

Debt matters

By Michael Roberts (thenextrecession.wordpress.com)

Abstract

The expansion of global liquidity in all its forms (bank loans, securitised debt, shadow banking and derivatives) has been unprecedented in the last 30 years. The Marxist view is that credit (debt) can help capitalist production take advantage of prospective profit opportunities, but eventually speculation takes over and financial capital becomes fictitious. It becomes fictitious because its price loses connection with value and profitability in capitalist production. This leads to a bursting of the credit bubble, intensifying any economic slump.

This paper emphasises the importance of capitalist sector debt over public sector debt in understanding the causes and characteristics of the current crisis. The paper attempts to measure profitability against all advanced capital and relative to the expansion of credit to explain why this particular capitalist slump has been so severe and why it will take a very long time to recover. Indeed, debt levels will only be reduced sufficiently by defaults.

“Since one unit’s liability is another unit’s asset, changes in leverage represent no more than a redistribution for one group (debtors) to another (creditors) ...and should have no significant macroeconomic effects “ Ben Bernanke, Essays on the Great Depression, 2000

“The debt we create is basically money we owe to ourselves and the burden it imposes does not involve a real transfer of resources..” Paul Krugman, The conscience of a Liberal, 28 December 2011

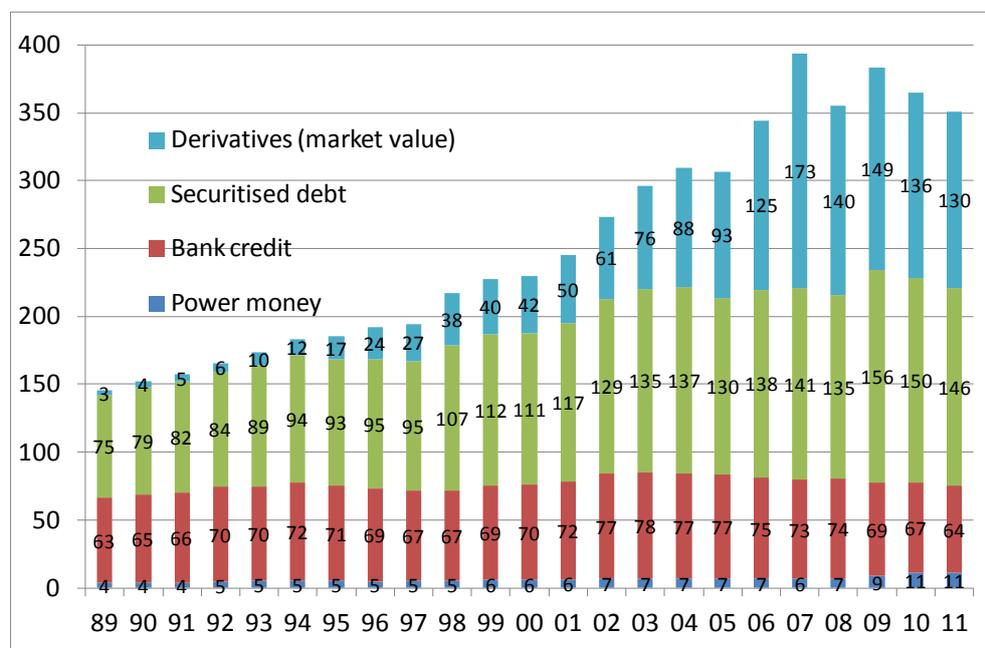
“At low levels, debt is good. It is a source of economic growth and stability. But at high levels, public and private debts are bad, increasing volatility and retarding growth. It is in this sense that borrowing can first be beneficial. So long as it is modest. But beyond a certain point, debt becomes dangerous and excessive.” Stephen Cecchetti et al. IMF September 2011

“Credit accelerates the violent eruptions of this contradiction -- crises -- and thereby the elements of the disintegration of the old mode of production” Karl Marx, Capital Volume 3

AN UNPRECEDENTED EXPANSION OF CREDIT

Global liquidity expanded at an unprecedented rate from the early 1990s (Figure 1). Liquidity here is defined as bank loans, securitised debt (both public and private) and derivatives.¹

Figure 1. Global liquidity as a % of world GDP, 1989-11



Source: Roberts M, see Appendix for sources and methods

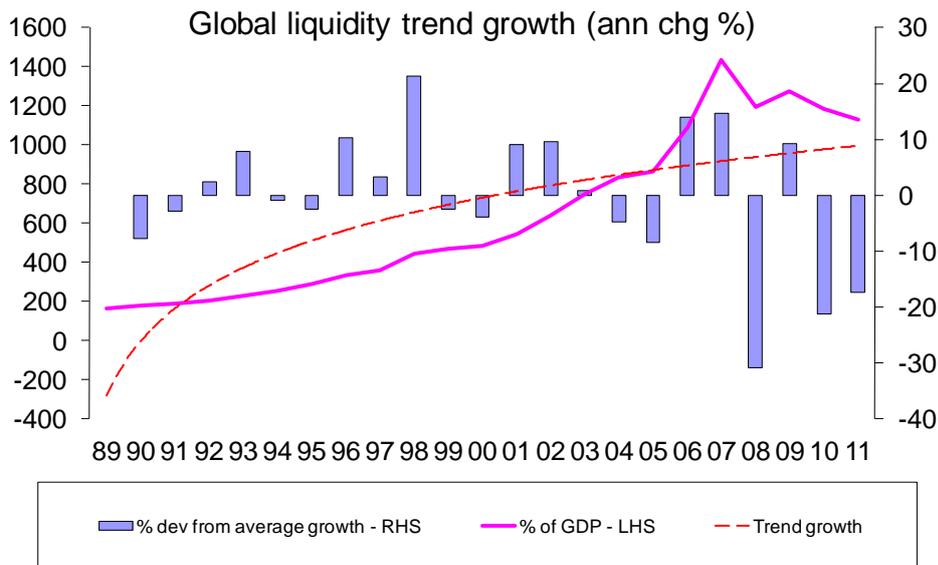
In effect, global liquidity is a measure of what Marx called fictitious capital². On this definition, global liquidity has risen from 150% of world GDP in 1990 to 350% in 2011. The pace of growth accelerated in the late 1990s and after a pause in the mild recession of 2001, liquidity took off again up to the point of the start of the global credit crunch mid-2007 (Figure 2).

¹ Derivatives are included in the definition of liquidity along with bank loans and debt because they expand the ability of the holders of loans and debt to borrow. So derivatives are an addition to 'fictitious capital' or liquidity. Derivatives are made up of interest-rate hedges, commodities, equities and FX. Interest-rate derivatives constitute the bulk, i.e. hedging the cost of borrowing. See Roche C and McKee B, *New Monetarism* (2009).

The notional value of derivatives rocketed from the early 1990 to reach over \$600trn, or 10 times global GDP by 2007. The notional value is measured by the Bank of International Settlements (BIS) from over the counter (OTC) trading in derivatives as well as exchange trading. OTC transactions are the vast bulk. Notional value as measured is double counting as it adds the value of contracts from both buyers and sellers. Netting out contracts leaves the gross market value. But this does not fully express liquidity because derivative contract values ought to capture the value up to the point of counterparty default risk. I use a figure of one-seventh of notional value to record the size of derivatives in global liquidity.

² For a discussion on Marx's concept of fictitious capital, see below

Figure 2. Global liquidity trend growth (annual change in % of GDP)

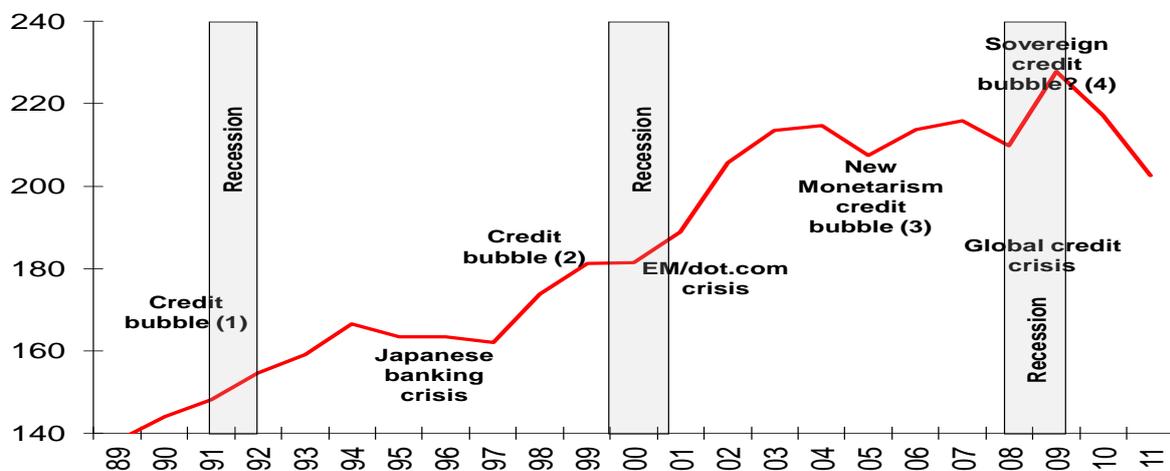


Source: Roberts M, *op cit*

If we exclude derivatives and look at just global credit (bank loans and debt), we can identify four credit bubbles and crunches from the early 1990s. First, there was the credit bubble of late 1980s and early 1990s mainly visible in Japan, ending in the Japanese banking crisis. The second bubble was the hi-tech, dot com bubble of the late 1990s that ended in the equity crash of 2000 and the recession of 2001. Then there was very fast credit bubble based on new forms of money (shadow banking and derivatives in the mid 2000s, culminating in the credit crunch of 2007 and subsequent Great Recession of 2008-9 (Figure 3).

