The profit-investment nexus: Keynes or Marx?

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WHAT THIS PAPER IS ABOUT

This paper starts from the premise that investment (especially business investment) is the key driver of economic growth and the main swing factor in the capitalist business cycle of boom and slump. .

In section 1, on theory, the paper looks at the Keynesian macro-identities which suggest that investment drives GDP, employment and profits through the mechanism of effective demand can be used to show this. But Marxist theory says that it is profit that calls the tune, not investment. Profit is part of surplus value, or the unpaid labour in production. It is the result of the exploitation of labour – something ignored or denied by Keynesian theory, where profit is the result of 'capital' as a factor of production. This paper shows that Keynesian macro-identities are thus back to front: investment does not 'cause' profit; profit 'cause' investment.

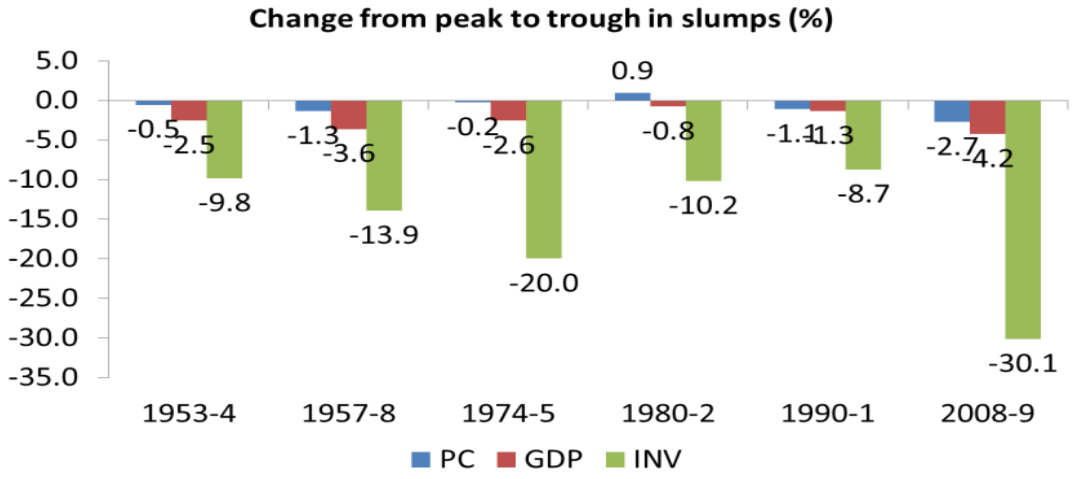
In section 2, overwhelming empirical evidence is presented to show that profits drive or lead investment in the business cycle, as the Marxist model would suggest. There is little evidence that investment drives profits as the Keynesian model would suggest.

In section 3, the paper considers the economic policy prescriptions that flow from sections 1 and 2. It argues that there is little evidence that government spending or budget deficits (net borrowing) restore economic growth or end slumps. These end only when the profitability of business capital is revived. The Keynesian multiplier is less compelling than the Marxist multiplier.

In his 1978 book: "Factors in Business Investment," published by the NBER, Bob Eisner[1] summarized much of his work on investment. The opening paragraph of the book's introduction captures well why investment is bound to be a perennial topic in economics: "Few economists or business analysts need be reminded of the importance of investment. First, investment contributes to future output; net investment to economic growth. Second, it contributes to current demand and current employment. Understandably, there is much sentiment for encouraging investment, or at least for removing discouraging influences, to permit these contributions to be optimal."

If we analyse the changes in investment and consumption prior to each recession or slump in the post-war US economy, we find that consumption demand has played little or no leading role in provoking a slump (Figure 1).

Figure 1. Percentage change in US real personal consumption (PC), investment and GDP



Source: BEA NIPA, author's calculations

In the six recessions in Figure 1, personal consumption fell less than GDP or investment on every occasion and does not fall at all in 1980-2. Investment fell by 8-30% on every occasion.

As the BIS put it: *"Business investment is not just a key determinant of long-term growth, but also a highly cyclical component of aggregate demand. It is therefore a major contributor to business cycle fluctuations. This has been in evidence over the past decade. The collapse in investment in 2008 accounted for a large part of the contraction in aggregate demand that led many advanced economies to experience their worst recession in decades. Across advanced economies, private non-residential investment fell by 10-25%".*[2]

1/ THE THEORY

If investment is the driver of growth or the 'swing factor' in recession, the question is what causes investment to rise and fall? Keynesian theory does not ignore investment as a key factor in the movement of economic activity. It considers the question using macro-identities.

Let us consider these identities. We start with:

National income = national expenditure.

National income can then be broken down to

Profit + Wages;

and National expenditure can be broken down to

Investment + Consumption.

So Profit + Wages = Investment + Consumption.

Now if we assume that wages are all spent on consumption and not saved, then

Profits = Investment.

But here is the rub. This identity does not tell us the causal direction that can help us develop a theory of what moves economies and/or a theory of crises.

For Keynesians, the causal direction is that investment creates profit. For orthodox Keynesians, crises come about because of a collapse in aggregate or 'effective demand' in the economy (as expressed in a fall of investment and consumption). This fall in investment leads to a fall in employment and thus to less income. Effective demand is the independent variable and incomes and employment are the dependent variables. There is no mention of profit or profitability in this causal schema.

Nevertheless, Keynes understood the central role of profit in the capitalist system. "Unemployment, I must repeat, exists because employers have been deprived of profit. The loss of profit may be due to all sorts of causes. But, short of going over to Communism, there is no possible means of curing unemployment except by restoring to employers a proper margin of profit."[3]

But investment creates profits not vice versa. "*Nothing obviously, can restore employment which does not first restore business profits. Yet nothing, in my judgement, can restore business profits that does not first restore the volume of investment."* [4] To use the pithy phrase of Hyman Minsky, devoted follower of Keynes*, "it is investment that calls the tune".*[5]

Let us return to the macro profit equation outlined above, but now as developed by Michel Kalecki, a Polish economist and synthesiser of Marx and Keynes. His equation is simply that:

Profits = Investment; or more importantly, profits depend on investment.

As a recent paper by James Montier[6] succinctly put it: *"This is, of course, an identity – a truism by construction. However it can be interpreted with some causality imposed. After all, profits are a residual: they are reminder after the factors of production have been paid."* Montier goes on: *"Investment drives profits because when a firm or a household decides to invest in some real asset they are effectively buying a good from another firm, creating profits for that entity."* So it seems that profits are a 'residual' and come from consumers buying things or services and not from surplus value created in the labour process, as Marx argued.

