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Credit Crunch: Origins and Orientation

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THE CYCLICAL PATTERN OF CAPITALISM is periodically punctuated by severe crises that lead to restructuring of the political-economic system. In this article we argue that the underlying factor of the current crisis is a real economic imbalance caused by an unprecedented growth of the financial sector. We argue, moreover, that a return to an expansive era of capital accumulation will become impossible in the advanced countries.

Each structural crisis opens opportunities for significantly advancing the position of the working class. But it requires a socialist movement with the organizational and programmatic capacity to articulate and implement progressive policies. This is not the state of the movement at present. We believe that without a political economy of the working class it is impossible to formulate a coherent political program of the working class.

1. *Insights from Political Economy*

1.1. *Value and money.* Classical political economy held social labor as the basis of economic value. Labor is a universal but scarce resource. When goods and services are produced as commodities their market prices are correlated with the quantity of social labor necessary to reproduce them (cf. Farjoun and Machover, 1983; Zachariah, 2006; Cockshott *et al.*, 2009).

When a commodity is sold, a relation of debt and credit is formed between buyer and seller. Money is a means to account credit and debt, and is derived from the state's ability to enforce a tax debt on its subjects. What it deems universally acceptable as means of settling tax obligations becomes a universal equivalent that can be used in exchange.¹ Thus when a buyer exchanges a money token for a commodity, the seller accepts the token as a means of settling its debts elsewhere.

Money is therefore not wealth but represents a claim on wealth, derived from the legal system and the state. It gives the power to command labor, as either the labor-content of commodities or the labor-power of others.

1.2. *Profitability and the steady-state rate.* The basic unit of production in a capitalist economy is the firm, which is driven by the profit imperative. The decisions each firm takes locally have macroeconomic consequences; therefore profitability, *i.e.*, the rate of return on capital invested, is a crucial variable in the development of capitalist economies.

At any moment in time there is a large number of firms earning different rates of profit, $R = P/K$, where P is the annual flow of profits and K is the capital stock invested in the form of buildings, machines, equipment, etc. The *average* rate of profit over all capital invested is fundamentally constrained by the size of the workforce relative to the capital stock in terms of labor value. In fact, one can show that the average profit rate tends towards a dynamic steady-state rate:

$$R^* = (l + p + d) / i \quad (1)$$

where l is the growth rate of labor, p the growth rate of productivity, d the depreciation rate of the capital stock and i is the ratio of gross investment to net profits.

The steady-state rate rises with higher growth of the workforce and productivity but is reduced by an increasing investment ratio. Note that R^* is independent of the wage share. Moreover, since l is constrained by population growth, long-run demographic factors

¹ We realize that this position may seem new to readers whose background in monetary theory comes from reading Marx, Ricardo, Menger or Smith, all of whom presented money's currency as being based on intrinsic metallic value. The authors sympathize instead with the Chartalist school of monetary theorists and historians; for example Keynes, 1936; 1940; Innes, 1913; and, more recently, Knapp, 1973; Wray, 2004; Forstater, 2003; Cockshott *et al.*, 2009.

affect the evolution of profitability (for derivation of (1) and further discussion, see Cottrell and Cockshott, 2006; Zachariah, 2009).

1.3. *Trade surplus and deficit.* If a region or country runs a persistent trade surplus it is making a loss in real terms since it is trading away a part of its surplus product for money tokens, *i.e.*, credit. But the credits accumulated by agents can be used to acquire assets in the debtor countries, thus increasing their power to command labor beyond the territory of their state.

Conversely, a region or country running a persistent trade deficit is appropriating a part of the surplus product of others while providing less in return. However, its accumulated debt increases. The annual account flows of a capitalist country can be written as

$$\text{Firms' Net Saving} + \text{Households' Net Saving} + \text{Government Surplus} = \text{Trade Surplus}$$

Thus, when running a negative trade surplus the capitalist sector, households and/or the government are net borrowers. Of course “households” consist of different classes with different incomes, propensities to save and levels of accumulated debt.

1.4 *Productive and unproductive sectors.* An economy can be partitioned into two aggregate sectors: i) a “productive” or basic sector, the output of which enters directly or indirectly into the consumption of the working people and their dependents; and ii) an “unproductive” or non-basic sector which comprises the remaining economic activities. The unproductive sector exists by the support of the surplus product of the productive sectors. The expansion of the unproductive sector reduces the amount of surplus available for reinvestment in the productive sector, and thus affects long-run capital accumulation (Cockshott and Zachariah, 2006).

1.5. *How the financial sector really works.* From industrial capitalism a set of economic agents — *rentiers* — emerged that derived its income not from industrial assets but from interest payments and dividends. Its economic activities, nowadays covered by the term “finance industry,” is a significant unproductive sector.

