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Aiding economic recovery after the financial crisis

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1. Introduction

The North Atlantic financial crises which became evident in the second half of 2007 and intensifying in late 2008 came after a long period of financialisation. In the aftermath of the financial crises much of the Western world (we focus on North America and countries of the European Union) has suffered from high and often rising unemployment alongside slow or negative economic growth². It also appears that the capacity to produce (potential output) has diminished (or at least not grown at pre-2007 rates). The focus in this paper with regard to some recovery in the economies is on the creation of something approaching full employment. As such this would imply, at least most of the countries of the European Union more than returning to pre-crisis levels as those levels of unemployment were not those corresponding to full employment. Full employment is seen as a situation where there was a balance between those seeking work and job vacancies with no-one who wishes to work being unemployed for more than 6 months. It would also require that the hours an individual worked matched their requirements. It can be readily recognised that the rate of employment (relative to the adult population) which corresponds to full employment will change over time as social norms and expectations change. Full employment is though used as the benchmark for economic recovery rather than eliminating the output gap (that is the difference between actual output and 'potential output') as 'potential output' is a slippery concept and one which has a tendency to adjust in line with actual output. The current estimates of potential output show signs of downward adjustments in the face of the recession. Economic recovery could be viewed in terms of restoration of economic growth at something like the pace experienced prior to the financial crisis. It is undoubtedly the case that economic recovery and falling unemployment would involve a relatively fast rise in GDP. But, for reasons indicated below, sustainable growth rates at pre-crisis levels may not be possible, and as such seeking a recovery in terms of full employment requires recognition of that. The key point here is that lower sustainable growth would involve lower investment requirements, and without compensating policy changes lower investment (relative to GDP) would involve lower employment.

In the years immediate prior to the financial crisis in many industrialised countries demand was supported by a variety of factors which were themselves unsustainable. Consumer debt rose rapidly with household saving (as in UK and USA) falling to virtually zero, and the rising debt would be unsustainable. There were housing price and construction booms promoted by high volumes of lending which appeared to be only justifiable on the basis of continual rise in house prices. The rapid

expansion of the financial sector with its high profits provided substantial tax revenues and lower than otherwise budget deficits.

In this chapter, we focus on some aspects of a sustainable recovery which would involve something approaching full employment. Full employment of labour requires that there is a level of aggregate demand which is compatible with it, and a level of demand which is sustainable and is not reliant on unsustainable consumer debt nor on high rates of investment which would be unsustainable through rising capital:output ratio and/or involving a growth rate which was environmentally unsustainable. However, full employment of labour does require sufficient levels of productive capacity in the relevant locations consistent with full employment without inflationary pressures building up from a level of demand in excess of the productive capacity of the economy (what elsewhere we have described as an inflationary barrier Arestis and Sawyer, 2005). Hence in the short term (a few years) higher rates of investment (as compared with present levels and with average over the pre-crisis average) will be required to repair the damage of the financial crisis and to enable shifts in the composition of output. But in the longer term investment rates could be anticipated to be lower (at least as compared with pre-crisis norms) along with lower growth than experienced in the past.

2. Financialisation and the financial crisis

The financial crisis of 2007/09 was preceded by processes of financialisation during the previous three decades over many countries. The term financialisation is here used following that of Epstein (2005) Financialisation has been variously described and for our purpose that given by Epstein (2005) will serve: 'financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies'. Financialisation is viewed here in terms of the growth of the scale and power of the financial sector with de-regulation of the financial sector and changes in the structure of the financial sector and its operations including securitisation. In this chapter we begin by a brief overview of some aspects of financialisation: it could perhaps be more accurately said to be some major changes in the capitalist system which have been widespread over the past three decades. Of particular relevance here is the growth of financial institutions, the shifts in their main areas of operation (relatively away from the clearing banks function), and the rise in the ratios of household debt to GDP and of financial assets to GDP. There have also tended to be changes in the flow of funds between households and firms.