This private sector credit bubble, based on real estate and associated securitised debt, then morphed into a public sector credit bubble as banks and financial institutions were ‘bailed out’ worldwide.

Figure 3. Global credit to GDP and the bubbles



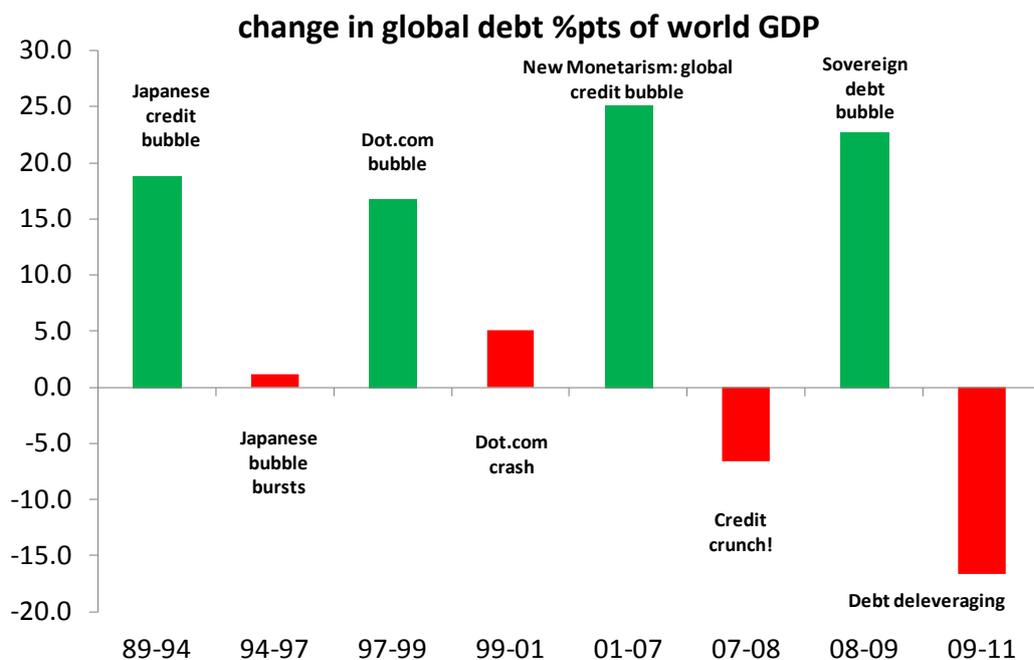
Source. Roberts M, *op cit*.

According to the Basel-3 BIS-IMF Financial Stability Task Force, the shadow banking (non-bank credit intermediaries) system grew rapidly from \$27trn in 2002 to \$60trn in 2007 and then declined to \$56trn in 2008 before recovering to \$60trn again in 2010. Shadow banking now covers 25-30% of the total financial system, or half the size of traditional banking assets globally³. The US has the largest shadow banking sector, with assets of \$25trn in 2007 (\$24trn in 2010).

The Great Recession has necessitated a process of deleveraging in both private and public sector debt. It is this lengthy process that is one key reason why there is a delay in a recovery in the world capitalist economy back to the trend growth before the global credit crunch and the Great Recession. From this viewpoint, debt matters.

Excluding bank loans and focusing on private and public securitised debt, we can identify significant volatility in the growth of global debt; periods of sharp expansion interspersed with periods of slowdown or outright contraction (Figure 4).⁴

Figure 4. Changes in global debt (% pts of world GDP)



Source. Roberts M, *op cit*

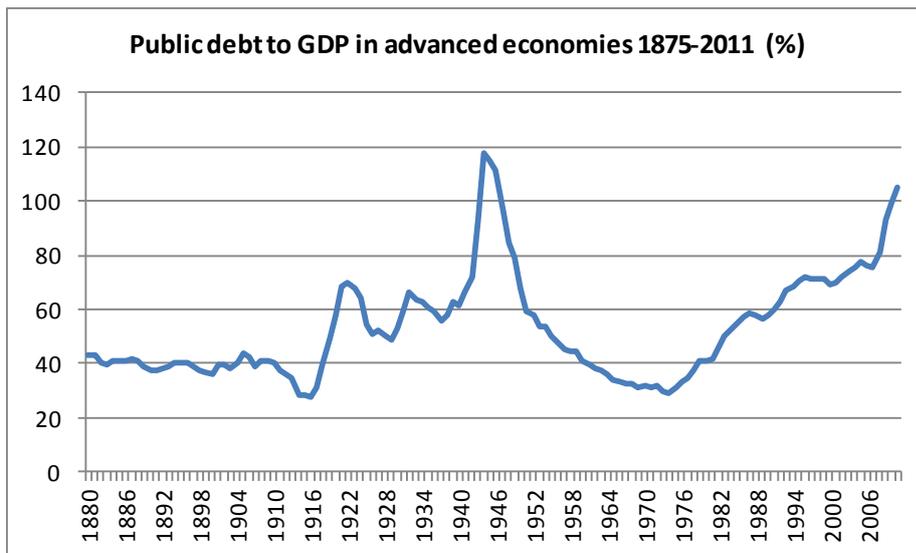
The sovereign debt bubble has also been unprecedented. According to the latest IMF database of gross public debt for all IMF members back to 1875, the public debt to GDP ratio in the advanced capitalist economies is now over 100% of GDP⁵. This is an historic high (excluding WWII) – Figure 5.

³ Shadow banking or non-bank credit institutions covers money mutual funds, investment funds other than mutual funds, structured financial vehicles and hedge funds. See the BIS Task Force Report, 12 April 2011

⁴ The figure measures just changes in global debt (public and private) and excludes bank loans and derivatives.

⁵ IMF World Economic Outlook, October 2012, Chapter 3.

Figure 5. Public debt to GDP in advanced economies (%)



Source: IMF

FICTITIOUS CAPITAL AND DEBT

It is private sector debt that is key to the process of capitalist production. And in particular, debt held by the capitalist sector. Changes in public sector debt will follow from the motion of capitalist production, on the whole.

For Marx, the capitalist economy is a monetary economy; and it is an economy with credit as a key constituent.⁶ So commercial and financial capital must be included in any “*finished form of the average rate of profit*”.⁷

Capital exists either in liquid form i.e. as money, or in fixed form as means and materials of production. Credit in all its forms increasingly substitutes for money in the general circulation of capital and commodities. This ‘fictitious capital’ is “*a kind of imaginary wealth which is not only an important part of the fortune of individuals*” (but also) “*a substantial proportion of bankers’ capital*”.⁸

For Marx, financial instruments, both credit and equity, are entitlements to present or future value “*We have previously seen in what manner the credit system creates associated capital. The paper serves as title of ownership which represents the capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital*”.⁹

The existence of these fictitious capitals imparts flexibility to the economy, but over time they become an impediment to the health of the economy. The more fictitious capital distorts the price signals, the more that information about the economy disappears. Decisions about

⁶ Tony Norfield (2012) has made an important attempt to show how Marxist concepts of the rate of profit, accumulation and fictitious capital are related through the financial sector.

⁷ Marx Vol 3 Part V (1981:459)

⁸ Marx op cit

⁹ Marx op cit.

production become increasingly unrelated to the underlying economic structure. Pressures build up in the economy, but they are not visible to those who make decisions about production. Fictitious capitals retain values that would evaporate if participants in the market were fully aware of the future. These fictitious values drag down the calculated rate of profit. They also serve as collateral for a growing network of debt. In effect, the financial system becomes increasingly fragile¹⁰.

The drive for profit in the capitalist sector is behind the inexorable expansion of credit¹¹.