Apologists for the banks say this Smithian classification is misleading. The real criterion of whether the banks are productive or not is to be found in their balance sheets. It was, they would say, an archaic Calvinist prejudice on Smith’s part to tie productiveness to physical

production. Marxist economists would argue that the crucial question is not whether the banks produce anything physical, but whether they produce surplus value. Do they produce surplus value?

For instance, charging for clearing checks or for making payments into other accounts are portrayed as provision for banking services. However, what one sees when one looks at the UK banking sector is that such charges are insufficient even to meet the wage bills of the banks. For the general public, this is the main use of banks, but it is not their main source of revenue. That comes instead from profits on financial contracts. Over time the banks and other financial institutions have come to make a part of their revenue by trading in financial contracts of ever greater complexity and abstraction.

1.6. *Unproductiveness of modern lending.* Suppose we have a public company that is initially 100% owned by shareholders. If taken over by a private equity firm then most of what previously went as dividends is now transferred to interest. It is clear that no additional value is created by such a change, so interest payments are just another form that can be assumed by profit revenue.

Suppose instead that a company expands and finances this expansion by bank credit. Here, arguably, the bank plays an indirect

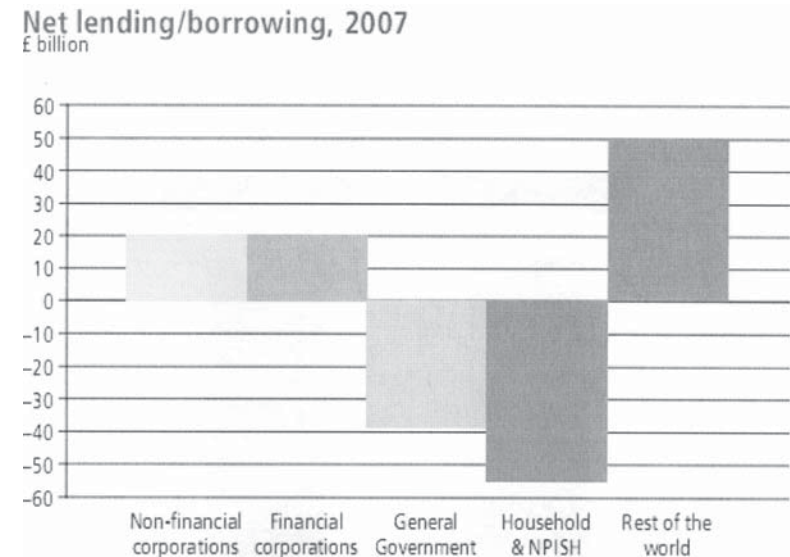


Figure 1: United Kingdom Sectoral Balances
Reproduced from the 2008 UK National Accounts Blue Book

productive role. A net growth in deposits corresponds to income that has been earned but not spent; if the bank channels this to productive investors it allows that portion of national income to be materialized in new equipment.

But productive lending is now a small fraction of what the great financial centers, like New York and London, do. Look at Figure 1: non-financial corporations are net lenders, not net borrowers from the banks. Net lending and borrowing in the system must balance, so the banks mainly channel profit from industry, and from overseas, into the two sectors that are net borrowers: the state and private households. Some state expenditure will be productive — new highways, schools, health care, etc. — but most goes on current costs or unproductive items such as warplanes and submarines. The money lent to the personal sector will in a large part go on unproductive consumer credit.

On balance, the financial system funds unproductive activities.