This argument is spelt out even more explicitly, by David Levy, Martin Farnham and Samira Ryan at the Jerome Levy Forecasting Center[7]. The authors state that the profits equation identifies the *"sources of profits = investment, non-business saving (households), dividends and profit taxes."*

This suggests that taxes on profits and dividends are a 'source' of profit rather than part of profit. But let that pass for now. If we take out taxes and dividends and assume workers don't save and we are back to the 'source' of profit as investment. *"After all, profits are a residual; they are the remainder after the factors of production have been paid. Thus it can comfortably be argued that the left-hand side of the equation is determined by the right-hand side."*

Tapia points out that *"for the whole Keynesian school, investment is the key variable explaining macroeconomic dynamics and leading the cycle."*[8] But if investment is the independent variable, according to Keynes, what causes a fall in investment? For Keynes, it is loss of 'animal spirits' among

entrepreneurs, or a 'lack of confidence' in employing funds for investment. As Minsky says, investment is dependent on *"the subjective nature of expectations about the future course of investment, as well as the subjective determination of bankers and their business clients of the appropriate liability structure for the financing of positions in different types of capital assets".*[9]

Tapia shows, for the Keynesians, investment depends on the psychology of investors, which changes for no apparent reason into a loss of faith in expected profits. Yes, profits do appear in Keynes-Kalecki analysis, but *"in Kalecki, the determination is from investment to profits and in the relation there is little room, if any, for reverse causation."*

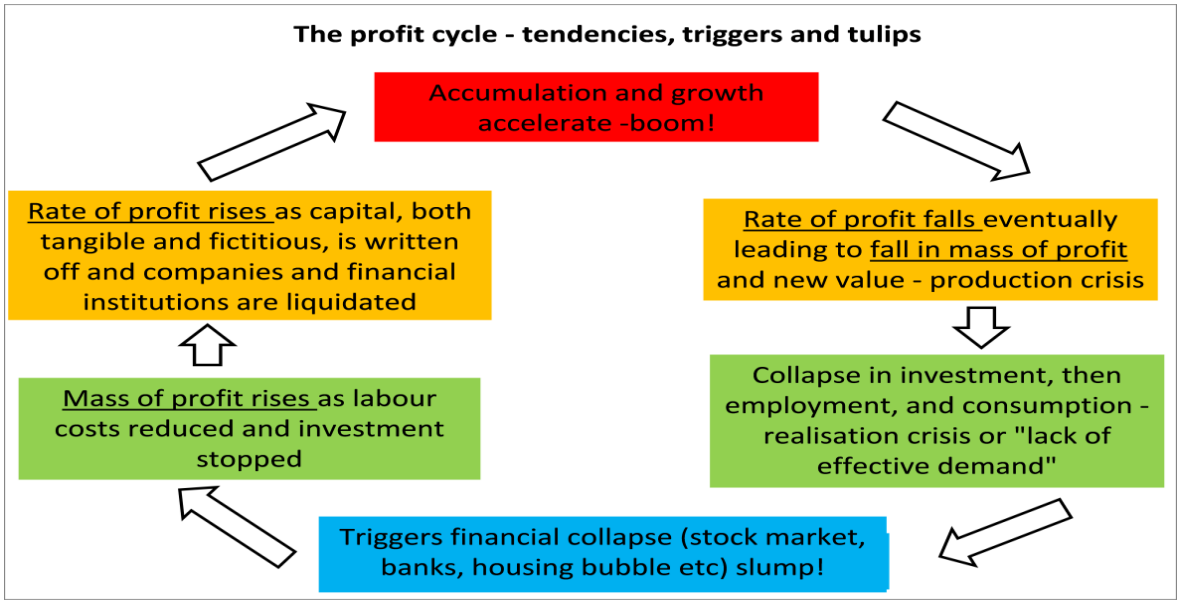
For Keynes/Kalecki, profit is the marginal product of 'capital', a 'factor of production'. There is no 'exploitation' of labour power involved. Keynes' theory of crisis assumes falling 'marginal productivity' due to the 'abundance of capital' and thus investment depends on the marginal efficiency of capital and 'animal spirits'. *"We have seen above,"* Keynes wrote, *"that marginal efficiency of capital depends, not only on the existing abundance or scarcity of capital-goods and the current cost of production of capital-goods, but also on current expectations as to the future yield of capital-goods. In the case of durable assets it is, therefore, natural and reasonable that expectations of the future should play a dominant part in determining the scale on which new investment is deemed advisable. But, as we have seen, the basis for such expectations is very precarious. Being based on shifting and unreliable evidence, they are subject to sudden and violent changes."* [10]

As Paul Mattick says, *"what are we to make of an economic theory, which after all claimed to explain some of the fundamental problems of twentieth-century capitalism, which could declare: 'In estimating the prospects of investment, we must have regard, therefore, to the nerves and hysteria and even the digestions and reactions to the weather of those upon whose spontaneous activity it largely depends'*?[11]

What if we turn the causal direction the other way: the Marxist way. Marx's theory of value tells us that all value is created by labour and profit is a product of the exploitation of labour power and its appropriation by capital. Then we have a theory of profit and investment based on an objective causal analysis in a specific form of class society. And now, investment in an economy depends on profits.

With Marx, profit is the result of the exploitation of labour (power) and thus is logically prior to investment. But it is also temporally prior. If we adopt a theory that profits cause or lead investment, that 'profits call the tune', not investment, then we can construct a reasonably plausible cycle of profit, investment and economic activity.

Figure 2. The profit cycle



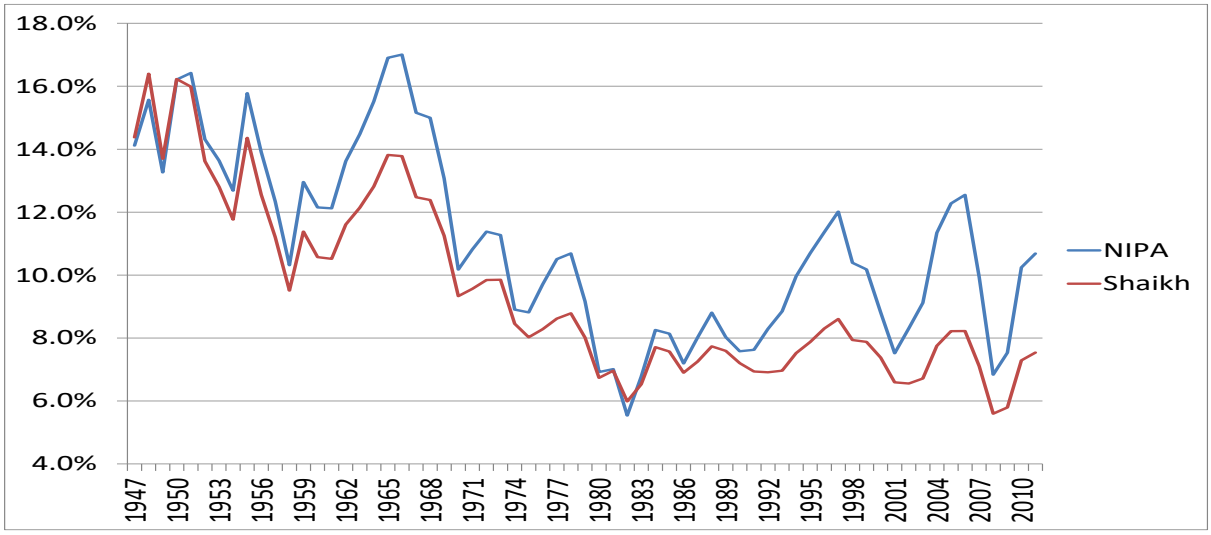
In Figure 2, we start at the moment of economic boom. Profitability starts to fall, eventually leading to a slowdown in the growth of the mass of profits, even to the point of contraction. It is this that provokes a collapse in investment. Only after that does consumption and employment fall – the condition of the lack of effective demand is reached. This is triggered by or triggers a collapse in financial assets. With the devaluation of capital (the value of means of production and labour power), profitability is restored for those capitals still surviving and the mass of profits rises, reviving investment, output and employment.

2. THE EVIDENCE:

Can we offer empirical evidence in support of the Marxist profit-investment nexus? We certainly can.