This is recognised by even some mainstream economists. Irving Fisher put it: *overindebtedness must have had its starters. It may be started by many causes, of which the most common appears to be new opportunities to invest at a big prospective profit, as compared with ordinary profits and interest*".¹²

But prospective profit eventually gives way to *"an expansion of "the speculative element" and enterprises keep up an appearance of prosperity by accumulating debts, increasing from day to day their capital account."*¹³. Fictitious values accumulate during extended boom periods and are subsequently shed in the course of the bust. This shakeout *"unsettle[s] all existing relations"*¹⁴ As Paul Mattick put it, *"speculation may enhance crisis situations by permitting the fictitious overvaluation of capital, which cannot satisfy the profit claims bound up with it"*¹⁵.

So for Marx: *"The credit system appears as the main lever of overproduction and overspeculation in commerce solely because the reproduction process, which is elastic by nature, is here forced to its extreme limits, and so is forced because a large part of the social capital is employed by people who do not own it and who consequently tackle things quite differently than the owner, who anxiously weighs the limitations of his private capital in so far as he handles it himself. This simply demonstrates the fact that the self-expansion of capital based on the contradictory nature of capitalist production permits the free development only up to a certain point, so that it constitutes an imminent fetter and barrier to production, which are continually broken through by the credit system. Hence, the system accelerates the material development of the productive forces and the establishment of the world market. It is the historical mission of the capitalist system of production to raise these material foundations. At the same time credit accelerates the violent eruptions of this contradiction -- crises -- and thereby the elements of the disintegration of the old mode of production"*¹⁶.

So a debt or credit crisis is really a product of a failure of the capitalist mode of production as a monetary economy. *"In a system of production, where the entire control of the reproduction process rests on credit, a crisis must obviously occur when credit suddenly ceases and cash payments have validity. At first glance therefore, the whole crisis seems to be merely a credit and money crisis."*¹⁷ BUT *"what appears to be a crisis on the money*

¹⁰ The analysis of fictitious capital here leans heavily on the excellent work of Michael Perelman; see biblio.

¹¹ See Keen, Kliman, Kotz, MacEwan & Miller, Moseley, Palley, Rasmus, Roberts, Shaikh, Wolff, 2012

¹² Fisher I (1939)

¹³ Marx to Danielson, 1879

¹⁴ Marx 1967; 3, p. 516

¹⁵ Mattick P 1969 biblio

¹⁶ Marx 1967; 3, p. 441

¹⁷ Marx 1967: vol 3, p490

market is in reality an expression of abnormal conditions in the very process of production and reproduction.”¹⁸

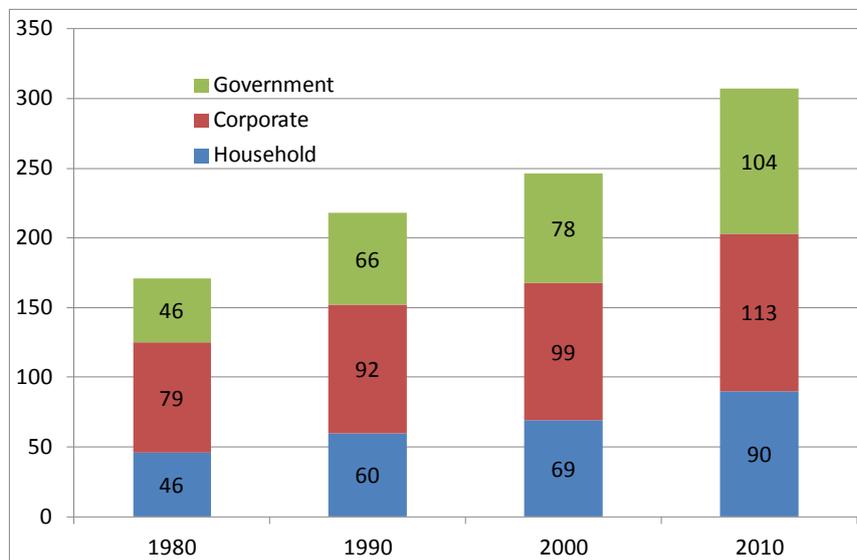
By inflating the base on which profit is earned, the existence of these fictitious values reduces the rate of return, And in the course of a crisis, the elimination of fictitious values serves to increase the rate of profit, at least to the extent that fictitious values and the burden they place on firms are eliminated at a rate that exceeds the fall of prices in. The clearing away of these fictitious values removes an important barrier to investment. Consequently, with their elimination, the economy strengthens and the cycle of accumulating fictitious capital begins again.

The destruction of fictitious capital is thus closely bound up with the devaluation of tangible capital. And the problem of recovery under the capitalist mode of production is thus intensified when fictitious capital reaches such an unprecedented size that it takes a very long time to eliminate it.

THE CONNECTION BETWEEN PROFIT AND CAPITALIST SECTOR DEBT

Non-financial corporate debt remains the largest component of overall debt in the advanced capitalist economies at 113% of GDP compared to 104% for government debt and 90% for household debt (Figure 6). In the 1980s, corporate debt as a share of output was nearly twice as large as household and government debt, but the latter two components have nearly doubled in size in the ensuing 30 years.¹⁹

Figure 6. Non-financial debt to GDP in advanced economies (%)



Source: Cechetti A et al

In the US, between 1950 and 1980, the ratio of nonfinancial debt (household, corporate and government) was quite stable at 130% of GDP. But after 1980 it nearly doubled to more than 250% and for advanced economies, the average weighted mean ratio has risen 80%. In the US, the major financial sector economy in the world, the rise in debt has been faster in the

¹⁸ Marx, Vol 2, p318.

¹⁹ Cechetti et al (2011)

non financial capitalist and household sectors than in government debt, unlike for most advanced economies. Only about one third of the increase in overall debt has been due to government borrowing. And business and household debt has been consistently higher than government debt. Indeed, in the US, gross public sector debt now stands at \$14.1trn but non-financial business and household debt stands at just under \$25trn.

Household debt expanded rapidly during the so-called neo-liberal era as a result of increased borrowing to compensate for stagnant real incomes in most households, falling interest rates to reduce the cost of borrowing and the resulting property boom in many advanced capitalist economies in the last 15 years. The creditors are the banks and other money lenders. Their assets (home values) eventually collapsed, placing a severe burden of deleveraging on the financial sector.

This is all well documented. But to understand the causes of the global credit crunch and the ensuing slump in capitalist production, it is not enough to look at the bursting of the property bubble. A Marxist interpretation will look for connections between the expansion and demise of credit and capitalist reproduction, namely through the impact of falling profitability on the credit crunch and the impact of large debt on profitability.

The orthodox Keynesian interpretation does not consider this. Keynes did try to connect profitability with credit and demand. His neoclassical concept of the marginal efficiency of capital was his approach. But he let it lie²⁰. Instead, he promoted an interpretation that the crisis is a collapse in aggregate or ‘effective demand’, caused by a loss of ‘animal spirits’ or ‘business confidence’ that feeds through to a collapse in investment and a willingness to spend. It is not due to excessive private debt. A slump ensues and can stay for a long time if the economy is locked into a liquidity trap. It needs government intervention to break out.

Some more unorthodox Keynesians have recognised that there is a problem with capitalism beyond simply a sudden lack of demand. Hyman Minsky argued that the problem lies in the financial sector: financial agents take more and more risk to make money and they borrow more and more to do it. This is inherent in an unregulated financial sector, which becomes vulnerable if things go wrong. So the economy at some point can then have a ‘Minsky moment’, when borrowers can’t pay their bills and lenders stop lending²¹.

Paul Krugman says that “*anything can trigger this*”²² (financial collapse). But once the slump has begun and capitalists and households try to reduce their debts, or deleverage, they drive the economy further down by not spending. The economy contracts faster than the debt can be reduced and we enter ‘debt deflation’ (as explained by 1930s economist Irving Fisher). Then debtors can’t spend and creditors won’t spend.

Steve Keen also argues that the key to crises under capitalism is excessive credit or private debt²³. Private credit rockets as banks speculate in ever riskier forms of assets (stocks, bonds, property). This creates extra demand in an economy that cannot eventually be satisfied. Increasingly, borrowing is raised just to cover previous borrowing in a Ponzi-like scheme.

²⁰ Keynes (1936)

²¹ Minsky H (1986)

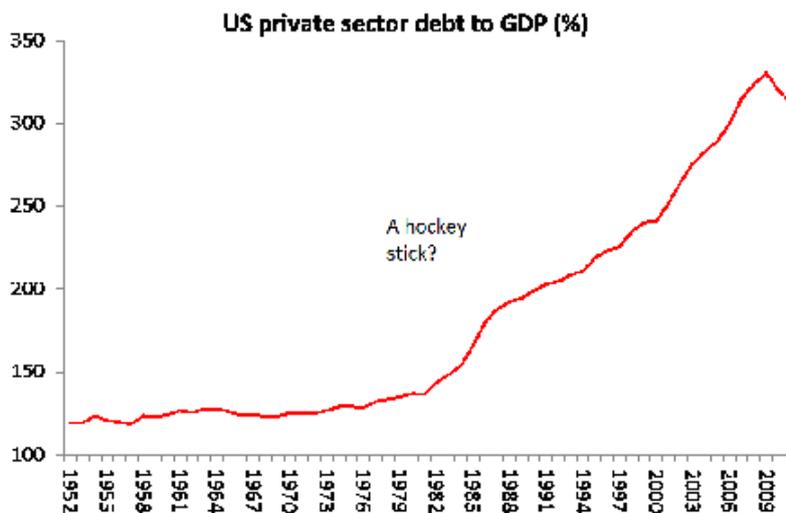
²² Krugman P (2012)

²³ Keen S (2011)

Eventually, the whole pack of cards collapses in a ‘Minsky moment’ and capitalism has a slump.