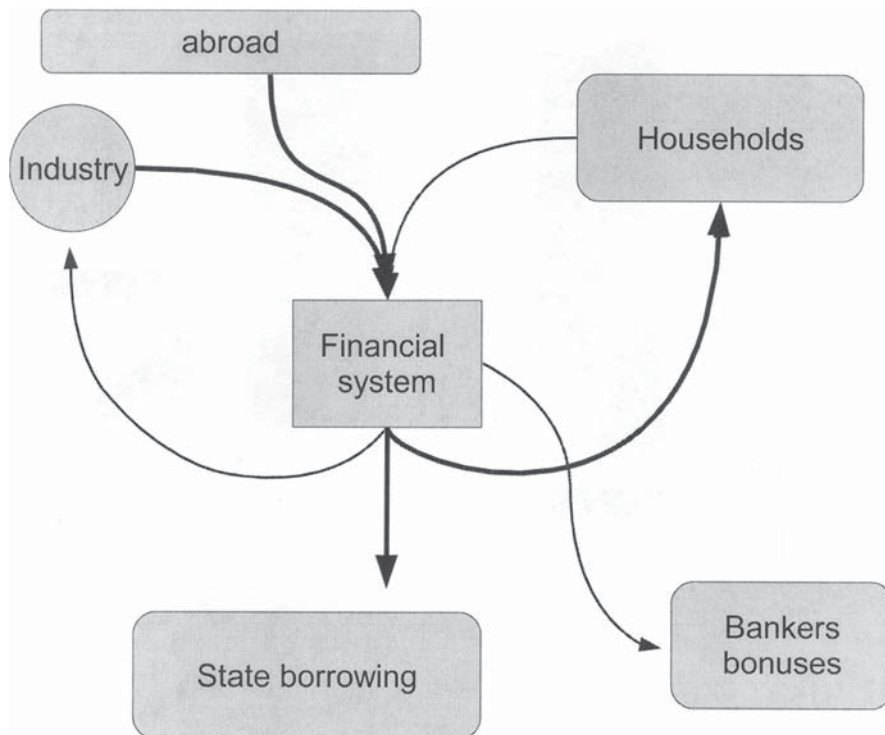


Figure 2: Outline of Main Flows of Funds

1.7. *Unproductiveness of dealing in contracts.* The financial system trades in a huge variety of other contracts: shares, bonds, futures contracts, etc. Trading in such contracts would appear to be a zero sum game, one person's loss will be another person's gain and *vice versa*. But this is no longer the case in a bull market. If the general price of financial assets rises over a period of years, then in paper terms most traders can show a monetary profit.

What creates prolonged bull markets?

Look at Figure 2. In an ideal world the state would run a balanced budget, the nation would not depend on foreign borrowing and the financial system would channel savings from households to industry. But in reality the industrial rate of profit is too low, the number of new shares being issued to finance industrial investment is not sufficient to absorb savings. This imbalance becomes even worse since the industrial sector ceases to be a net investor and becomes a net saver (Figure 1). Shortage of new issues causes the price of existing shares to be bid up to absorb the funds.

Here is a paradox. A rise in the price of financial assets can not itself absorb net savings. If firm A uses incoming funds to buy shares from B, then A can balance its accounts: its new deposits are now matched by new assets. But B now has the money for the shares. What does it do?

It tries to purchase other shares, bidding the price of all shares up in the process. The money stays in the financial system. This inflationary process would go on indefinitely unless there were some balancing outflow. Here the bonuses and profits of the banks play a role. Because asset prices are appreciating all round, financial firms show big trading profits which they distribute as dividends and bonuses to their traders.²

During the bull market the financial system acts as a vast Ponzi scheme. Any excess of deposits by savers over and above the current needs of industry and the state are translated into profits and bonuses. Savings are converted into current consumption revenues of the banking community.

2 As we write this, Goldman Sachs has announced that it is paying out \$4 billion in bonuses to its traders for the last quarter alone, averaging about half a million dollars per individual.

The bull market sustained the illusion that saving is possible, even though real capital accumulation was at barely more than replacement levels. As time passed the illusion grew more and more unstable. The banks, having distributed so much dividends and bonuses in the good days, became under-capitalized. When the crunch came they failed and the taxpayer had to take over their liabilities.

The financial system now takes on the role of the feudal aristocracy and priesthood. They spend the nation's surplus product in conspicuous consumption. Instead of papal indulgences promising a better hereafter, they sell modern promissory notes supposedly guaranteeing a happy retirement. The promises are almost as egregious as those Luther protested against. Today's savings have gone on bankers' bonuses, airforce jets and soldiers' wages. The truth is that the real consumption of the retired must always be supplied by the labor of their younger contemporaries. The enormous, expensive and unproductive financial system consumes savings today, while being unable to conjure up new labor to support future retirees.

2. *Capitalist Trajectories of the 20th Century*

2.1. *The broad picture up to World War II.* The second industrial revolution of the mid-19th century was followed by a crisis of profitability in the center of world capitalism, Great Britain, and the Great Depression of the 1870s. The outcome of this was a restructuring of the political-economic system: the increasingly competitive capitalist interests drove the rising industrial powers of Britain, the United States, Germany, France and Belgium into the game of rivaling Empires. The conquered or dominated territories served not only as suppliers of cheap raw materials, but also as important outlets for the speculative ventures of the rentiers' surplus capital.

At the same time industrialization had already brought dramatic social changes through the transformation of the rural population into urban wage-workers. The crisis of the 1870s also saw the rise of labor unrest and the birth of the modern labor movement and socialist mass organizations among the industrial working classes of Western Europe and North America.