There are four features to which we draw attention here as particularly relevant for our discussion, noting that those features are 'stylised facts' which relate to a greater or lesser extent across industrialised economies, but notably the UK and the USA. This is not to say that financialisation

broadly conceived has many other aspects. This does not deny that the economic, social and political power has been a continuing feature of capitalism. In the financialisation era (since 1980), in general, though varying from country to country, there have been a range of developments which are highly relevant for our discussion here.

First, there is the growth of the financial sector in scale and range of activities. As argued in Sawyer (2010), this growth has not involved a substantial increase (relative to GDP) in saving nor in investment, and indeed in many countries investment rates have been stable or declining. Thus as the major role of the financial sector should be to link together savers with investors, the growth of the financial sector has not contributed to the fulfilment of that role in that the efficiency with which those linkages are made and the 'quality' of investment does not appear to have risen.

Second, there have been associated changes in the distribution of income both as between wages and profits (and rentier income of the financial sector) with shifts from wages to profits and in the personal distribution of income, in the direction of increased inequality in the personal distribution of income with particularly pronounced shifts towards the top 1 per cent. The financial sector itself has contributed to the shift in the personal distribution through being a relatively unequal sector and the growth of inequality within the sector. The profits and income of the financial sector have also tended to rise.

The literature on wage-led vs. profit regimes³ indicates that the income shares do have an impact on the level of demand, and for many countries and here significantly at the global level higher profit share depends to depress demand⁴. But it is not just a matter of the direct effects on demand. The rise in profits and hence in the potential for retained earnings out of profits alongside a general lower investment climate can mean that some corporations move to a position of being net lenders rather than the traditional view of being net borrowers. If corporations are net lenders then they have to lend to someone – and the options are lending to government, lending overseas (directly in the form of foreign direct investment or through acquisition of financial and other assets overseas) or lending to consumers. This lending may not be direct (though where corporations establish finance arms to lend to consumers for the purchase of their own product it would be) and then flows through intermediaries: but the net sectoral flows would be in the direction from corporations to households.

Third, the over-all effects on investment, and specifically investment in the non-financial sector have been argued to be to lower rather than raise investment. Hein (2011), for example, argues that 'On the one hand, this [financialisation] has imposed short-termism on management and has caused decreasing managements' animal spirits with respect to real investment in capital stock and long-run growth of the firm. On the other hand, it has drained internal means of finance for real investment

purposes from the corporations, through increasing dividend payments and share buybacks in order to boost stock prices and thus shareholder value'. This depressing effect on investment would then be associated with slower growth of the capital stock and of output, as well as a depressing impact on aggregate demand.

Fourth, the growth of the financial sector has involved the development of a range of financial products such as derivatives, mortgage backed securities and securitisation. But, as indicated above, this has not gone alongside any growth in savings or investment (relative to GDP). It has involved tiers of financial assets and liabilities in which the assets backing a financial asset are other financial assets (rather than backed by real assets). This raises two interesting questions. First, what forms the basis of the payment of returns on financial assets. When a financial asset is backed by a real asset, the simple answer would be that the payment of returns on financial assets (whether in form of interest payments or dividends) would be backed by the profits to be gained on the operation of the real asset (this may push the question back one stage—what is the source of the profits on real assets). But the creation of a financial asset (such as a mortgage backed security) poses the question of where the returns on the 'additional' financial asset arise from. Second, the expansion of the balance sheet of a single financial institution through expansion of both its assets and its liabilities generates enhanced risk of instability simply because a change in the relative price of assets and liabilities (in an adverse direction) throws the financial institution into insolvency. Further, problems of contagion are exacerbated in that one institution's assets is another institution's liabilities, and the failure of one financial institution and its inability to meet its liabilities impacts on the value of the assets of another financial institution.