Keen says the best way to look at Keynesian-style ‘aggregate demand’ in a modern capitalist economy is to add to national income the amount of private debt or borrowing (Figure 7). If you amend Keynes like this, you get a better indicator of when a crisis is coming²⁴.

Figure 7. US private sector debt to GDP (%)



Source: IMF

What does Marx say? As we have seen in the previous section, Marxist theory agrees with Keen that private credit can become excessive. Indeed, this flows from the Marxist view that money is not neutral in the capitalist economy but central to it. Credit can and will get out of line with the capitalist production. Credit is really fictitious capital i.e. money capital advanced for the titles of ownership of productive and unproductive capital i.e. shares, bonds, derivatives etc. The prices of such assets anticipate future returns on investment in real and financial assets. But the realisation of these returns ultimately depends on the creation of new value and surplus value in the productive capitalist sector. So much of this money capital can easily turn out to be fictitious.

But the key point for Marxists here is profit. The huge rise in private debt (measured against GDP) is clearly a very good indicator that a credit bubble is developing. But it alone is not good indicator of when it will burst²⁵. It is when the rate of profit starts to fall; then more immediately, when the mass of profits turns down. Then the huge expansion of credit designed to keep profitability up can no longer deliver.²⁶

²⁴ Keen won the Real Economics Review prize for forecasting the credit crunch. He says that this came to him as a revelation because he suddenly realised how the rise in US private debt was preparing a crisis. Keen said the graphic on US private debt to GDP looked like the ‘hockey stick’ graphic for global warming.

²⁵ Some economists in the Austrian school have tried to gauge when the tipping point might be by measuring the divergence between the growth in credit and GDP growth (see Borio and White, *Asset prices, financial and monetary stability*, BIS 2002). But Marxist theory provides a much better guide.

²⁶ See Roberts M (2009)

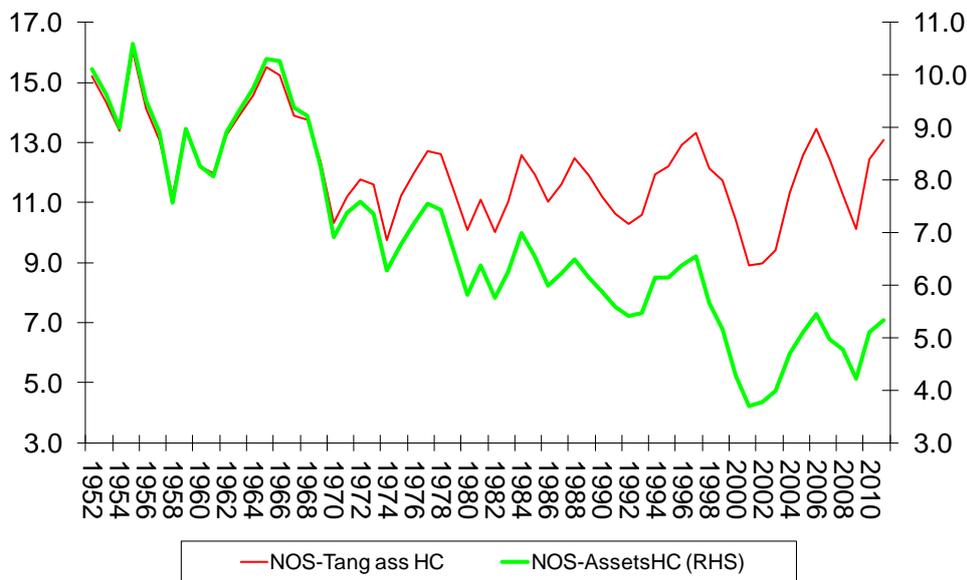
The drive for profit leads to an expansion of credit (debt), but also it leads to a rise in the real cost of that debt and thus the cost of capital. Changes in the rate of interest and inflation affect the cost of capital outside of any increase in the size of debt. A recent study found that if the average rate of real GDP growth, inflation and interest had stayed the same after 1980 then the US household and corporate debt burden would have been roughly the same as in the early 1950s, despite the rise in nominal debt levels.²⁷

Can we show the relationship between debt and the profitability of capital more directly? One way of showing how the fall in the rate of profit combined with excessive debt to bring US capitalism down is to measure the rate of profit not just conventionally against tangible corporate assets but also against fictitious capital²⁸.

Marx recognised that fictitious capital will also enter into the calculation of profitability for capitalist production. Businesses attempt to follow price setting practices that allow for the recapture of past investments and to repay debt obligations. If they cannot, they face bankruptcy. So in that regard, the value of this capital "*will continue to be estimated in terms of the former measure of value, which has now become antiquated and illusory*"²⁹

In Figure 8, US corporate profits are measured against tangible assets (red line) and then against all assets (tangible and financial) on corporate balance sheets. We find that the US corporate rate of profit based on tangible assets more or less stabilised from 1982 onwards during the neo-liberal era, but when fictitious capital is included, there is a divergence from the beginning of that period with the gap widening particularly after 2000. The seeds of a major crisis were being sown as early as the beginning of this century.

Figure 8. US corporate rate of profit against tangible and all assets (historic cost basis) %



²⁷ JW Mason et al (2011)

²⁸ Alan Freeman was among the first to raise the possibility of including within Marx's law of profitability the financial assets of a capitalist company. Freeman has attempted to measure the rate of profit in the US and the UK by incorporating financial assets (forthcoming paper)

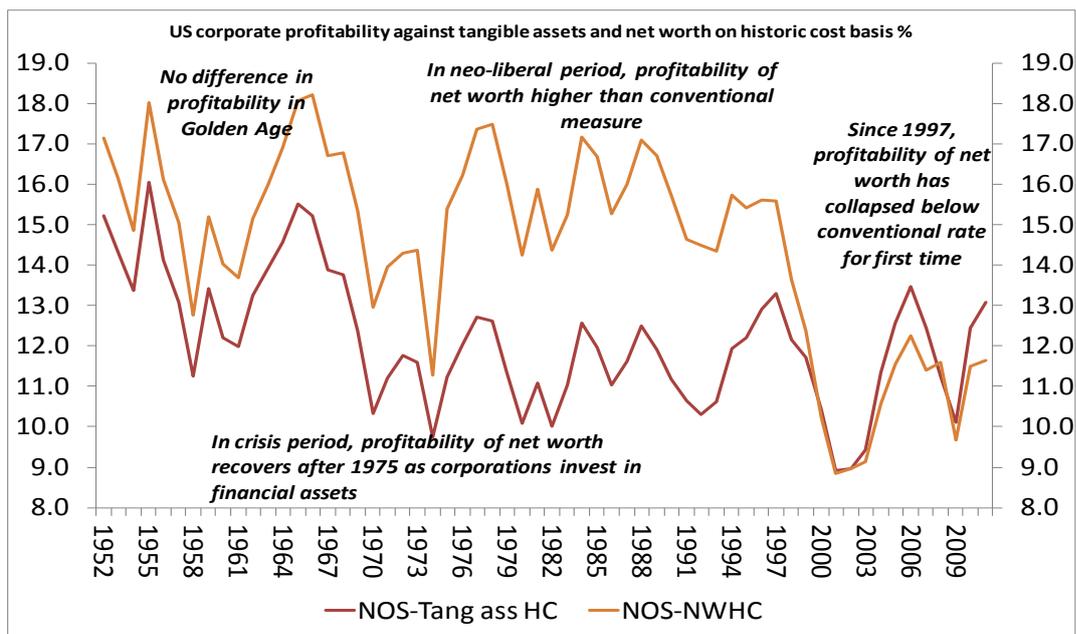
²⁹ Marx 1977, p. 214).

Source: see appendix for sources and the considerable measurement problems!

Once ‘conventional’ profitability also turned down in 2006, the crisis began and the impact was much bigger because of the size of fictitious capital.