While the ruling classes enjoyed a *belle époque* after the crisis, the trajectory of unleashed rentier interest and imperialism resulted in

a World War, with great human costs and reparations, followed by another Great Depression in the 1930s and the collapse of liberal parliamentarism, culminating in an even costlier World War (cf. Hobson, 2005; Hobsbawm, 1987).

2.2. *From post-war boom to crisis of mid-1970s.* The catastrophe of depression and war resulted in another restructuring of the political-economic system after 1945: One by one the colonies fell through anti-imperialist struggles. The center of global capitalism shifted from Britain to the United States, which would build an informal empire of military bases and client states in the Cold War.

In the advanced economies the working classes could assert their strength, winning several progressive reforms. In Western Europe socialist or social-democratic parties were in power. Nationalizations were undertaken, capital mobility restricted and real interest rates were kept low to promote industrial investment. In short, the balance of forces shifted from the rentier interest towards industrial capital, as well as labor.

The high demand for labor and low unemployment after World War II also strengthened workers' bargaining power on the labor market. In addition, workers were concentrated in industries in which strikes would cause major disruptions not just to the firm but the economic system, thereby strengthening workplace bargaining power. This created a basis for substantial gains in real wages and living conditions. It was politically acceptable as long as profitability and growth could be maintained and the rule of capital left intact (Kalecki, 1943; Silver, 2003). Under varying degrees of state-led industrial development, rising capitalist economies could achieve rapid capital accumulation, high growth rates and low unemployment, but they could not prevent the decline in profitability that was apparent in the 1960s.

This is predicted from the steady-state rate R^* . Rapid accumulation implies a high investment ratio i which reduces R^* , unless the growth rates of productivity p and of labor l counterbalance it sufficiently. The former was already high during this period but the latter met demographic constraint as the reserves of labor-power in the advanced economies were depleting. The result was a declining average rate of profit, pushing a greater fraction of capital into bankruptcy after interest payments and dividends. See Figures 3, 4 and 5.

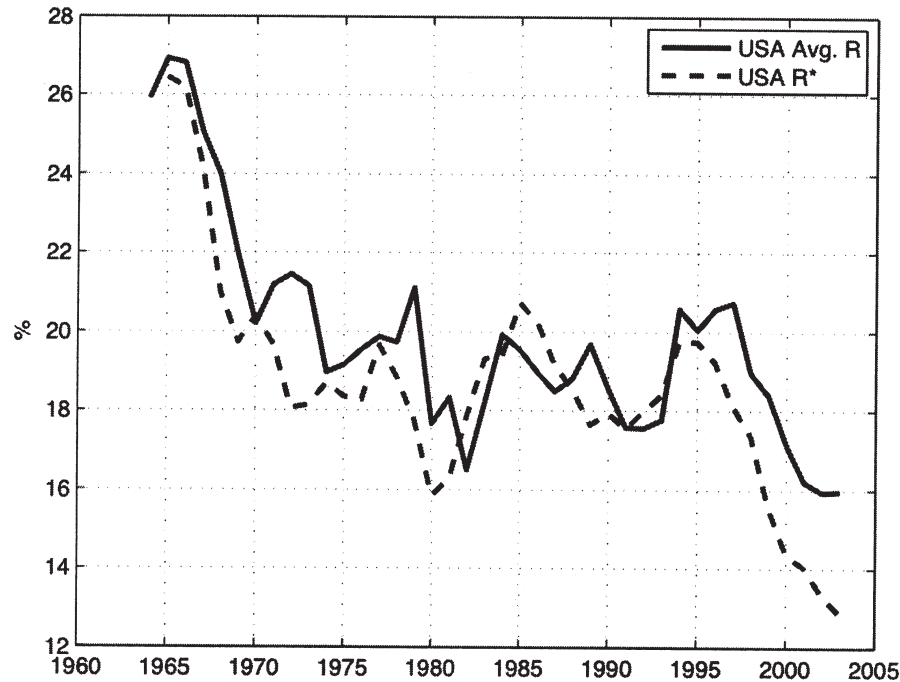


Figure 3: Trajectory of Profitability in the USA. The dashed line in these Figures is the attractor for the average profit rate defined in equation (1). (The variables in R^* were smoothed with a ± 2 -year window.) Source: Marquetti, 2009.

The trajectory of declining profitability resulted in another global crisis in the mid-1970s, which would again lead to restructuring. However, the labor movement was in general incapable of addressing the crisis with an adequate political program. The substantial gains it made during the expansive phase of capitalism had strengthened the material basis for reformism and support for the existing framework of state policies. Instead it was the rentier interest that was able to re-assert itself (cf. Glyn, 2006; Duménil and Lévy, 2004).