First, it is clear from the evidence that there has been a secular fall in the rate of profit in the major capitalist economies and this has not been caused by an "abundance of capital" relative to output, as 'marginalist' Keynesian theory would argue. Shaikh shows that the US corporate rate of profit has fallen in the post-1945 period even more than the official data (NIPA) would expose[12]. Indeed, the so-called neoliberal period from the early 1980s only consolidated at an historic low level of profitability (Figure 3).

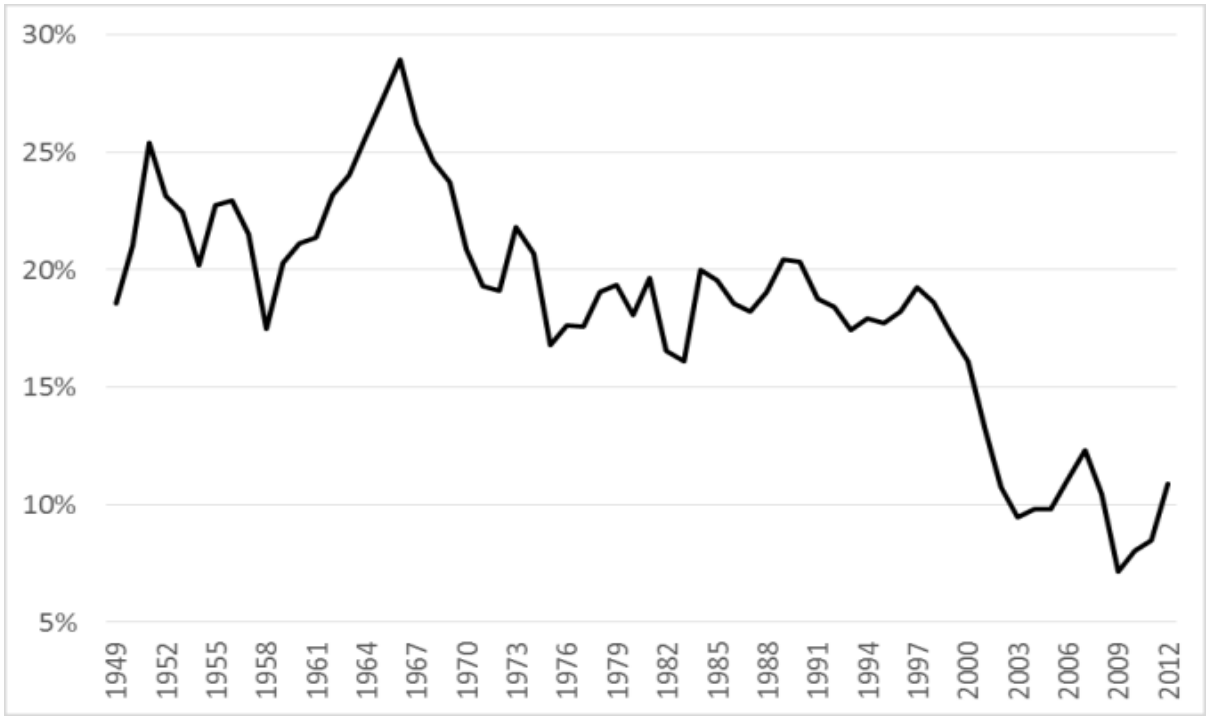
Figure 3. US corporate rate of profit (%), NIPA and Shaikh estimates



Source: BEA, NIPA, Shaikh, Capitalism, see appendix for Shaikh's workings

Similarly, Peter Jones has shown that if the 'fictitious' components of profitability are removed from the calculation of the US corporate rate of profit, then the 'underlying' rate of profit has never been lower (Figure 4)[13].

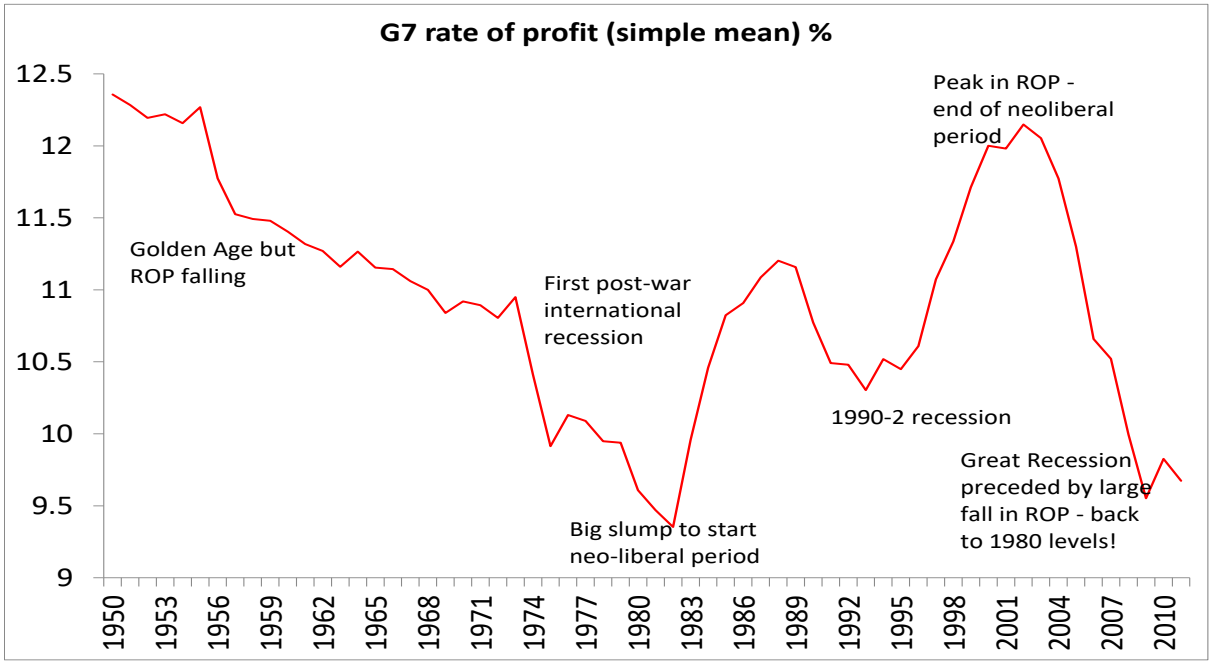
Figure 4. The US rate of profit (excluding 'fictitious profits') %



Source: Jones op cit

I have shown that for the G7 economies as a whole (and including fictitious profits), the recovery in profitability during the neo-liberal period came to an end in the early 2000s, setting the scene for the Great Recession of 2008-9 (Figure 5)[14].