However, using financial assets to account for fictitious capital is not entirely satisfactory and there is an element of double counting³⁰. A more appropriate measure may be to use corporate net worth which also incorporates financial liabilities (loans from banks, bonds and shares issued).³¹ In Figure 9, US corporate profits are measured against tangible assets and net worth. In the era of the ‘conventional profitability crisis’ from 1966 to 1982, the conventional rate of profit declines while profitability against net worth also does, but less severely and recovers more quickly. In the neo-liberal era 1982-1997, profitability against net worth was higher than conventional profitability. In the latest period 1997-11, conventional profitability has been broadly flat but against net worth, it has dropped significantly. That suggests that Marx’s law of profitability still holds as an explanation of the global slump if fictitious capital is captured in the equation. Against net worth, US corporate profitability nearly halved between 1997 and 2000.

Figure 9. US corporate profitability against tangible assets and net worth on historic cost basis %



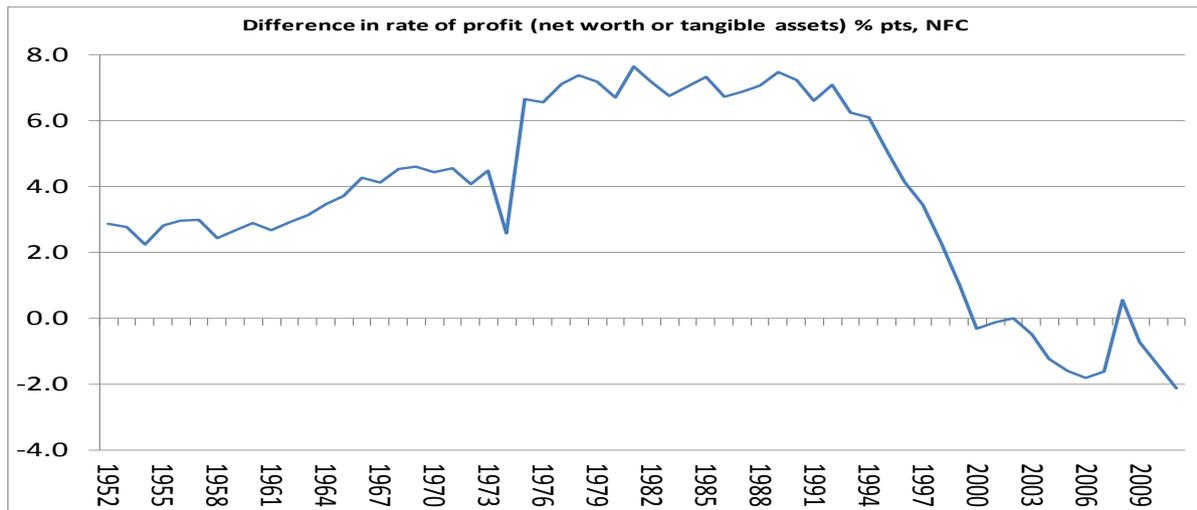
³⁰ “We have previously seen in what manner the credit system creates associated capital. The paper serves as title of ownership which represents the capital. The stocks of railways, mines, navigation companies, and the like, represent actual capital. . . . This does not preclude the possibility that these may represent pure swindle. **But this capital does not exist twice, once as the capital value of titles of ownership on the one hand and on the other hand as actual capital invested.** . . . It exists only in latter form, and a share of stock is merely a title of ownership to a corresponding portion of the surplus value to be realized by it”. .Marx op cit.

³¹ Following Dumenil and Levy (2005), I have adopted net worth as the denominator in the equation for the rate of profit. My measure also uses tangible assets on a historic costs basis following the tradition of the TSSI of Marx’s law.

Source: see Appendix

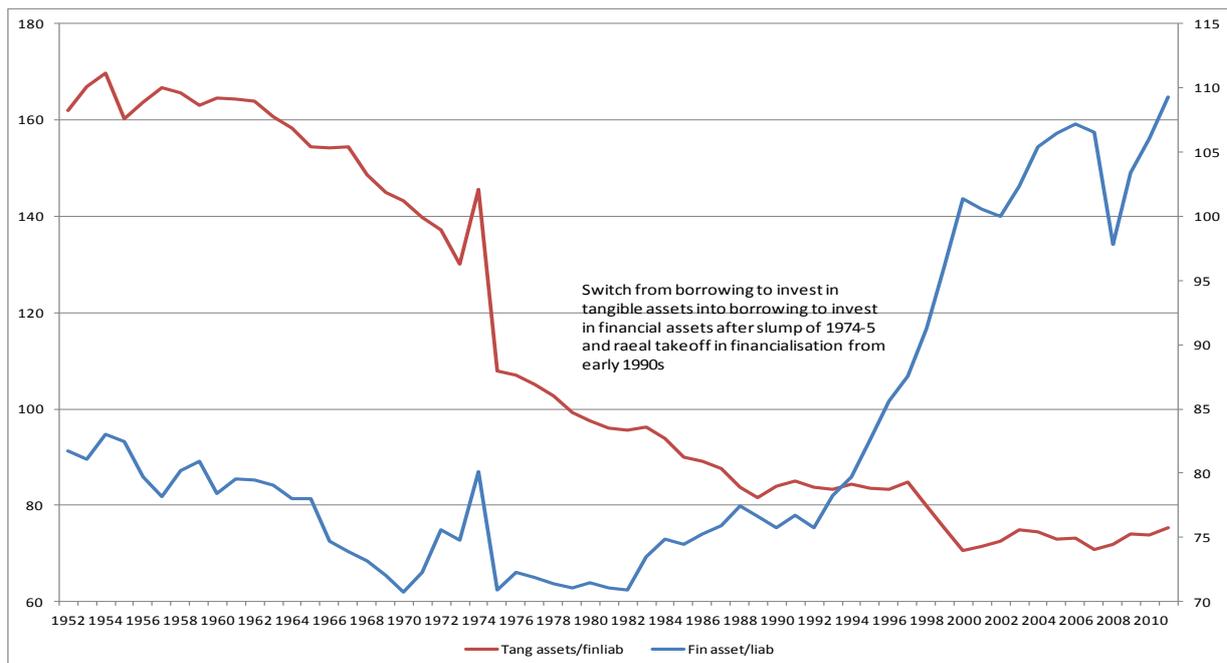
After 2000, the rate of profit based on net worth has remained under the rate against tangible assets for the first time on record, suggesting that the ‘financial’ part of non-financial capitalist sector is now a significant obstacle to the recovery in capital accumulation (Figure 10).

Figure 10. Difference in rate of profit in US non-financial corporate sector based on net worth or tangible assets (% pts)



If we decompose the components of US corporate net worth, we find that US capitalists increased their borrowing or raised more equity capital in order to invest in financial assets rather than real investment. This was exponential after the early 1990s (Figure 11).

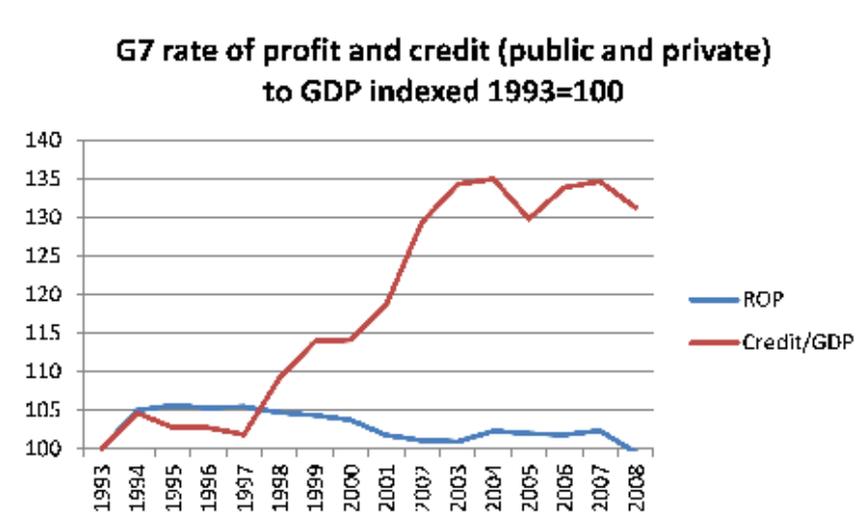
Figure 11. Ratio of US corporate tangible and financial assets to liabilities (%)



Source: see Appendix

We can apply this analysis to the major capitalist economies. After the mid-1990s, the average rate of profit in the top seven capitalist economies fell 5% to 2008 (the start of the Great Recession) while G7 non-financial debt to GDP rose over 30% (Figure 12). The rise in fictitious capital just hid the underlying crisis in capitalist production up to 2008.

Figure 12. G7 rate of profit and non-financial debt to GDP (indexed 1993=100)



Source: Roberts M (2012)

So whether rising debt levels lead to an economic crisis or slump depends on the profitability of the capitalist sector. And in turn, the profitability of the capitalist sector depends partly on the weight of debt accumulated in that sector. Public sector debt is not involved directly in the causation process.³²

PUBLIC SECTOR DEBT: IN ITS OWN RIGHT?