2.3. *Neoliberal era leading up to the current crisis.* It began in the USA in 1979 by a sharp increase in real interest rates, which raised the debt burden of states across the globe and reduced the fraction of profits retained by firms. Capital accumulation slowed down, and with it

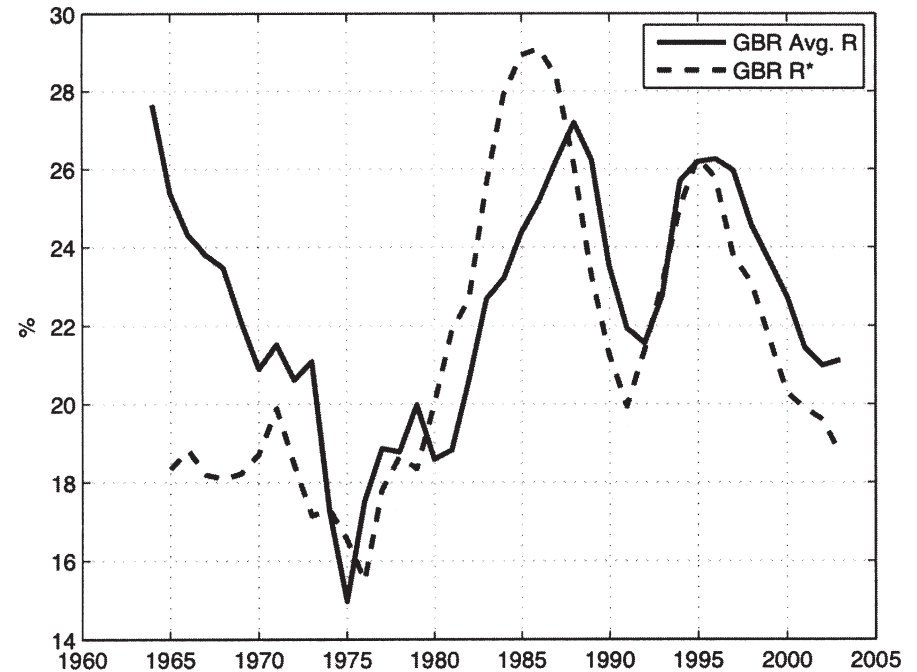


Figure 4: Profitability in Great Britain

output, employment and productivity growth. As the investment ratio i rises, the downward trend of R^* , in effect until that moment, was halted or even reversed, albeit at a social cost, with a greater fraction of the surplus product consumed unproductively.

The governments of Thatcher in Britain and Reagan in the USA led the way for the policies of reaction, shifting the balance of forces away from labor as well as industrial capital within the advanced countries, and towards the rentier interest. It found low return manufacturing sectors expendable: it was more important to break the bargaining power of workers by unemployment and sharply increase the share of rentier income, which it succeeded in doing. During the period 1965–1974 unemployment was 4.6% in the USA, but had risen to 7.7% during 1975–1984. In Western Europe it was 1.8%, rising to 6.1% for the same periods. Meanwhile the rentiers' share of national income jumped from levels below 5% to levels be-

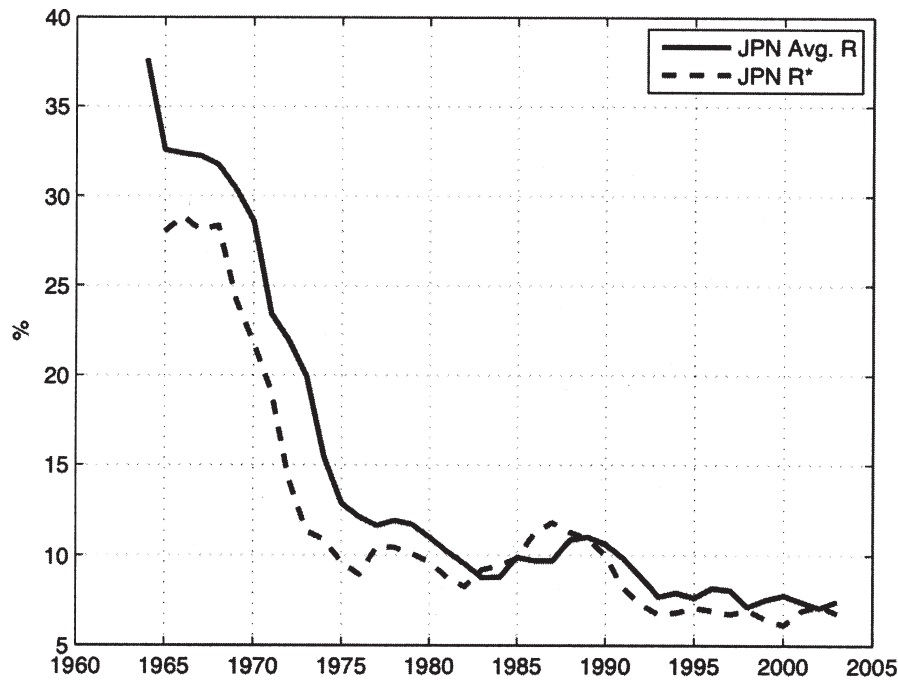


Figure 5: Profitability in Japan

tween 8% and 20% in various countries during the 1980s (Duménil and Lévy, 2004a; Epstein and Jayadev, 2005).