The processes of financialisation have placed many constraints on sustainable economic recovery with full employment. Here we highlight a few of those, without any claim that the list is complete, and to which we return. One comes from the power of the financial markets and credit rating agencies in imposing constraints on the operations of fiscal policy in a range of countries. The allocation of saving and credit then lies in the hands of credit rating agencies and other financial institutions. A second comes from the impacts of financialisation on aggregate demand (through higher inequality and depressing effects on investment). As argued below these effects raise the need for budget deficits. Further, corporations have shifted to higher saving (out of profits) and lower investment and thereby shifted from being borrowers to lenders. The other side of that is some combination of government borrowing and household borrowing. The latter became evident with the fall of household saving to zero (or below) in the UK and USA around 2007. The reliance of demand on household borrowing and on rising asset (notably house) prices was unsustainable. The third is derived from the unstable nature of the financial sector, and with its growing role the greater

impact which financial crises have on real activity. There are many processes of the financial sector which tend towards instability, and in Minsky's terminology the shift from hedge to speculative to Ponzi finance. In this paper our focus is on the second of those constraints, but this should not be taken to mean that major reforms of the financial sector are not required. High on the list of reforms would be the adoption of policies and institutions which guide funds into social beneficial directions including the fostering of the 'greening' of investment and of productive activities: these would include the development of publically and mutually owned development banks, requirements on the direction of bank funds (as for example in the American Community Reinvestment Act).

3. Revival of investment

Investment is an important component of demand (and hence in the determination of the level of economic activity and employment) and economic growth. Some basic statistics on investment in the past two decades in major European countries, United States and Japan are displayed in Table 1. The pattern amongst these 'big six' economies is mixed, with a couple of notable falls in investment ratio between the 1990s and the 2000s up to the crisis (Germany, Japan), flat lining in UK, and small increases in France, Italy and USA. After the financial crisis investment to GDP ratio is noticeably smaller (with the exception of France). The degree to which investment has to revive to return to the pre-crisis levels is, of course, somewhat understated by these figures since GDP has fallen post-crisis as well as investment. However, the major question which has to be addressed is whether a return (or beyond) to the levels of investment (relative to GDP) is feasible or desirable. The feasibility relates to the major question of the underlying sustainable rate of growth. We would postulate that the likely sustainable growth rate in many countries will be significantly below past rates. For a given capital-output ratio, a 1 per cent lower annual growth rate could well imply a net investment ratio which is 4 to 5 percentage points lower: assuming a capital-output ratio of that magnitude. Comparisons with the investment ratios in Table 1 clearly indicates that such a reduction in investment would be substantial, and as we will point out below would have significant implications for the future of budget deficits.

Table 1 near here

The willingness or otherwise of the financial system to provide funding for investment can also be raised. A pre-requisite for the revival of investment is often viewed as resting on the availability of funding for investment. It is then paradoxical that saving in most industrialised countries run well ahead of investment – with the consequence that there are substantial budget deficits required to mop up the saving. Some would this as 'crowding out' of private investment by the budget deficit. But the reality is that the saving would not be able to occur if there were not a budget deficit with the corresponding issue of financial assets. There is not a shortage of savings, indeed there is a

surplus of savings. The position on the relationship between private savings and investment prior to the financial crisis is illustrated in Table 2. It then becomes a trite observation to say that low levels of investment have to be ascribed to either a lack of willingness to undertake investment (low 'animal spirits' using Keynes' terminology) or a lack of initial finance to enable investment to occur. It is a basic post Keynesian proposition that if investment occurs (through loan finance) then a corresponding amount of saving is generated, and that savings becomes available to fund the investment expenditure. This second case would then come from an unwillingness of banks to provide loans (or equivalently imposing more stringent conditions on loans). A higher level of savings and investment then crucially depends on an expansion of bank lending. In this perspective, the lending which is crucial is that by banks whose liabilities (bank deposits) count as money and hence are an addition to spending power. The present failings are partially related to the failure of 'quantitative easing' to stimulate lending by banks, and rather have contributed to boosting asset prices.