Public sector debt rises whenever the capitalist sector is weakened and unable to progress without state help. So is a crisis in public sector debt just by-product of a crisis in the capitalist sector, or can there be a fiscal crisis in its own right?³³

Well, the steady rise in public sector debt in the advanced capitalist economies began in the neo-liberal era. It coincides with low conventional profitability in the capitalist sector, poor economic growth (compared to the Golden Age before the decline in profitability after 1965) and a huge expansion of private sector debt (corporate and household).

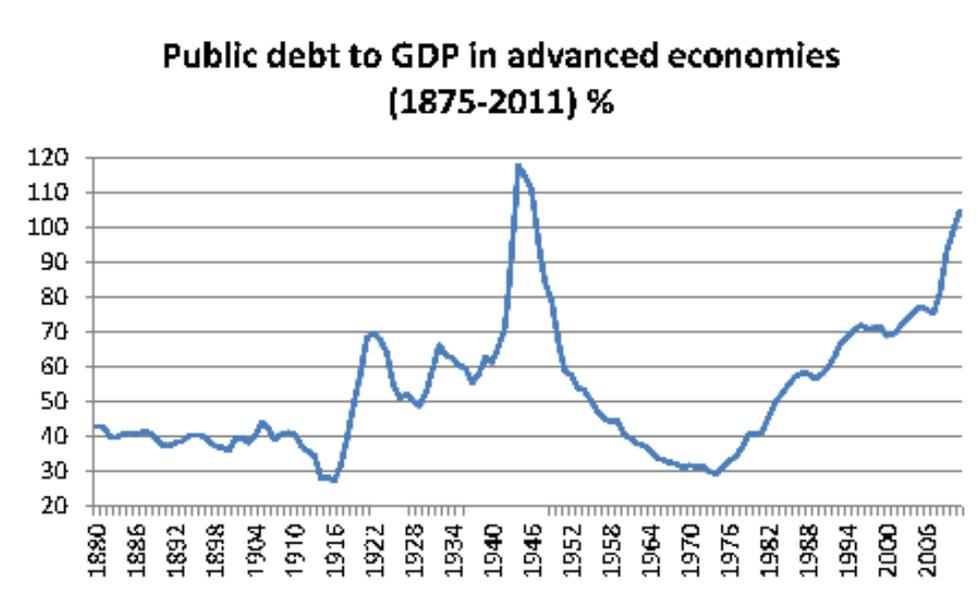
Moreover, the biggest leap in public sector debt has been as a result of the crisis in private sector debt and the capitalist economy – jump on nearly 50% in debt to GDP since 2008

³² A Taylor (2012) estimates that when an economy has high private sector debt growth before a crisis, the subsequent economic recovery will be weaker – indeed by up to 4% pts of real GDP growth on average. You see what matters is the health of the capitalist sector in a capitalist economy.

³³ See Kratke (2010),.

(Figure 13). Public sector debt to GDP is now near second world war levels and well above that in the debt deflation period of the Great Depression.

Figure 13. Public debt to GDP in advanced economies (%), 1875-2011



Source: IMF

So the global credit crunch, the bailout of the financial sector by the state and ensuing Great Recession provide compelling evidence that the crisis of the public sector is a crisis of capitalism and not some separate crisis.

In the US, after the credit binge of the 2002-7, private sector debt (households, businesses and banks) had reached \$40.8trn in 2008. These sectors have now deleveraged to \$38.6trn, or down 8%, mainly because banks have shrunk and households have defaulted on their mortgages. But this private sector deleveraging has been countered by a huge rise in public sector debt, up over 70% from around \$8trn in 2007 to \$13.7trn now and still rising, if more slowly. The public sector debt has risen to finance the bailout of the banking system as well as to fund widening budget deficits as tax revenues collapsed and unemployment and other benefit payouts rocketed. As a result, the overall debt burden (public and private) in the US is still rising and at a rate that matches nominal GDP growth. So the overall debt to GDP ratio is still not falling.

This explains why the apologists for capitalism want to reduce the public sector debt or at least shift the burden of financing it onto labour and away from capital. Tax struggles are class struggles, although in disguise³⁴. In this sense, the rise in public sector debt becomes part of the overall crisis induced by falling profitability and excessive private sector debt.

Keynesians sometimes argue that debt does not matter and more (public) borrowing is not a problem, at least not for now. And yet all the analysis of all the historical evidence shows that once debt gets up to 85-100% of GDP, whether it is private or public debt, economic growth slows sharply to well below a trend level that can sustain employment or encourage

³⁴ Kratke MR op cit.

investment³⁵ And that is where we are right now. In other words, when the capitalist sector is overladen with debt and a crash comes, it takes a long time to clear that debt, whatever government measures are adopted³⁶.

Krugman seems to recognise that there could be “debt-driven slumps”, arguing that an “*overhang of debt on the part of some agents who are forced into deleveraging is depressing demand.*”³⁷ From that debt deflation (Fisher-style), the liquidity trap and the Keynesian multiplier emerge. But more recently, Krugman appeared to deny the role of debt in crises as it does not matter in a ‘closed economy’ i.e. one where one man’s debt is another’s asset. It’s only a problem if you owe it to foreigners.³⁸ But the IMF disagrees: “*recessions preceded by economy-wide credit booms tend to be deeper and more protracted than other recessions*” and “*housing busts preceded by larger run-ups in gross household debt are associated with deeper slumps, weaker recoveries and more pronounced household deleveraging*”³⁹.

In their very latest report, the historians of debt, the Reinharts and Kenneth Rogoff confirm the relationship between debt and growth under capitalism⁴⁰ They looked at 26 episodes of public debt overhangs (defined as where the public debt ratio was above 90%) and found that on 23 occasions, real GDP growth is lowered by an average of 1.2% points a year. And GDP is about 25% lower than it would have been at the end of the period of overhang. It is the same when private sector debt gets to very high levels. Such is the waste of capitalism and fictitious capital.

Studies by McKinsey and the IMF also found that on average GDP declines by 1.3% points for two to three years after a financial crash and debt to GDP must fall by up to 25% to complete deleveraging. There are host of other studies that reveal pretty much the same thing⁴¹. The IMF recently found that when public sector debt levels above 100% of GDP typically experience lower GDP growth than the advanced country average⁴². Most important, the IMF found that where debt levels were between 90-100% and were decreasing over the 15 years following the peak, economic growth is faster than for countries even below the 100% threshold (Figure 14). Deleveraging is crucial to recovery whatever the level of debt reached.

³⁵ There has been a heap of studies that argue that it is large budget deficits and high debt that will cause GDP growth to falter. The most famous one is that Reinhart and Rogoff (2009) that shows if public debt levels get to over 85-90% of GDP (as they now are in most advanced capitalist economies, then it will take years (5-7 years or more) to restore economic growth. The implication is that the quicker public debt ratios are reduced, the quicker the sustained growth can resume.

³⁶ According Alan Taylor (2012), overhangs of credit that builds up before a financial crisis imposed “*abnormally severe downward pressures on growth, prices and capital formation for sustained periods*”.

³⁷ Krugman wrote a piece with Gauti Eggertsson (2010) *Debt, deleveraging and the liquidity trap*, 16 November 2010) that

³⁸ Krugman (2012)

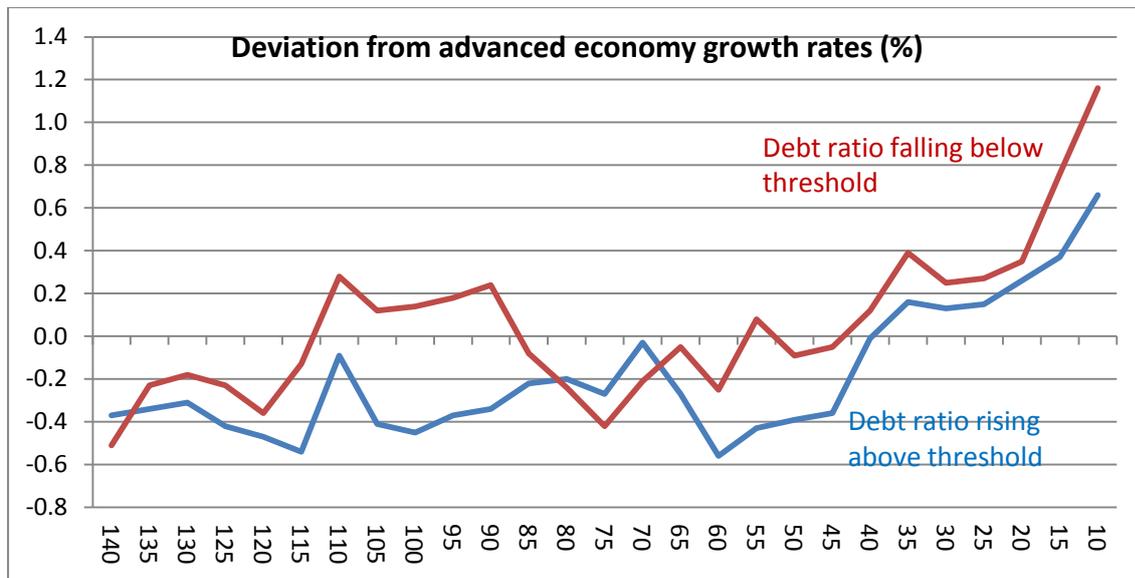
³⁹ IMF WEO April 2012, p57

⁴⁰ Reinhart C et al (2012)

⁴¹ McKinsey, IMF, etc

⁴² Reinhart and Rogoff (2010) reach the same conclusion at a 90% threshold.