Restrictions on capital mobility were removed and East Asia, Southeast Asia and parts of Latin America were now open for investments, providing vast new reserves of cheap labor-power and restoring profitability on a global scale. Industrial working classes were emerging in countries such as Brazil and South Korea, while progressively being transformed into a service proletariat or facing unemployment in the advanced economies. The rise of “finance” was accompanied by increased income streams across countries as well as financial volatility throughout the 1980s and 1990s.

This trajectory of growing unproductive expenditure lead to significant real economic imbalances in the world economy as its center, the United States, at the turn of the millennium lacked sufficient levels of investments in its productive base to match its increasing

levels of consumption, driven by the financial sector itself. The situation was exacerbated by the costly occupations of Afghanistan and Iraq. The result was a huge annual trade deficit with a persistent accumulation of household and government debt³ (Duménil and Lévy, 2004b; Papadimitriou *et al.*, 2005).

In section 1.5 it was shown that instead of channeling funding from personal savers into productive industrial investment, the financial sector now seemed to operate in reverse. Industrial and commercial companies are now net depositors with the banks who lend the money to fund personal consumption, or finance unproductive state expenditure. This went hand in hand with a speculative appreciation of all sorts of paper assets. Notional profits from trading in this appreciating paper were then distributed to the executives, traders and shareholders of the banks, undermining their capital base. When the burden of debt eventually became unsustainable, the major banks in New York and London were revealed to be effectively insolvent.

The failure of the financial sector emphasizes that the exponential growth of real capital values can only occur when backed by an exponential growth of something real — ultimately an exponential growth of the source of value: labor.

3. Limits to the Rate of Capital Accumulation in the 21st Century

While environmental factors will set external limits to the rate of capital accumulation in the 21st century, it will also face internal economic and political limits caused by demographic factors that capitalism has brought about but cannot reverse:

Once large reserves of cheap labor-power are opened up to employment in capitalist firms, the growth of the workforce contributes to raise average profitability R^* . The profits retained by firms, after interest payments and dividends, are invested in fixed capital with the aim of increasing productivity. Under rapid capital accumulation the demand for labor will rise even faster. But the workforce cannot grow at a higher rate than the population for long. Moreover, the size of the population stabilizes as health and sanitation conditions are improved and the economy industrializes; this raises the child survival rate, but also the net cost of rearing children.

3 On the other side of the coin, export-led countries in East Asia and the Middle East had interests in maintaining trade surpluses with the United States.

Sooner or later the reserves of labor-power begin to deplete: the demand for labor begins to exceed supply in various sectors; real wages rise and the bargaining position of workers improves, with political consequences that follow. This process is now in the making on a massive scale in the industrializing economies of Asia, with growing industrial working classes.

When population stabilizes, exponential growth of real capital becomes impossible. It implies a high investment ratio i , thereby lowering R^* as the productivity growth rate p can only counterbalance it by so much. Either capital accumulation slows down or average profitability is depressed until a significant fraction of capital is unable to meet interest payments and dividends, leading to bankruptcy, capital destruction and restructuring. In either case, the rate of capital accumulation by firms under a class of rentiers reaches its limits. Investment, which is the source of the tremendous dynamism of capitalism, then becomes a matter of just replacing old capital stock with more up-to-date equipment, with no net growth in labor-value. The