Table 2 near here

Within what is likely to be a lower rate of investment, the major challenge is to ensure that investment which is conducive to environmentally friendly production is funded. The market mechanisms cannot be relied upon to do this: and further it may be more readily accomplished through a bank-based financial system than a market-based system (see Pollin 1995 for a statement of this general argument). It may well require that a required proportion of lending by banks is directed towards 'green investment' (or at least to investment which is not environmentally unfriendly), and the establishment of publically sponsored banks specifically designed to support such investments.

Many have argued for 'green investment' as both necessary to address environmental and ecological concerns and as a means of stimulating employment⁵. In a recession situation, it is undoubtedly true that 'green investment' would increase employment (as indeed other forms of expenditure) and be socially useful. Some forms of 'green investment' (e.g. home insulation) is socially (and often privately) beneficial through reducing future consumption (in this case energy). Thus, with such forms of 'green investment', the level of future GDP would be diminished (though this is an illustration of the misleading nature of GDP as an indicator of human welfare). Other forms of 'green investment' (e.g. to enable use of solar energy) are in effect related to economic growth (as measured by GDP). In general we would then argue that a lower growth rate will be accompanied by a lower investment rate, even if there is a substantial shift in the direction of 'green investment'. However, a shift in the composition of investment (towards 'green investment') may enable a higher growth rate (than would have been the case). In Fontana and Sawyer (2012) we postulated that

growth of GDP would be limited by the sustainable growth in the use of 'natural capital' ['ecological footprint'], but that the relationship between the growth of GDP and the sustainable use of 'natural capital' could be potentially changed through development of technology and through alterations in the productive structure; and a shift in the productive structure would have to be accompanied by a corresponding shift in the structure of investment.

From this brief discussion we draw the following thoughts. Investment cannot be said to be hampered by a shortage of saving, though there may well be an unwillingness of the banks to provide finance. The prospects of lower growth than previously experienced through environmental concerns and the pace of technical change means lower investment (relative to GDP) than previously. In macroeconomic terms, adjustments have to be made (as argued below through budget deficits) to the prospects of lower investment in the face of saving maintained at previous levels (or higher). Within the funding of investment, there are requirements that it is directed in the socially relevant directions.

4. Creating the conditions for full employment

The title of the paper refers to economic recovery and most would interpret in terms of a restoration of economic growth at the type of rates observed prior to the crisis. The recessions and slow growth in other periods have meant that in mid 2013 GDP remains below its level of 2008. If judged by the pre-crisis growth rates, then (in 2013) output is of the order of 15 per cent below what would have been the trend value. Recovery from the depths of the recession will involve higher output and the appearance of relatively rapid growth. Falling unemployment would accompany that relatively rapid growth, though the availability of productive capacity becomes a significant issue, particularly in areas of high unemployment, as the financial crisis and subsequent lower levels of investment have depressed productive capacity.

We would argue for full employment as the key objective to be achieved following a recovery. In saying this, we have to recognize that full employment has rarely been achieved, and that the creation and sustenance of full employment requires a whole gamut of policy measures including demand management and macroeconomic policies, regional and industrial policies and the appropriate institutional arrangements.

One rationale for full employment is often seen in terms that unemployment (of labour) means that a society is not producing all that it is capable of, and goods and services which would be of value to people are not being produced. It has overtones of seeking to maximise output (given the resources available). This is not a rationale on which we rely here in that higher levels of output require higher natural resource use. It is rather to view full employment as a right to employment and to participate in society.

We would measure economic recovery in terms of the degree to which employment rises and unemployment falls. This would of course bring higher output and what would be reported as growth in that output would indeed grow, and during a recovery could usually be expected to grow faster than the trend rate of growth. Our perspective as indicated above is that over the longer haul the rate of growth will be significantly lower than in the past (as far as industrialised countries are concerned). The lower investment rate would lead to higher unemployment unless it is compensated by higher demand elsewhere which would need to come from some combination of budget deficits and lower savings (through a re-distribution of income). Lower growth (of output) would need to be accompanied by a lower growth of hours worked (to the extent to which growth of output differs from productivity growth) if rising unemployment is not to result.

