"Investment Paradox" and Deflators

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Sam Gindin has raised a point of some interest in a recent article (Gindin 2014 b) where he replies a (counter) critique by Andrew Kliman (Kliman 2014 b) of a previous attempt by Gindin himself (Gindin 2014 a) to show the impossibility of any kind of nexus between the falling rate of profit and the Great Recession (GR).

I am not dealing here with the relationship between a falling profit rate and the GR, which is a much more important matter, to be left for a future writing, but more simply with what Gindin says about the so-called "investment paradox", a seemingly declining fixed investment/profit ratio since the mid '80s simultaneously occurring along a tendential rise of the mass and rate of net profit, and with the "paradox" itself.

1. Investment Paradox

This paradox is not to be taken easily for, once proved true, it would leave very little room for the theory according to which changes in the investment share and the rate of accumulation are positive functions of changes in the rate of profit. This theory – a remarkable piece of commonplace[1] - is shared by different kinds of theoreticians:

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[1] In bourgeois society, absolutely everybody must instinctively stick to the assumption that "the more you gain, the more you are keen to invest".

postkeynesians (e.g. Marc Lavoie [2]), marxists (e.g. Anwar Shaikh [3]), J.M. Keynes himself, and others, and has been recently enriched with a further postulate asserting that productive investments are now very low although the rate of profit has somewhat increased as profitability is still "insufficient" (Kliman 2014 a [4]). Even though no criterion has been put forward for this insufficiency of the rate profit - in such a way that one is not allowed to know with respect to what it happens to be insufficient -, we might say that the theory has now become that of "the correspondence between rate of accumulation (or share of investment) and rate of profit but *only above a certain point of minimum*".

[2] (Lavoie, 1996)

[3] (Shaikh 2010, p.46). Shaikh's flirtation with keynesian theory must lead to throw away his own original theory of the falling rate of profit (Shaikh 1978 and 1980). According to this theory investment is driven by the needs of the competitive war which is fought through relative higher reductions of costs of production and increases in the market shares. Since the most efficient technique in term of competitive war is the one which trades the profit rate for the profit margin (a higher Capital/Output ratio associated to a higher Profit/Output ratio) , the new investment must raise the profit margin and the market share at the cost of a lower rate of profit – it is the other side of the Okishio theorem. But this is simply impossible if the capitalist expects a higher rate of profit from the additional fixed capital.

[4] "To be sure, the middle of the last decade cannot be characterized as a period of stagnation in the U.S.economy. But GDP and employment growth were only moderate and inflation remained tame––under conditions in which one would have expected them to be much stronger. This suggests that stagnation had become the new "default" state of the economy. Or, as Martin Wolf has put it, "financial excesses… masked or … were even a response to pre-existing structural weaknesses."[18]
If one accepts that this analysis is probably correct, the question becomes: why has stagnation become the economy's default state? Various answers have been put forward. The one that seems most plausible to me is that the economy tends toward stagnation because demand is weak; demand is weak because productive investment demand—spending on equipment, office and factory construction, etc.—has taken a nosedive (see the graph below);[19] and investment has taken a nosedive because the profitability of such investment has become chronically low. In other words, *there is insufficient existing profit to fund investment projects, and the future profit they are expected to generate is insufficient to induce the needed volume of investment as well.* [My emphasis, P.G.]" (Kliman 2014 a, pp.4). Yet, in a subsequent article Kliman seems to switch back to his former story of a sort of constancy of the ratio between rate of accumulation and rate of profit (Kliman 2014 b).