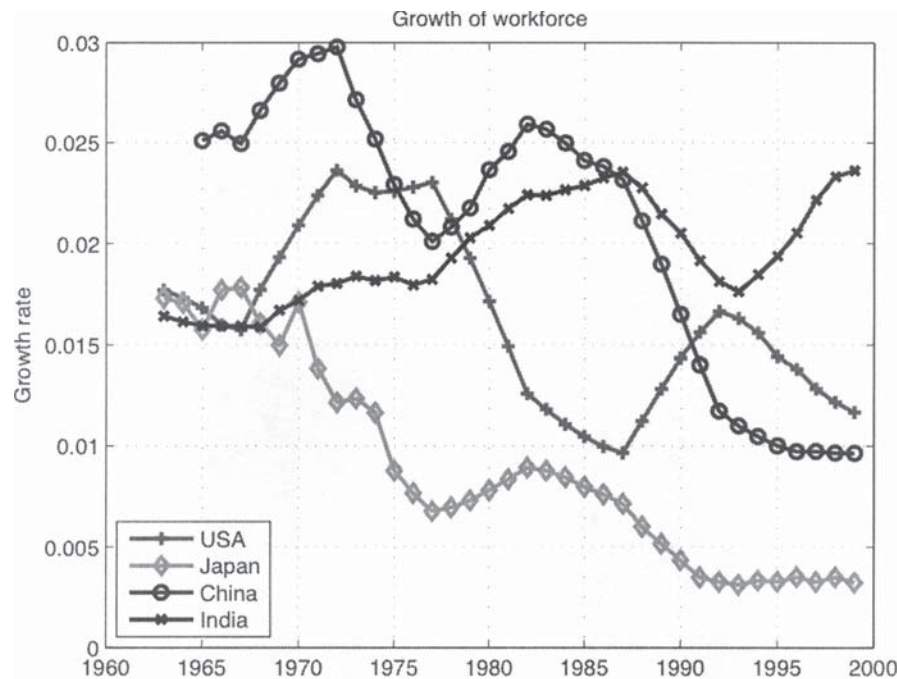


Figure 6: Depleting Labor Reserves in USA, Japan and China

social surplus product becomes increasingly unproductively consumed and thus contributes less to improving the living standards of the working classes (Cockshott, 2007; Cockshott *et al.*, 2009).

Capitalist economies that use up their labor reserves will therefore push towards capital exports for more profitable investments elsewhere. In Britain this occurred already in the 1880s, in Japan in the 1980s and China is heading along the same path. Africa and Latin America are likely to become the dominant destinations for capital exports from Asia, initially in the production of raw materials. This may lead to the resurgence of inter-imperialist rivalries.

As the global reserves of labor begin to deplete, the capitalist social order will face economic and political crisis on a global scale.

4. Policy

4.1. *Abolition of debt.* The first sign of the crisis was a run on the Northern Rock Bank, which experienced rapid growth by offering mortgages of more than 100% of property prices. Because the

Table 1

Estimated annual growth rate of population n , workforce l and productivity p in %, during the period 1997-2007. In the advanced economies and East Asia, the growth of the workforce is now constrained by declining population growth.

There is still a sharp contrast between East and South Asia.

	n	l	p	d	i	R^*
Developed Economies and EU	0.7	0.7	1.6	10.9	83.6	15.8
Eastern Europe (non-EU) and CIS	0.7	0.6	4.1	9.5	—	—
East Asia	1.3	1.0	6.4	9.9	100.5	17.2
South-East Asia and Pacific	1.9	2.5	1.4	10.2	—	—
South Asia	2.2	2.4	3.6	10.1	—	—
Latin America and the Caribbean	1.8	2.4	0.6	10.4	—	—
Middle East	3.0	4.9	-0.2	11.9	—	—
North Africa	2.4	3.3	1.4	11.5	—	—
Sub-Saharan Africa	2.6	3.0	1.1	11.4	—	—

Source: ILO, 2008. Estimated steady-state rates using EPWT (Marquetti, 2009).

funds from its millions of small depositors were insufficient, it had become dependent on borrowing from other banks or large industrial companies.

Fractional reserve banking has depended on banks having a large number of depositors. This damps fluctuations in withdrawals. The law of large numbers no longer applied to the Northern Rock, as it depended on a relatively small number of big lenders. It only took a handful of these to withdraw for it to become insolvent.

Rather than rely on the existing deposit guarantee scheme which ensured all deposits up to £30,000 — equivalent to about 18 months of average wages — the government nationalized Northern Rock and guaranteed all deposits, however large. Instead of allowing banks to fail, the state would bail them out. Governments expressed relief that their action prevented a cascading collapse, but the cost was a growth in public debt unprecedented in peacetime. Was any other policy available?

There was an alternative policy.

The failing banks could simply have been allowed to fail. The UK deposit guarantee scheme was generous; similar policies applied elsewhere. Only a tiny minority of depositors held more than £30,000 cash. So the majority would not have lost anything. Most customers have only modest amounts of cash; a few very rich depositors have tens of millions deposited. To them, the deposit guarantees were practically worthless.

The trillion dollar public bailout was done to protect the claims of these few very rich depositors. Had all deposits above the guarantee vanished, the class system would have been threatened. For what is money but “the power to command the labor of others”?⁴ Millions in your account play the role of a patent of nobility under feudalism. Modern Grand Dukes like Buffet and Gates’ titles are on a bank’s hard drive rather than parchment, but they still command the lives and labor of hundreds of thousands.