5. The need for budget deficits

The financial crises and their aftermath have, of course, been associated with rising budget deficits as the automatic stabilisers of fiscal policy kicked in with some discretionary policies against recession before the forces of austerity struck. It has also been associated with lower rates of investment expenditure as growth slowed or went negative, and to some degree a cause of the slower growth. But in general domestic savings did not slow to the same degree: since $S + FA = I + BD$ (where S is domestic savings, I private investment BD budget deficit and FA financial account inflow = current account deficit = imports minus exports and net income). Indeed in the face of decline in investment, it is the budget deficit which enables the savings to be realised and the sale of government bonds provides the financial assets which can be acquired through savings.

A return to high levels of employment will require appropriate fiscal policy (in the direction of significant budget deficits) and the abandonment of the target of balanced budgets. The 'fiscal compact' of the Economic and Monetary Union is a major obstacle for the restoration of high levels of employment. The 'fiscal compact' has as its central theme the achievement of a balanced structural budget. A structural budget position is that which would be achieved if the economy were operating at 'potential output'. We have pointed out elsewhere (Arestis and Sawyer, 2014)) the ambiguities of the notions of 'potential output', which is not as its name suggests the output which the economy is capable of producing but rather the level of output which would be consistent with constant inflation. Ambiguities over the meaning and measurement of potential output and of structural budget position are significant for the formulation of economic policy – there is little point in saying that the objective is to balance the structural budget if that budget position cannot be estimated in an agreed manner. The major point though to be made here is that a balanced budget, particularly one balanced at 'potential output' (however that is defined) is unlikely to be achievable. The mainstream economics view has in effect been that there can readily be a balanced budget since

from the equation mentioned above when savings and investment are equal in a closed economy then the budget deficit will be zero. Then saving intentions and investment intentions can be brought into equality through the setting the interest rate at the 'natural rate of interest' (cf. Wicksell, 1936). The view here is that saving and investment decisions are made by different groups (though there is some overlap in that corporations make decisions on retained earnings, that is their savings out of profits). Since saving and investment decisions are undertaken by different people (households and firms in the case of the former, firms in the case of the latter) and that the forces influencing those decisions are quite different, and there is little reason to think that the general tendencies to save and to invest will be in alignment. Let us illustrate this as follows. The purpose of investment is to make additions to the capital stock in order to produce and sell a higher output (and make more profits). Investment is to enable the capital stock to grow broadly in line with growth of expected demand, and the underlying growth rate of the economy (which itself will be moulded by investment). If the trend growth of expected demand is g , and the capital-output ratio is v , then the growth of the capital stock required would be $g.v.$. To illustrate an expected rate of growth of 2.5 per cent and a capital-output ratio of 4 would imply the net investment to GDP ratio of 10 per cent. Gross investment would be larger as it covers depreciation. Saving by households may be largely related to the level of income; saving by firms would be retentions out of profits. It may be expected that the savings propensity of households out of wages would be rather lower than the savings propensity of firms out of profits. The saving function can be written as $swW + spP$ where W is wages and P profits with sw and sp propensities to save out of wages and profits respectively. The average propensity to save $S/Y = sw(W/Y) + sp(P/Y)$. One feature to note is that the average propensity to save depends on the distribution of income between wages and profits, and is expected to be higher with a larger share of profits in national income.

A lower growth and investment rate, as suggested above may be the future prospects, has some significant implications which we draw for budget deficits. The obvious point which would follow from the equation above is that a lower investment regime would likely involve lower rates of employment and capacity utilisation. The growth rate would also, of course, be lower. There are, in effect, two ways to respond. A further way, that of net export promotion, can be readily ruled out as a general solution as not all countries (or even most) can boost net exports. The two ways to be considered as the use of budget deficits and changing savings behaviour.