Figure 5. G7 rate of profit from Penn World tables (%)

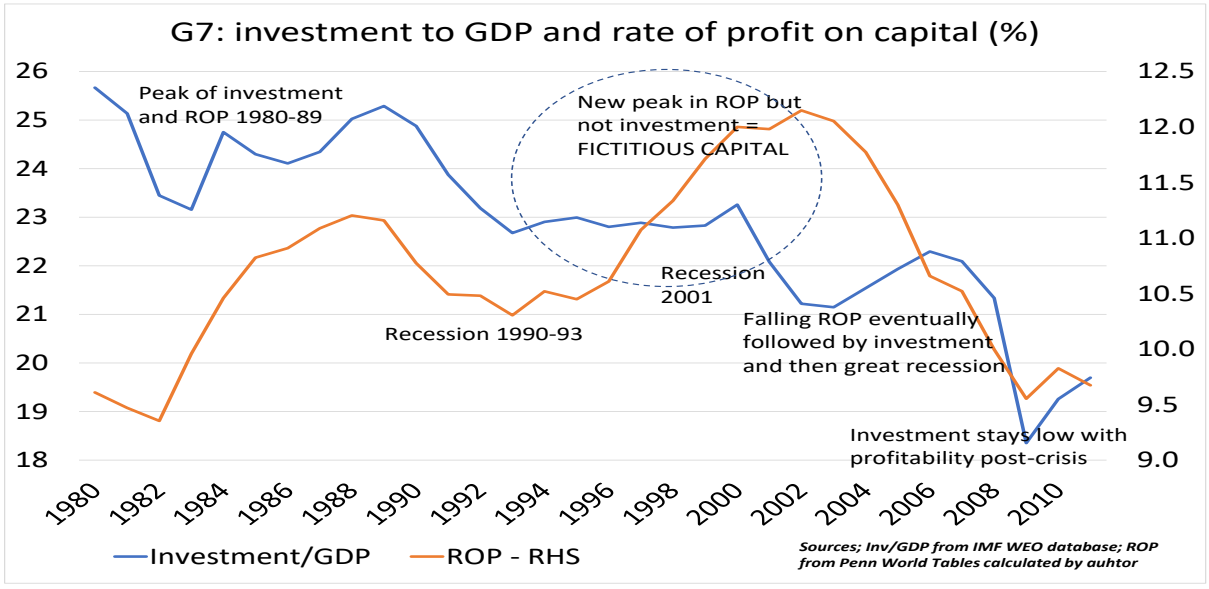


Source: Author's calculations – see endnote

But what is the empirical relation to investment? Kliman and Williams show that the fall in US profitability can be closely correlated to a fall in business investment rates as long as we exclude financial profits.[15]

Again, if we look at G7 economies, we find that business investment to GDP has been falling along with profitability of capital, if fictitious profits accumulated in the credit boom of the early 2000s are excluded (Figure 6).

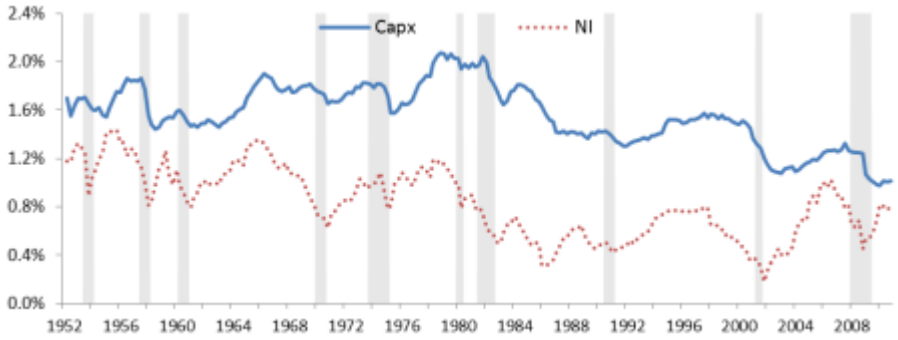
Figure 6. G7 rate of profit and investment to GDP (%)



Source: see figure note

These and other studies by Marxist economists have been supported on occasion by mainstream research. For example, mainstream economists, Kothari, Lewellen and Warner, found a close causal correlation between the movement in US business investment and business profitability[16]. The authors show that the return on total assets of US non-financial companies (measured as after-tax profits as a percentage of assets – red dotted line); and the rate of fixed investment against total assets (blue line) fell secularly from the 1950s, reaching a low in the mid-1980s and then consolidating or rising a little after that (Figure 7).

Figure 7. Quarterly fixed investment (Capx) and after-tax profits (NI) scaled by lagged total assets for nonfinancial corporations from 1952–2010.



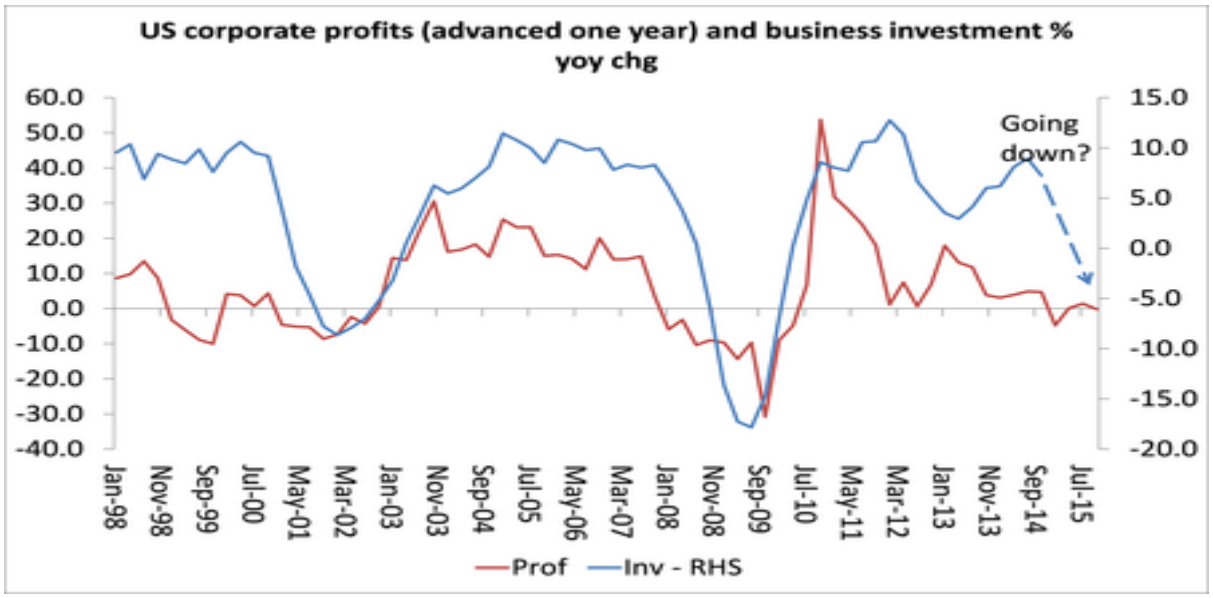
Source: Federal Reserve Flow of Funds accounts. Shaded regions indicate NBER recessions

Business investment (as a share of assets) declined in tandem with profitability. The authors concluded that *"investment growth is highly predictable, up to 1½ years in advance, using past profits and stock returns but has little connection to interest rates, credit spreads, or stock volatility. Indeed, profits and stock returns swamp the predictive power of other variables proposed in the* literature."

More relevant to the movement in investment in the business cycle is the movement in the mass of profits. Our mainstream authors find that *"Profits show a clear business-cycle pattern and a clear correlation with investment."* They measured the predictive causal correlation between changes in profits, GDP and investment and the Great Recession. They found that *"if investment maintained its historical connection to profit growth, investment was predicted to drop by 14.7%, roughly two-thirds the actual decline of 23.0%."*

This two-thirds figure is almost exactly what I found for the period 2000 to 2013[17]. I found that the correlation between changes in the rate of profit and investment was 64%; second, the correlation between the mass of profit and investment was 76%; and third, the correlation between the rate of profit (lagged one year) and the mass of profit was also 76% (Figure 8).

