consumer or the self acting subject at the centre of their worlds. The question of how retail finance can be constrained needs further analysis and debate. If effective regulation of profit seeking banks is not possible, then a change of business model could be encouraged or enforced by remutualisation and an expansion of non profit savings and loan organisations.

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