Had the banks all closed down, credit card and check purchases would have become impossible. But instead of allowing them to fail,

4 Speaking of a rich man with money, Adam Smith wrote: “The power which that possession immediately and directly conveys to him, is the power of purchasing; a certain command over all the labor, or over all the produce of labor, which is then in the market. His fortune is greater or less, precisely in proportion to the extent of this power; or to the quantity either of other men’s labor, or, what is the same thing, of the produce of other men’s labor, which it enables him to purchase or command” (Smith, 1974, Book 1, Chapter V).

a Jubilee could have been declared. It would have declared all debts incurred prior to Day Zero legally invalid, excepting modest guaranteed deposits. Those toiling to meet mortgage and credit card debt would have been liberated. The taxpayer would have been freed from the crushing burden of the national debt, and surprisingly, the banks would have become uber-solvent. Their liabilities would have shrunk relative to their cash reserves. Industry would have remain privately owned. But the abolition of debt, which has been a radical measure since antiquity, would have hit the aristocracy of money the way the French revolution hit the aristocracy of land.

The Russians did it after 1917, and shortly later, the German Social Democrats achieved a similar effect via hyper-inflation. Today, the governments of the UK and USA have veered toward the German 1920’s course: printing money to pay for wars current or past. Abolishing debts is a “minimum program” demand. It serves to polarize political opinion against the main enemy — the rentier interest — while benefitting the majority. Inflation hits all depositors alike, while debt abolition, of the type described, primarily hits those with large deposits.

4.2. *Abolition of exploitation.* Remember what Marx said to the International Workingmen’s Association. That they should inscribe on their banners not a “*fair day’s wage for a fair day’s work,*” but the “*abolition of the wages system.*”

What did he mean by this? How was the abolition of the wages system to be brought about?

By the wages system it is clear that he meant the system in which workers are paid for the value of their labor-power, but the value which they create belongs to their employer. This relationship was, according to him, at the root of capitalist exploitation. But how could it be abolished?

The answer is clear enough if you read his *Critique of the Gotha Programme* (Marx, 1970). It was to come about by replacing money with a system of labor coupons so that people would be paid an hour of coupons for every hour they worked. Using an hour’s coupons they would be able to get goods that had taken an hour to produce. “The same amount of labor which he has given to society in one form, he receives back in another.” But how do we get from here to there?

Having cancelled debts, the next step would be to fix the value of the Euro, etc., in terms of hours of labor. Each month the Central Bank

would publish the current equivalence between labor and Euros, etc. Economists call this the MELT (for “Monetary Equivalent of Labor Time”). It would pursue monetary policy to stabilize the MELT. At the same time legislation would be passed giving a firm’s employees a legal right to the full value added by the hours of labor that they worked. Trade unions would be able to bring a civil action to enforce this right against any firm that continued to engage in exploitation.

4.3. *Socialization of investment.* Since debts had been cancelled, firms, having no interest to pay, would remain solvent under these conditions. But they would cease to pay dividends, and shares would lose their value. This would impact private pensions. But the abolition of the national debt would leave the state in a position to substantially raise state pensions. Relatively wealthy pensioners would still lose out, but the majority of pensioners would gain.

At this stage capitalist exploitation would have been removed, but not exploitation in the form of rent or interest. The removal of these would require additional legislation. Updated versions of the old laws against usury would have to be reinstated to eliminate lending at interest. Rent on land would have to be devoted to public purposes by the introduction of “full site value rating,” an old radical-liberal demand. Under this scheme, the city, county or commune authorities would be entitled to levy a 100% tax on the rental value of a site.

We argued in section 1.5 that the original progressive purpose of the financial system has atrophied. But there still remains a need for something analogous in any industrial society. We have argued that the attempt to accumulate capital faster than the population grows runs into insuperable contradictions. There is still a need to transfer resources from declining to rising industries. But from the social point of view this is essentially a steady-state operation. There need be no net accumulation of dead labor relative to living labor. It would suffice if a much reduced and publicly owned financial system worked to mobilize the depreciation accounts of different industries. Depreciation funds from declining industries would be advanced to growing industries.

However, given the need for a very significant redeployment of labor from the declining financial services sector to new environmentally sustainable forms of production, it is doubtful that such depreciation funds would be adequate, so the state might have to directly fund some of the new industries out of income tax.

We believe that the series of measures that we outline above are distinctly different from those of left-Keynesianism. They constitute the necessary steps required to replace the current economic order with one that is no longer based on exploitation and no longer driven by the environmentally and demographically unsustainable imperative of exponential capital accumulation.

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