Figure 8. US corporate profits and business investment yoy % chg, 1998-2015



Source: BEA NIPA, author's calculations

Economists at investment bank, JP Morgan also found that *"at least three-quarters of the investment decline can be thought of as a historically typical drop given the behaviour of profits and GDP at the end of 2008. Problems in the credit markets may have played a role, but the impact on corporate investment is arguably small."* [18]

Another financial economist, David Watts from CreditSight ran the growth in sales revenues and the level of utilisation of existing capacity for Eurozone non-financial companies against business investment. He found there is a close correlation. In other words, what drives business investment are the level of sales and profits[19]. Klein concludes: *"You don't need any estimate of a "credit channel" (or "policy uncertainty" or "confidence") to explain why companies boost or cut their capex. They spend when it's profitable, and don't when it isn't."*[20] The Bank for International Settlements (BIS) latched onto the same point: "*the uncertainty about the economic outlook and expected profits play a key role in driving investment, while the effect of financing conditions is apparently small."* [21]

The Federal Reserve Bank of Cleveland has also found similar results[22]. Economists there found that there was a very high correlation between the movement of business profits, investment and industrial production. Chief economist Ergundor: *"A simple correlation analysis shows that the correlation between the change in corporate profits and the contemporaneous change in industrial production is 54 percent, but the correlation goes up to 66 percent if I use the one-quarter-ahead change in industrial production.*

Similarly, the correlation between the change in corporate profits and the contemporaneous change in gross domestic private investment is 57 percent, but the correlation goes up to 68 percent if I use the one-quarter-ahead change in investment.

More formally, a Granger causality test indicates that the quarterly change in profits leads the quarterly change in production by one quarter, but the change in profits is independent of the change

in production. A similar relationship applies to the quarterly change in profits and investment. Thus, firms seem to adjust their production and investment after seeing a drop in their profits." The time gap between profits and investment is about three quarters of a year.

Deutsche Bank economists[23] also noted that "*Profit margins always peak in advance of recession. Indeed, there has not been one business cycle in the post-WWII era where this has not been the case. The reason margins are a leading indicator is simple: when corporate profitability declines, a pullback in spending and hiring eventually ensues."* Deutsche goes on: *"the historical data reveals that the average and median lead times between the peak in margins and the onset of recession are nine and eight quarters, respectively" (Figure 9)*.

Figure 9. Profit margins and the business cycle

Profit margins peak on average about two years before the onset of recession, but the lead times vary substantially across business cycles

Business cycle	Peak in margins	Distance to recession (quarters)
1949 to 1953	Q4 1950	11
1954 to 1957	Q4 1955	8
1958 to 1960	Q2 1959	5
1961 to 1969	Q1 1966	16
1970 to 1973	Q1 1973	4
1975 to 1980	Q4 1978	6
1983 to 1990	Q4 1988	8
1991 to 2001	Q3 1997	15
2002 to 2007	Q3 2006	6
2009 to present	Q3 2014	?
Average>		9
Median>		8

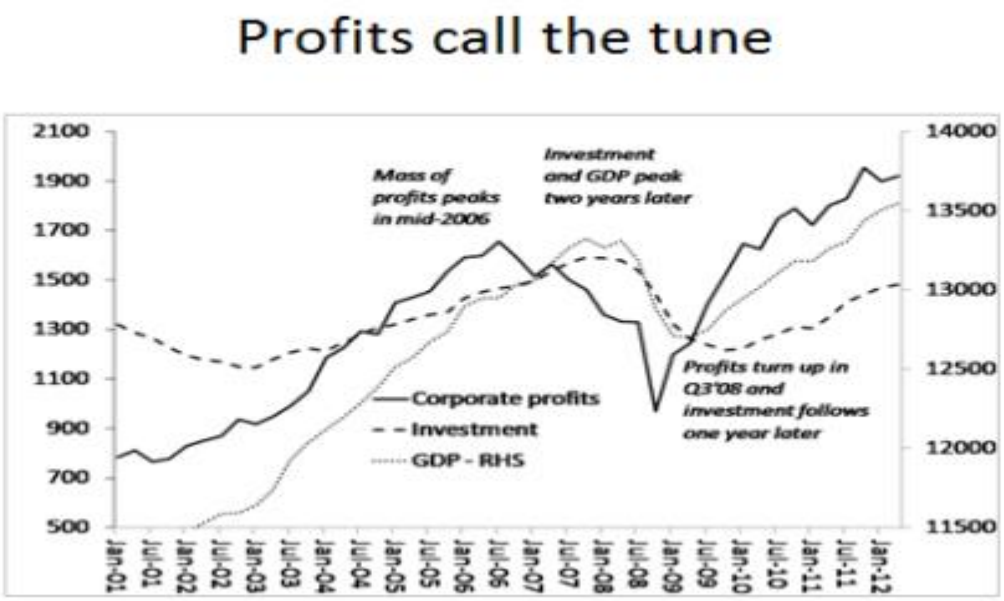
Source: BEA, NBER, Haver Analytics & Deutsche Bank

Source: Deutsche Bank

Tapia shows that over 251 quarters of US economic activity from 1947, the movement in profits was much more volatile than the movement in wages or even investment.[24] Most important, *"corporate profits stop growing, stagnate and then start falling a few quarters before a recession".* Profits then lead investment and employment out of each recession. In the long expansion of the 1990s, profits started declining long before investment did (profits fell back in 1997 while investment went on growing until 2000, when a crisis ensued). "*In all these cases, profits peaks several quarters before the recession, while investment peaks almost immediately before the recession."* Using regression analysis, Tapia finds that pre-tax profits can explain 44% of all movement in investment, while there is no evidence that investment can explain any movement in profits.

This is exactly the conclusion that G Carchedi and I reached in a joint study[25]. In Figure 9, the US mass of profits leads business investment and GDP growth into recession and then out of it.

Figure 9. US corporate profits, investment and GDP growth 2001-12 $bn



Source: BEA NIPA, authors calculations

Finally, I applied Granger causation regression analysis to changes in profits, investment and GDP since 1961. I found that the correlation between profits and investment was 0.43 with least squares regression coefficient at 0.60. Profits 'Granger caused' investment with a one-year lag. And investment 'Granger caused' GDP with a two-year lag. But there was no causal connection from investment to profits – the same result as Tapia.[26]

Thus, the evidence is overwhelming that profitability is the driver of investment growth and that profits lead investment (and GDP) and not vice versa. The Marxist view is supported empirically.

3. The Policy implications

There are economic policy implications that flow from this conclusion. After all, it is the kernel of Keynesian economic policy that the way out of economic recession under capitalism is to boost 'effective demand'. And in an unemployment 'equilibrium', it will be necessary to stimulate this demand, either by easing the cost of investment or consumer borrowing (monetary policy) and/or by government spending (fiscal policy).

Keynesians see the capitalist economy in a utopian way. The Keynesian analysis denies or ignores the class nature of the capitalist economy and the Marxist law of value that shows profits come from the exploitation of labour. As a result, Keynesian macro identities start from consumption and investment ("effective demand") and go onto incomes and employment.

Remember the multiplier is a device invented by Richard Kahn, Keynes' disciple of the 1930s. It purports to measure the change in real GDP caused by a change in government spending or taxation – in other words, the impact on growth of government fiscal measures. So the Keynesian multiplier measures the impact of more or less spending (demand) on income (GDP). BUT it does not measure

the impact on profitability. And, in the Marxist view, that is crucial to growth under the capitalist mode of production.