Figure 14. Deviation from average growth rate of advanced economies compared to public debt to GDP level (% pts).



Source: IMF

The correlation between high debt and low growth seems strong, but the causation is not clear. Is it 1) a recession causes high debt, so the only way to get debt down is to boost growth (Keynesian)? Or 2) high debt causes recessions, so the only way to restore growth is to cut debt (Austrian)? The evidence one or way or another from all these studies is not there.⁴³ The evidence from this paper is that it is the contraction of profitability that leads to a collapse in investment and the economy which then drives up private debt. If the state has to bail out the capitalist sector (finance), then public debt explodes.

DEALING WITH DEBT AND FISCAL MULTIPLIERS

Whether it is the chicken or egg, debt ‘deleveraging’ is necessary under capitalism. If dead capital remains stuck on the books of companies, then they won’t invest in new production; households won’t spend more if they have mortgages hanging over their heads and the value of their house is worth less. And governments cannot take on new public projects if the interest cost of existing debt eats into their available revenues.

The Keynesian analysis denies or ignores the class nature of the capitalist economy and the law of value under which it operates by creating profits from the exploitation of labour. As a result, Keynesian macro identities start from consumption and investment (“effective demand”) and go onto incomes and employment. In a period of economic slump when effective demand is low, more government borrowing to raise demand is the way out. The

⁴³ As John Cochrane put it in his blog (The grumpy economist, *Two views of debt and stagnation*, 20 September 2012, <http://johnhcochrane.blogspot.co.uk/>), “when I read the review of the ‘studies’, they are the usual sort of growth regressions or instruments, hardly decisive of causality.” In other words, the studies show a correlation between high debt, big budget deficits and recessions, but not the causal direction.

Keynesian multiplier measures the impact of more or less spending (demand) on income (GDP). Thus the recent debate over the size of that multiplier has become widespread⁴⁴.

The Marxist way of looking at the impact of government spending through more borrowing is very different. We can talk of a Marxist multiplier.⁴⁵ The Marxist multiplier starts from the concept of profit generated from the class struggle and the law of value. The causation is from profits to capitalist investment and then from investment to employment, wages and consumption. Spending and growth in GDP are dependent variables on profitability of investment, not the other way round. So the Marxist multiplier measures changes in profitability and their impact on investment and growth⁴⁶.

If the Marxist multiplier is the correct approach, then government spending and tax increases or cuts must be viewed from whether they boost or reduce profitability. If they do not, then any short-term boost to GDP from more government spending will only be at the expense of a lengthier period of low growth and an eventual return to recession.

If government spending goes into social transfers and welfare, it will cut profitability as it is a cost to the capitalist sector and adds no new value to the economy. If it goes into public services like education and health (human capital), it may help to raise the productivity of labour over time, but it won't help profitability. If it goes into government investment in infrastructure that may boost profitability for those capitalist sectors getting the contracts, but if it is paid for by higher taxes on profits, there is no gain overall. If it is financed by borrowing, profitability will be constrained by a rising cost of capital.

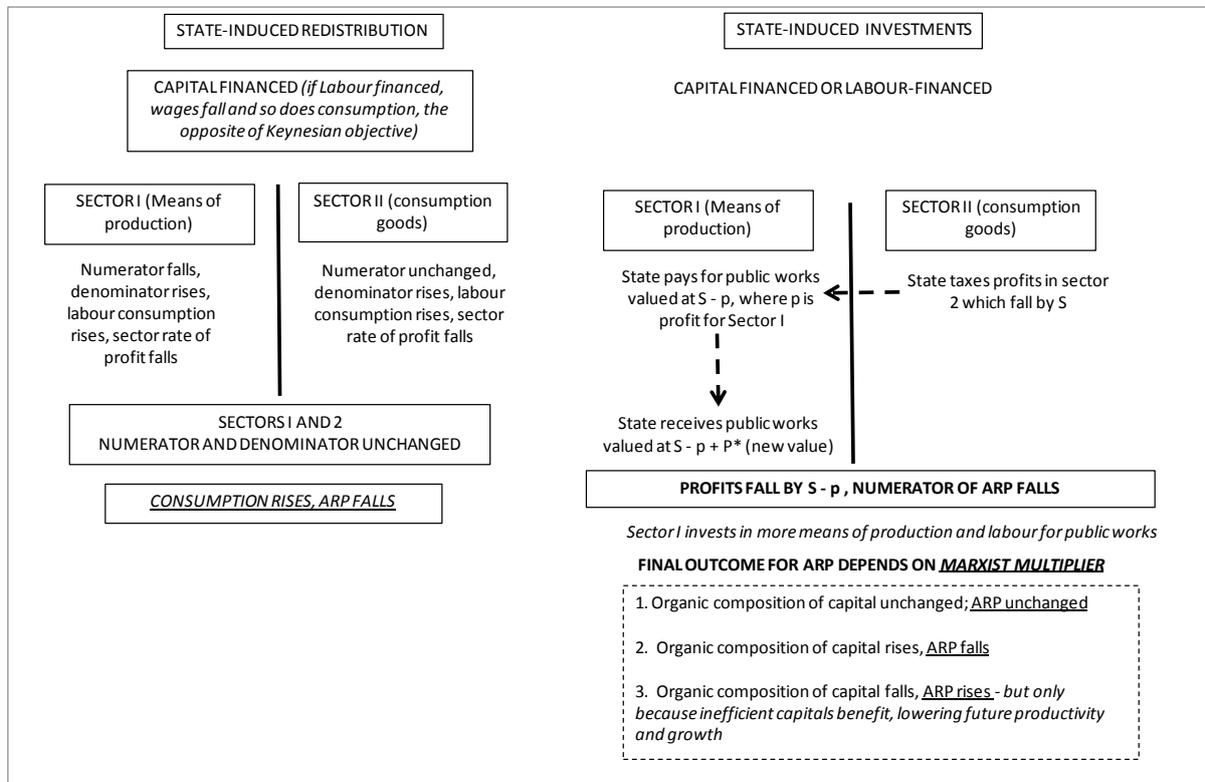
⁴⁴ See Roberts M, The smugness multiplier, <http://thenextrecession.wordpress.com/2012/10/14/the-smugness-multiplier/>

⁴⁵ Carchedi (2012)

⁴⁶ Then, as Carchedi puts it: *"in the Marxist multiplier, profitability is central.... The question is whether n rounds of subsequent investments generate a rate of profit higher than, lower than, or equal to the original average rate of profit"*.

There is no assurance that more spending means more profits, on the contrary, as Figure 15 shows⁴⁷.

Figure 15. Government intervention and the Marxist multiplier



Source: Carchedi G and Roberts M, forthcoming

Under the capitalist mode of production, the purpose is not raise GDP or increase household consumption. That may be a by-product, but the purpose is to make profits. And profitability is still too low to encourage capitalists to raise investment sufficiently to reduce unemployment and wage incomes and thus ‘effective demand’. A policy of raising wages would reduce the share of profit in GDP; and a policy aimed at expanding government spending would be damaging to profits, just when capitalists are trying to ‘deleverage’ their ‘dead’ and unusable capital and reduce costs.

Sure, some capitalist sectors benefit from extra government spending through the procurement of government services and investment from the capitalist sector e.g. military weapons and equipment; roads, schools and hospitals etc. Mainstream economists often claim that government does not “produce anything”, it does not “create wealth”. What the mainstream really means is that government does not create new value (profit). It merely redistributes existing value, often against the interests of the capitalist sector as a whole. Government can thus be damaging to capitalist investment especially if taxes are diverted to welfare spending, workers’ pensions and public sector wages. And if government gets too large, it could even reverse the dominance of the capitalist mode of production.

⁴⁷ See Carchedi G and Roberts M, forthcoming paper

So the Austerians see the need to keep government spending down, reduce the ‘size of the state’ and cut sovereign debt not as ends in themselves, but as part of the effort to revive profitability in the capitalist sector by cutting the costs of taxation and welfare.