In a slower growth world, a budget deficit permits savings to occur which does not flow into investment. It also acts as a pension arrangement. Pension schemes can be funded or unfunded, and the latter is a mechanism by which the present working age generation pays taxation and social security contributions which pay the retired generation's pension. In return, it receives a 'promise'

that when the present working age generation are in retirement the same arrangements will benefit them. A similar mechanism works for funded schemes: the present working age generation saves which enables the retired population to dissave (as the pension received is a combination of returns on savings plus run-down of saving this is not immediately apparent. The budget deficits and the debt which is then issued, and acquired by the present working age population (or more usually by pension funds on their behalf) form the basis of a pension arrangement. In the absence of investment opportunities, budget deficits are required.

From this we may conclude that one of the conditions for recovery is the acceptance of the need for budget deficits on a long term basis and that the chase for balanced budget threatens to be MAD (mutually assured destruction). From the situation as of mid 2013 in industrialised countries a recovery of investment (for example) will bring a reduction of the budget deficit (cf. equation (1) above). However the central question is what the budget deficit would look like if investment (and saving and net exports) was at some 'normal' level. Let us first mention net exports: the net export position of any country has to be consistent with the net export positions of the rest of the world – that is globally net exports sum to zero. Further, a country with a net export deficit has to borrow from abroad, a country with a net export surplus has to lend to the rest of world (and hence other countries willing to borrow). A country's net export position may not be sustainable: elaborate. At the present time, it is the 'normal' rate of investment which is particularly difficult to discern. The post Keynesian analysis, following Keynes, stresses that we live in a world of fundamental uncertainty and that investment expenditure decisions by firms depends on their perceptions of the future; but the future is inherently unknowable. As the future is inherently unknowable for firms, so is it for analysts!. We have suggested above that in light of the recent record on productivity rises (since the crisis), the continuing credit constraint [elaborate], the possibility of the drawing to an end an information technology inspired boom (which was particularly stimulant in the 1990s and the dot.com bubble) and the looming environmental and ecological concerns lowering the sustainable rate of growth, the 'normal' level of investment (relative to GDP) is likely to be lower in the future. But it is not possible to put a precise number on this, and hence not possible to calculate with any precision the budget deficit which would be required to underpin a high level of employment. What is required is a recognition that budget deficits are likely to be required and that the scale of the budget deficit has to be gradually adjusted as experience evolves (which is not to say that we would ever be sure as to what the 'normal' rate of investment is).

6. Inequality

It is widely acknowledged that there has been widespread increases in inequality often focused on increasing income of the top 1 per cent, and that there has been a shift away from wages towards

profits (the extent of which varies between countries)⁶. There are many reasons to decry the large changes in inequality in the past three decades or so, and here have a narrow focus on the impact on demand and employment. The rise in inequality was widely viewed as feeding into financial instability through the pressures on low income groups encouraging unsustainable lending and stimulated by easy but expensive credit and sub-prime mortgage availability.⁷

A downward shift in income inequality would, as argued in Sawyer (2011), be a 'progressive way' to reduce budget deficits since such a shift would raise average propensity to consume and lower saving rate. A shift to a more progressive tax regime could similarly be used in that in effect post-tax income is shifted from rich to poor. A more progressive tax regime also have the side benefit of enhancing fiscal policy as an automatic stabiliser, and indeed one of the effects of increased inequality and the general shift from direct to indirect taxation has been to reduce the automatic stabilisers.

The policy measures designed to shift the distribution of income can be easily listed, but the issues of implementation are inversely related with the ease of listing them! Significant increases in minimum wages where such exist and their introduction elsewhere, adoption of 'living wage' ordinances, structuring wage awards in the public sector to increase lower wages faster than higher wages, enhancing the power of trade unions. Making the tax system progressive through, for example, capital gains treated as income for tax purpose, removing caps on earnings limits for social security contributions (with no commensurate changes to social security benefits), enhanced property taxation.