Let us return to the Keynes-Kalecki macro identity. It can be re-designed as:

Investment – (non-capitalist) Savings = Profits

Thus the lower are non-capitalist savings, the higher the investment and then the higher the profits. Non-capitalist (domestic) savings can be divided into three parts: savings by households, saving by governments and foreign capitalist savings. If households save more (as they tend to do in a slump) and foreign savings rises (in other words, the national economy's deficit with the rest of the world rises. If government also run budget surpluses and save, then investment will be lower. And if investment calls the tune, then lower investment will mean lower profits (business savings).

However, there is a saviour in this equation: government savings, or to be more exact; government dissaving. If government runs up a big budget deficit, in other words, dissaves, it can boost investment and thus profits. So the Keynesian logic goes.

But the Marxist logic is that the causal connection is the opposite.

Thus the equation looks like this.

Profits + (non-capitalist) Savings = Investment

If we assume profits are fixed or fall in the equation (because the rate of exploitation of labour power cannot be increased), then investment cannot be increased or will fall, unless other savings are increased to compensate, namely household savings and/or reduced capitalist consumption or more government saving, not dissaving. This is the opposite of the Keynesian policy conclusion. On this view, more government borrowing will not boost profits, but the opposite – and profits are what matters under capitalism. So government dissaving is a negative for capitalist investment. Government spending will not boost the capitalist economy because it eats into profitability by depriving the capitalist sector of some of its potential profit.

Carchedi presents the difference I have described here as between the Keynesian multiplier (i.e. consumption to investment to national income to profits) and the Marxist multiplier (i.e. profits to investment to income and consumption). Carchedi: *"In the Keynesian multiplier, state induced investments have a positive effect on production and thus on income, spending, and saving…..Profitability plays a subordinate role and the effects on the economy are always apparently positive. 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".*[27]

If the Marxist multiplier is the right way to view the modern economy, then what follows is that government spending and tax increases or cuts must be viewed from whether they boost or reduce profitability. If they do not raise profitability or even reduce it, 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. There is no assurance that more spending means more profits – on the contrary. Government investment in infrastructure may boost profitability for those capitalist

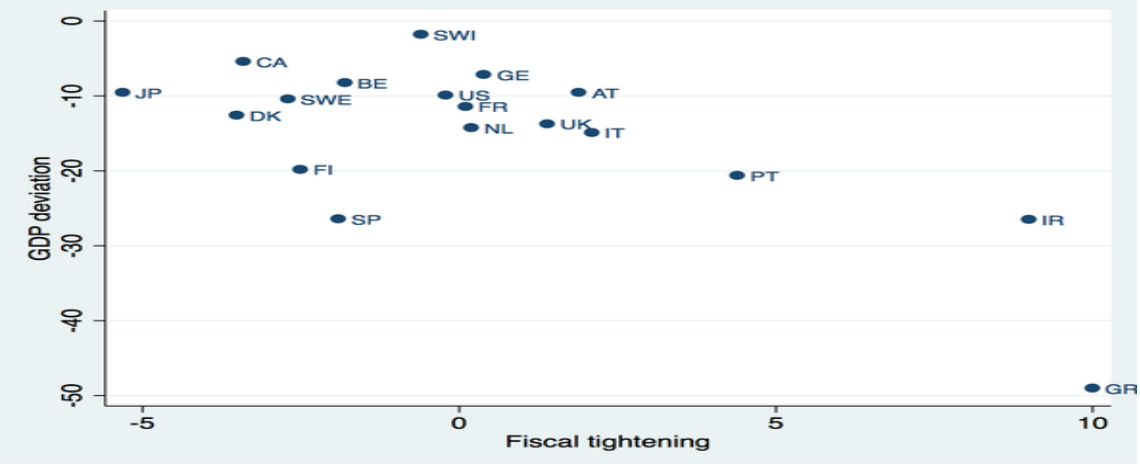
sectors getting the contracts, but if it is paid for by higher taxes on profits, there is no gain overall. And if it is financed by borrowing, profitability will eventually be constrained by a rising cost of capital.

Government spending will not boost the capitalist economy because it eats into profitability by depriving the capitalist sector of some of its potential profit. Kalecki sort of realised this in his famous paper, Political aspects of full employment, *1943*, when he said: *"public investment should be confined to objects that don't compete with the equipment of private business. Otherwise, the profitability of private investment might be impaired and the effect of public investment upon employment offset by the negative effect of the decline in private investment".*[28]

So which multiplier is the most convincing on the evidence? Tapia looked at the causal connection between US profits, investment and government spending[29.] He found that *"little evidence is found that government spending may stimulate future investment and in this way may pump-prime the economy."* He concluded that "*The Keynesian view that government expenditure may pump-prime the economy by stimulating private investment has very little support in the data, as the net effect of government expending on lagged private investment is either null or negative. Only in the sample 1961-1990 did past government spending appear as enhancing gross investment in the present, though it does not stimulate business investment, and the effect does not appear in other samples so that it does not constitute strong evidence in favor of a pump-priming effect of government spending This suggests that it is the profitability of capital that is decisive for the recovery or otherwise from an economic recession or depression."*

Keynesian economist, Paul Krugman considered the impact of fiscal tightening, as measured by the IMF's estimate of the cyclically adjusted primary balance (i.e., excluding interest payments) as a percentage of GDP.[30] He showed the deviation of real GDP from what the IMF was projecting before the crisis and assumed that projected growth 2007-2013 was expected to continue for two more years to get 2015 estimates (Figure 10). This appears to show a significant correlation between fiscal tightening as defined and the deviation of actual real GDP growth from the IMF forecast.

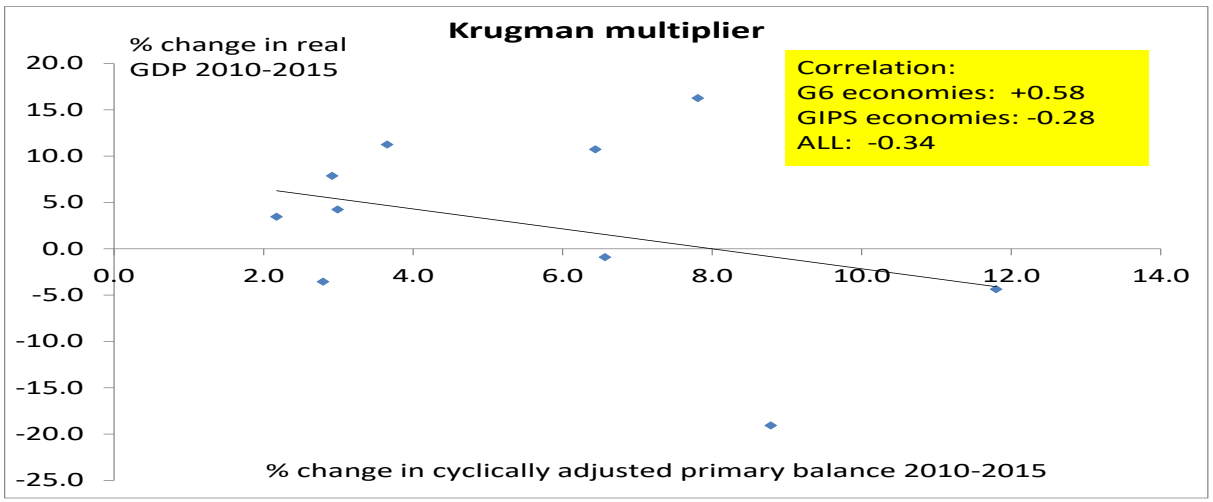
Figure 10. The deviation from the pre-crisis IMF real GDP growth forecast and fiscal tightening (cyclically adjusted primary balance as a % of GDP).