There is no guarantee that an economy will come out of a slump⁴⁸. The clearing of both ‘dead capital’ in production and fictitious capital in finance is going to take a long time. So we are in what is really a ‘long depression’ as in the 1880s in the UK and the US. The great boom then (or ‘great moderation’ now) of 1850-73 (1982-97 now) came to end in a big crash (1873 then, 2007 now), and subsequently it took a series of slumps (1879, 1883, etc or 2008-9) to clear the decks for renewed profitability before capitalism entered a new period of growth from the 1890s onwards.

There are only three options for reducing debt: inflation, growth or restructuring (default). Assuming sufficient economic growth is not forthcoming, inflation is the Keynesian ‘solution’⁴⁹, default is the Marxist. A recent study by the IMF on private and public sector debt found that the easiest way to get debt under control in the absence of fast economic growth (current conditions) was to default!⁵⁰

Debt matters and default awaits.

Default: Greece a case study

For some very weak capitalist economies, default is the only option. In its latest report on Greece, the IMF projects that despite a huge reduction in labour costs through record unemployment, falling real wages and pensions, Greece is still in a deep depression with real GDP contracting for six years. As a result, despite fiscal austerity measures of gigantic proportions and a partial default on sovereign debt, Greece’s public sector debt ratio will reach 192% in 2014 and has no chance of making the target of 120% (and that’s higher than anywhere else in the Eurozone) by 2020.

A debt buyback will not be sufficient. Under a buyback, the European Stability Mechanism, the euro area’s permanent bailout fund, probably would loan Greece money to buy its bonds from investors at the current, discounted market rates. But debt buybacks have perverse effects. They drive up the price of remaining bonds, leaving the market value of a government’s debt little changed. In addition, a buyback could only address a part of the roughly 40% of Greece’s €340bn of sovereign debt that is privately held. So the most it would reduce the debt ratio by would be about 12% points off Greece’s debt pile by 2020, leaving it still well above the IMF’s target. A writedown of Greek government debt owed to official creditors is thus essential as well as direct EU recapitalisation of Greek banks after the writedown.

⁴⁸ Papell, Prodan (2011) focused on five slumps following financial crises identified by Reinhart and Rogoff (2009) that were of sufficient magnitude and duration to qualify as comparable to the current Great Recession. If the path of real GDP for the US following the Great Recession is typical of these historical experiences, this slump will last about 9 years. But in order for potential GDP to be restored the real growth rate will have to be 84% than it was between 2009 and 2012. The magnitude of the necessary difference is well above the average historical experience

⁴⁹ See Reinhart C and Sbrancia MB (2011) for liquidating debt by inflation creating negative real interest rates

⁵⁰ Tang and Upper BIS (2010) found that in a sample of 27 crises that were preceded by an increase in credit/GDP there was a significant reduction in that ratio afterwards. On average, private sector credit over GDP increased 44% before the crisis and there was drop of similar magnitude afterwards (38%)

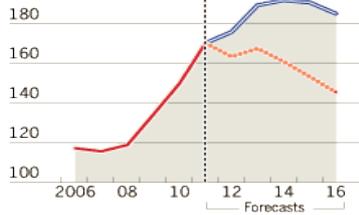
Greek government debt

As % of GDP

----- Baillout agreed (Mar 2012)

— New Greek budget (31 Oct 2012)

200

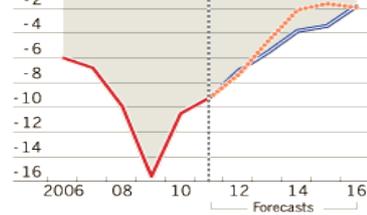


Source: OECD, Greece finance ministry

Government deficit

As % of GDP

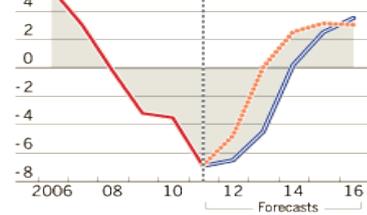
0



GDP growth

Annual % change

6



Bibliography

BIS Task Force Report, 12 April 2011

Carchedi G. Could Keynesian policies end the slump? Introduction on the Marxist multiplier, ISR October 2012

Carchedi G and Roberts M, The long roots of the present crisis: Keynesians, Austerians, and Marx's law (forthcoming)

Cechetti S, Mohanty MS, Zampolli, The real effects of debt, BIS working paper 352, September 2011.

Dumenil G and Levy D, The real and financial components of profitability, USA 1948-2000, May 2005.

Fisher I. The debt deflation theory of Great Depressions. *Econometrica*

Freeman A, The profit rate in the presence of financial markets, forthcoming

Keen S. Instability in financial markets: sources and remedies, INET conference, April 2012.

Keen, Kliman, Kotz, MacEwan & Miller, Moseley, Palley, Rasmus, Roberts, Shaikh, Wolff, Radical Economic theories of the current crisis, 2012

Krugman, End this Depression now!, 2012

Keynes JM, The General Theory of money, employment and interest (1936)

Kratke MR, Critique of public finance, the fiscal crisis of the state revisited (DATE).

IMF World Economic Outlook, October 2012, Chapter 3.

IMF special paper, Default in today's advanced economies, 2010

Jorda O, Schularick M, Taylor A, When credit bites back, leverage, business cycles and crises, October 2012

Marx, Karl. 1977. Capital (New York: Vintage).

_____. 1974. Grundrisse (New York: Vintage).

_____. 1967. Capital, 3 vols. (Moscow: International Publishers).

Mason J, A Jayadev, Fisher dynamics in household debt: the case of the United States, 1929-2011

Mattick, Paul. 1969. Marx and Keynes: The Limits of the Mixed Economy (Boston:Porter Sargent).

Minsky, H, 1975. John Maynard Keynes (New York: Columbia University Press).

Minsky H, Stabilising an unstable economy, 1986.

Mouatt S, Credit cycles, freewheeling, driven of driving, Southampton Solent University, June 2011

Norfield T. Finance, the rate of profit and imperialism, paper to WAPE , July 2012

Perelman M. Fictitious capital and the crisis theory, 2008

Papel D and Prodan R, The statistical behaviour of GDP after financial crises and severe recessions, Federal Reserve Bank of Boston, October 2011

[//www.bostonfed.org/economic/conf/LTE2011/papers/Papell_Prodan.pdf](http://www.bostonfed.org/economic/conf/LTE2011/papers/Papell_Prodan.pdf)

Reinhart C, Rogoff K. This time is different (2009)

Reinhart C and Rogoff K. Growth in the time of debt (2010)

Reinhart C and Sbrancia MB, The liquidation of government debt, 2011

Reinhart C, Reinhart V and Rogoff K, Debt Overhangs: Past and Present, NBER Working Paper No. 18015, April 2012.

Reinhart C, Rogoff K, This time is different again? The United States five years after the onset of subprime, Harvard University October 2012

Roche C and McKee B, New Monetarism (2009).

Roberts M, The Great Recession (2009) published by Lulu

Roberts M, The causes of the Great Recession (2010), paper to AHE conference 2010.

Roberts M, Measuring the rate of profit (2011), paper to AHE conference, 2011

Roberts M, A world rate of profit (2012), paper to WAPE. IIPPE, AHE conference, 2012

Tang G, Upper C, Debt reduction after crises BIS Quarterly review, September 2010.

Taylor A, The Great Leveraging, NBER WP 18290, August 2012

Sources and methods

Figure 1-4. Data are drawn from the BIS Quarterly Review and statistics on banking, debt and derivatives: Statistical annexe. A7, A16, A113, A124, A131, A136.

IMF Global Stability Report, October 2012, statistical annexe, Table 1.

Figure 5. IMF World Economic Outlook, October 2012, Chart 3.1

Figure 6. From Cechetti S et al, op cit.

Figure 7. Datastream

Figure 8-10. Data are drawn from the Federal Reserve of Funds reports. The data are available at FRED, the database of the Federal Reserve of St Louis under the following codes.

Corporate profits: Q0985BUSQ027SNBR
Tangible assets: TTAATASHCBSHNNCB
All assets: TATASHCBSNNCB
Net worth: TNWHCBSNNCB

Or through Datastream at:

US TANGIBLE ASSETS,HISTORICAL COST: NFARM NFIN CORP BUS(FOF) US10XXTHA

US ASSETS, HISTORICAL COST: NFARM NFIN CORP BUS (FOF) CURN US10XFTHA

US NET WORTH, HISTORICAL COST: NFARM NFIN CORP BUS (FOF) CURN US10XXWHA

NET OPERATING SURPLUS – NON FINANCIAL CORPORATIONS USPFOPCNB

The rate of profit = Corporate profits divided by tangible assets; OR corporate profits divided by all assets OR corporate profits divided by net worth. Based on non-financial corporations.

Figure 11. Data as from Figure 1-4 plus data from Robert M (2012).

Figure 12. See Figure 5.

Figure 13. IMF op cit Figure 3.6

Figure 14. see Carchedi G and Roberts M forthcoming