A reduction in the propensity to save implies a rise in the propensity to consume, and encouraging higher consumption sounds a paradoxical response to environmental concerns. However in terms of impact on the environment we are postulating a lower rate of investment and the production of investment goods will have environmental impact. The rearrangement within GDP between investment and consumption may have limited impact on the environment -- depending on the relative environment intensity of consumer goods and investment goods.

7. Concluding remarks

The 'Great Depression' of the 1930s only came to an end in broad terms around the start of the Second World War; and the post-war period opened up into the 'golden age' of capitalism with high levels of economic growth and something approaching full employment in many Western industrialised countries. The 'Great Recession' of the past five years has not involved in general the scale of unemployment seen in the 1930s, though of course, some have experienced unemployment on a mass scale (at time of writing Greece and Spain over 25 per cent, for example). Output if judged relative to trend has fallen more sharply. The post-war boom can be variously ascribed, but it

undoubtedly involved high levels of investment (as compared with prior experience: Matthews, 1968), government expenditure on a much enhanced scale (again as compared with the pre-war situation; e.g. Peacock and Wiseman, 1961), the repairs of war damage and reconstruction and degrees of commitment to the achievement of full employment and a tendency for income inequalities to decline. The thrust of the argument in this paper is first to reassert the centrality of full employment as a major objective of economic policy. It recognizes the damage which has been done by the financial crisis to the productive potential, and the damaging consequences of financialisation. Some degree of reconstruction is required, and this is most evident in the southern European countries suffering from austerity and the euro crisis.

An economic recovery with full employment and a growth rate which is environmentally sustainable would require adjustments to lower rates of investment, and above we have focused on the role of budget deficits in this regard. It also requires that the investment which does take place is well directed in terms of being environmentally sensitive and ensuring that productive capacity is in the right place in the relevant quantities consistent with full employment. This will require some social direction of the flows of finance.

But, as Kalecki (1943) argued, the major constraints on the achievement of full employment are not economic, but come from political and social forces which will so strongly resist the greater roles ascribed to government, enhanced power of labour and the direction of finance.

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Table 1: Investment record in past two decades

Country	Investment/GDP (%) average 1990-99	Investment/GDP (%) average 2000-08	Investment/GDP (%) average 2009-2012
France	18.48	20.05	20.14
Germany	22.64	18.90	17.74
Italy	20.48	21.24	19.53
Japan	28.83	23.09	20.60
United Kingdom	17.29	17.33	15.03
United States	18.70	19.55	15.98

Source: Calculated from World Bank Data Base

Table 2. Private savings and private investment relative to GDP, 2002-2007

	Private savings/GDP	Private investment/GDP
Germany	23.6	16.8
France	19.0	16.6
Italy	20.7	18.5
UK	15.3	15.3
euroarea	20.8	17.7

Note: All figures are in percentages.

Sources: Calculated from Eurostat, OECD Economic Outlook.

¹ This paper reflects research being conducted within the project Financialisation, Economy, Society and Sustainable Development (FESSUD) (www.fessud.eu) which is a five year project funded by the European Commission Framework Programme 7 (contract number 266800).

² For example, the Eurozone growth figures were negative in three years out of the five 2009 to 2013, and output in 2013 (OECD forecast) would 2.2 per cent below the level in 2008. Unemployment for the Eurozone rose from 7.7 per cent in 2008 to 11.4 per cent in 2012 (From OECD Economic Outlook June 2013)

³ See for example Onaran and Galanis (2012).

⁴ Small open economies are seen as more likely to be profit led in that a reduction in wages and hence in unit labour costs, treated as a sign of competitiveness, would stimulate export demand, and this could then offset the depressing effects of lower wages on domestic demand. At the global level, there is no export demand!

⁵ See for example Pollin et alai (2008)

⁶ See, for example, OECD (2012); and OECD database on income distribution <http://www.oecd.org/els/soc/income-distribution-database.htm>

⁷ See van Treeck and Strum (2012) for a review of the arguments.