Source: Paul Krugman

However, as Krugman said himself, this is perhaps an odd way of measuring the impact of the Keynesian multiplier and, if Greece is excluded, the correlation is less convincing. If instead of the deviation from IMF pre-crisis GDP forecasts, we use the change in the real GDP in the last five years against fiscal tightening, as defined by Krugman, the result does show a negative correlation for the G6 economies plus distressed Eurozone economies (GIPS) combined between 2010 and 2015 (Figure 11). But there is a positive correlation for the G6 alone. In other words, the tighter the fiscal impact, the better the GDP pick-up in the G6 economies – the opposite of the conclusions of the Keynesian multiplier.

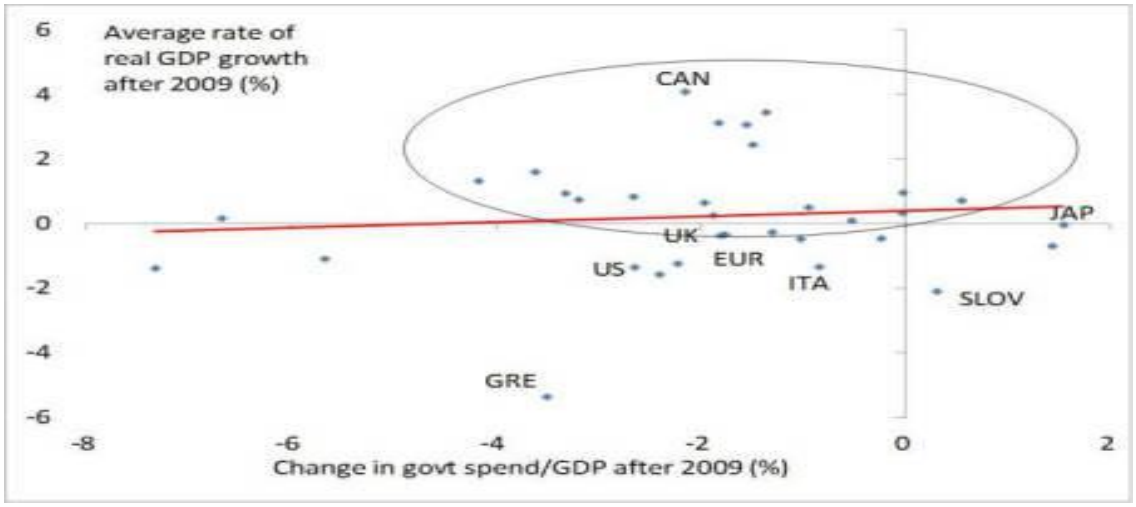
Figure 11. Changes in real GDP and the cyclically adjusted primary balance as % of GDP, 2010-15.



Source: IMF data, author's calculations

Then if we compare changes in government spending to GDP against the average rate of real GDP growth since 2009 for the OECD economies, there is a very weak positive correlation and none if Greece is removed (Figure 12).

Figure 12. The average rate of real GDP growth since 2009 (%) in the OECD economies and the change in government spending to GDP (%).



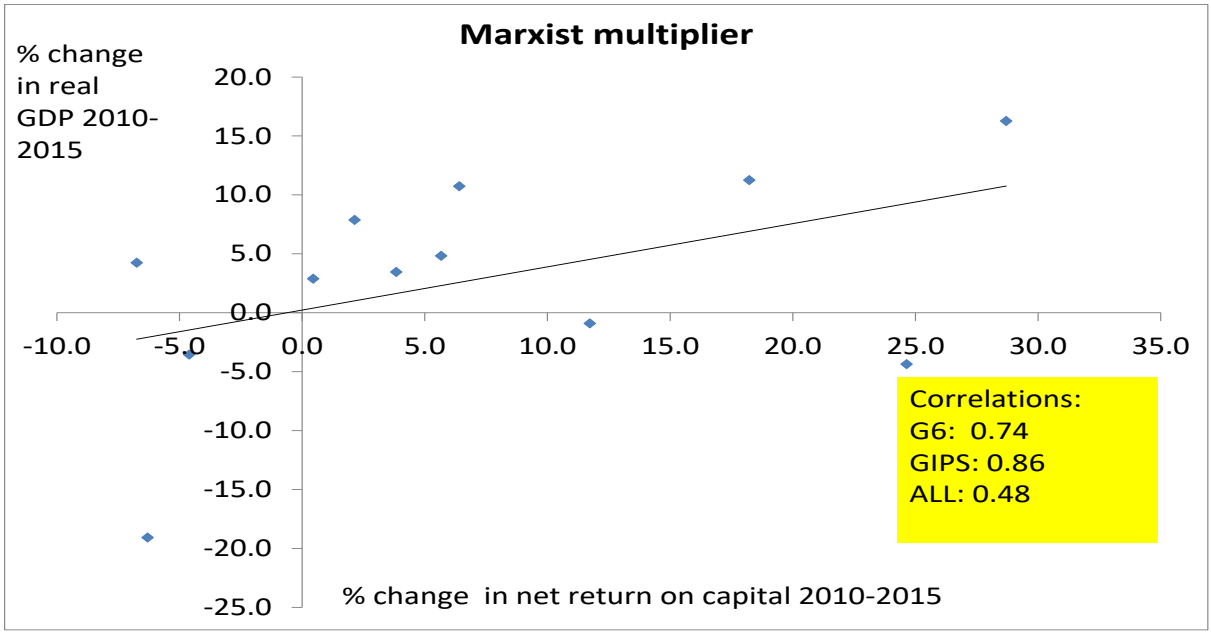
Source: AMECO database, author's calculations

Alberto Alesina and Francesco Giavassi found that *"fiscal adjustments based upon cuts in spending are much less costly, in terms of output losses, than those based upon tax increases. ….spending-based adjustments generate very small recessions, with an impact on output growth not significantly different from zero."* And *"Our findings seem to hold for fiscal adjustments both before and after the financial crisis. We cannot reject the hypothesis that the effects of the fiscal adjustments, especially in Europe in 2009-13, were indistinguishable from previous ones"*. In other words, cutting government spending (austerity) had little effect on the real GDP growth rate and that applied to the post-crisis 'austerity' policies of European governments.[31]

Again, Cugnasca and Rother from the EU Commission find that the Keynesian multiplier was well below 1 in the post-Great Recession period. The average output cost of a fiscal adjustment equal to 1% of GDP is 0.5% of GDP for the EU as a whole, in line with the size of multipliers assumed before the crisis, despite the fact that approximately three quarters of the consolidation episodes that considered occurred after 2009. So it is hardly decisive as an explanation for the continuation of the Long Depression after 2009. The multiplier is somewhat larger at 0.76 for Eurozone countries and EU countries with a currency pegged to the euro, where monetary policy is less able to compensate for country-specific adjustments. [32]

Now let's consider the impact of changes in the profitability of business capital against economic growth (the Marxist multiplier)[33]. Taking the same data as Krugman, I found that there is a significant positive correlation between changes in profitability of capital (net return on the stock of fixed assets) and economic growth for the G6 economies (Figure 13).

Figure 13. The Marxist multiplier: change in real GDP and change in net return on capital, %, 2010-25 (blue spots are individual EZ states).

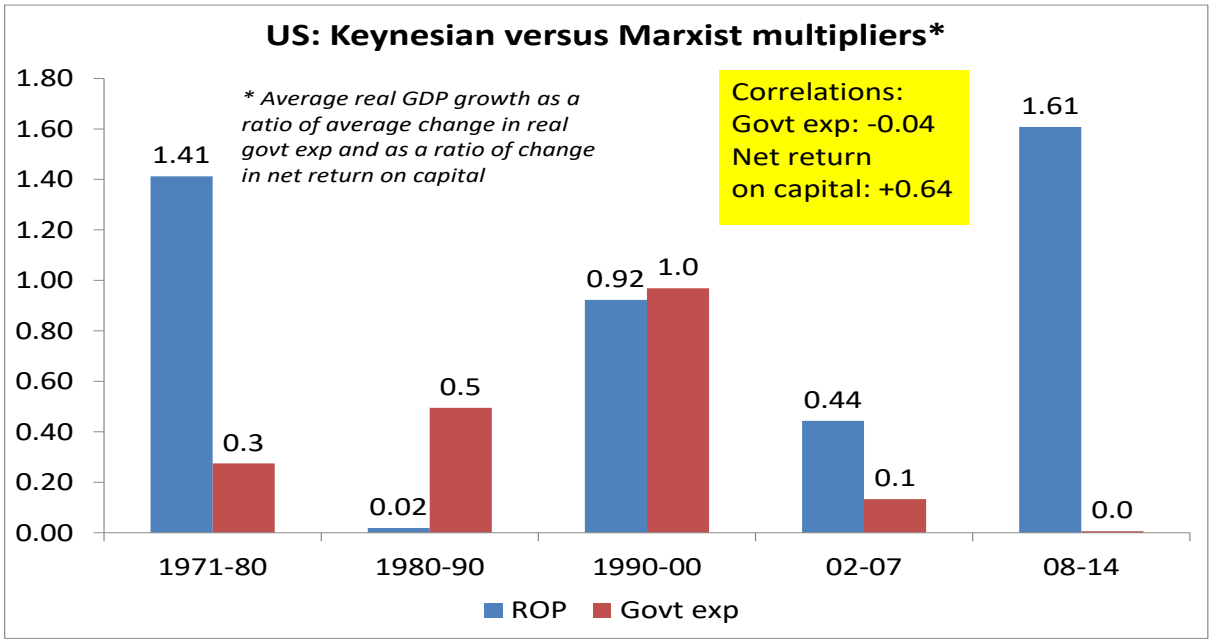


Source: AMECO database, author's calculations

The correlations are positive for G6 plus the distressed Eurozone economies (GIPS) and at much higher levels than with the Keynesian multiplier.

I then compared average real GDP growth against the average change in government spending and as a ratio of the change in the net return on capital for successive decades since 1960 (Figure 14). I found that real GDP growth is strongly correlated with changes in the profitability of capital (Marxist multiplier), while the correlation was negative with changes in government spending (Keynesian multiplier). The Marxist multiplier was considerably higher in three out of the five decades, and particularly in the current post Great Recession period. And in the other two decades, the Keynesian multiplier was only slightly higher and failed to go above 1. Thus there was stronger evidence that the Marxist multiplier is more relevant to economic recovery under capitalism than the Keynesian multiplier.

Figure 14. Average real GDP growth as a ratio of the average change in real government spending and the net return on capital.

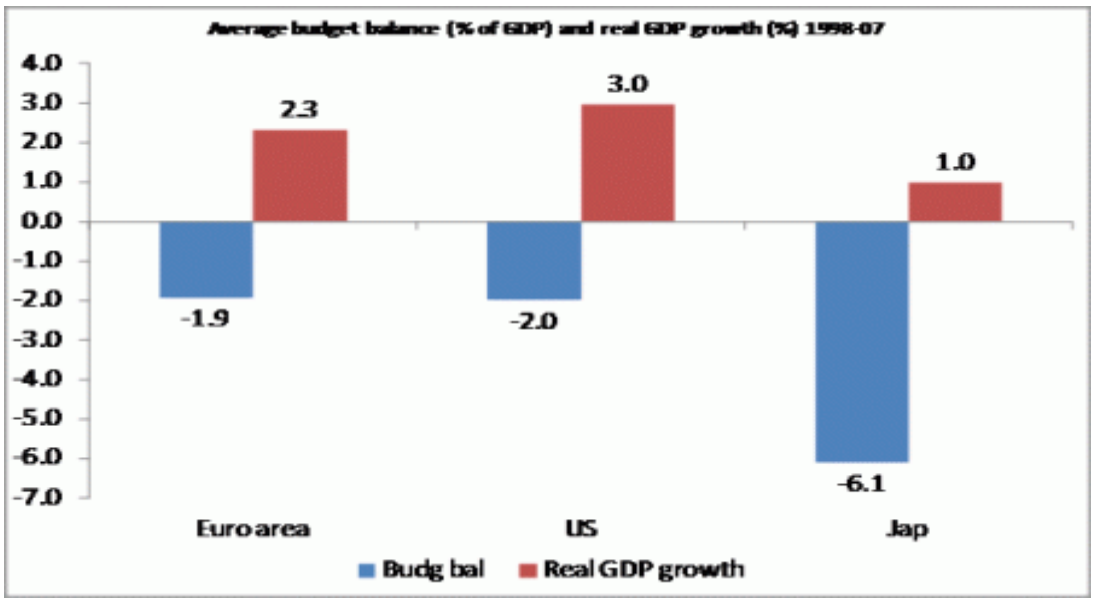


Source: AMECO database, author's calculations

Another case study is Japan since 1998. I compared the average budget deficit to GDP for Japan, the US and the Euro area against real GDP growth since 1998. 1998 is the date that most economists argue was the point when the Japanese authorities went for broke with Keynesian-type government spending policies designed to restore economic growth. Did it work?

Between 1998 and 2007, Japan's average budget deficit was 6.1% of GDP, while real GDP growth averaged just 1%. In the same period, the US budget deficit was just 2% of GDP, less than one-third of that of Japan, but real GDP growth was 3% a year, or three times as fast as Japan. In the Euro area, the budget deficit was even lower at 1.9% of GDP, but real GDP growth still averaged 2.3% a year, or more than twice that of Japan. So the Keynesian multiplier did not seem to do its job in Japan over a ten-year period (Figure 15). Again, in the credit boom period of 2002-07, Japan's average real GDP growth was the lowest even though its budget deficit was way higher than the US or the Eurozone.

Figure 15. Average budget balances and real GDP growth, 1998-07 (%)



Source: OECD, author's calculations

There does not seem to be any evidence that bigger government spending or wider budget deficits will lead to faster investment or economic growth over time in capitalist economies. Indeed, the evidence is to the contrary much of time. The Marxist multiplier of profitability and investment seems more convincing.

CONCLUSION

The Keynesians see the economy as a money economy but forget that it is a money-making economy. "It is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary." (Keynes).

This paper has argued:

1) The Keynesian view that effective demand and investment drive profits is logically weak and empirically unproven.
2) The Marxist view is that profitability and profits drive investment in a capitalist economy. This is theoretically logical and empirically supported.
3) This implies that it is the Marxist multiplier (the changes in real GDP relative to profitability) that is a better guide to any likely recovery in a capitalist economy than the Keynesian multiplier (changes in real GDP relative to government net spending - dissaving).
4) Keynesian fiscal (and monetary) stimulus policy prescriptions are unlikely to work in restoring investment, growth and employment in a capitalist economy – indeed they could even delay recovery.

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