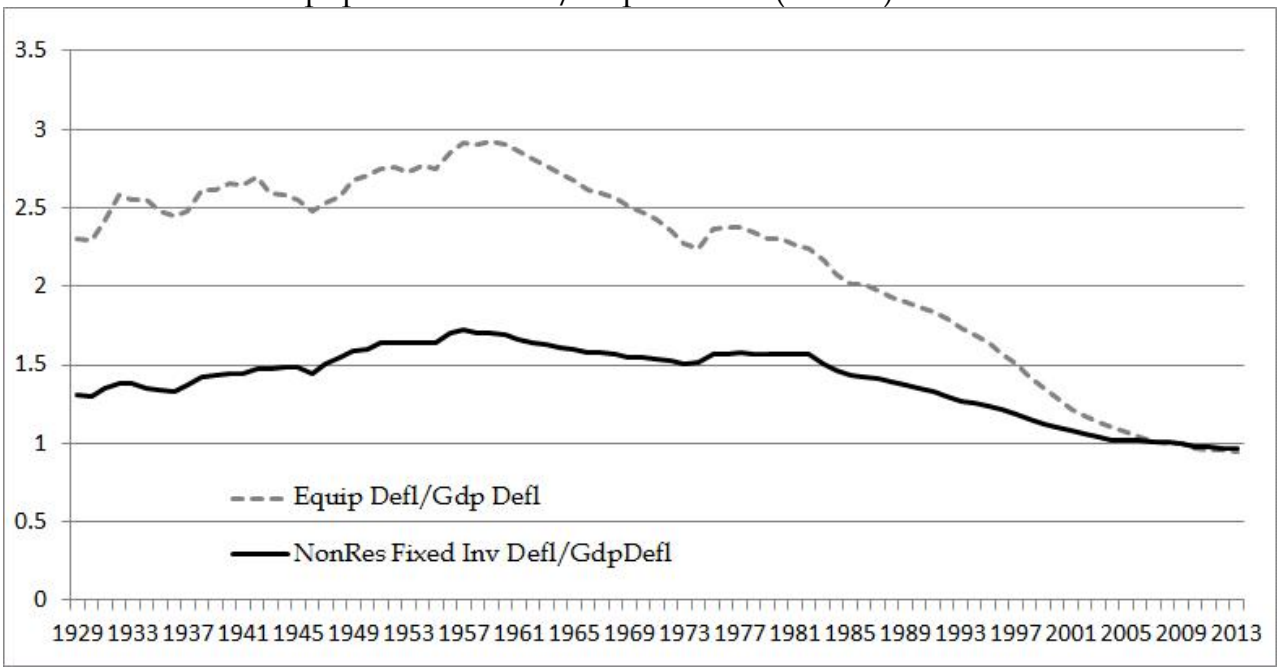
2. Optical Illusion?

Gindin's point is that the falling investment/profit and/or investment/Gdp ratios are a mere optical illusion owing to a growing gap between nominal and real (deflated) statistical magnitudes:

> " The *real* question, rather, is: why were corporations not investing their high profits in ways that expanded the production of goods and services? […]
> The answer is: they were. While conventional measures of the share of GDP going to non-residential investment have clearly fallen since the early 80s, this downward trend in the investment-GDP ratio reflects a price illusion. When the price index of GDP and that of investment goods are roughly in line—as they were before the 1980s—the ratio of investment-GDP will be roughly the same whether measured in nominal or real (i.e. after inflation) terms. But since the early 1980s they diverged and so this must be taken into account. From 1982-2007, the price index for GDP rose by 89% while it rose only 22% for non-residential investment, primarily because equipment was rising as a share of investment and prices for equipment actually *fell* through these years.[8] Adjusted for prices, the apparent slower growth in investment relative to GDP is reversed: real non-residential investment increased by a respectable 4.7% per year between 1982-2007, as against 3.6% for GDP. And in the four years before the crisis (2004-2007) real non-residential investment increased at an annual average rate of 6.3%.[9] " (Gindin 2014 a, pp.4-5)

What Gindin says about the relationship between the movements of the two price indexes (or deflators) looks rather bizarre since from both Nipa Tables 1.1.4 and 1.1.9 we can see that the Equipment Deflator/Gdp Deflator and the Net Non-Residential Investment Deflator/Gdp Deflator ratios are regularly falling *since the late '50s*, about 25 years *before* the year 1982 taken by Gindin as starting point of this decline:

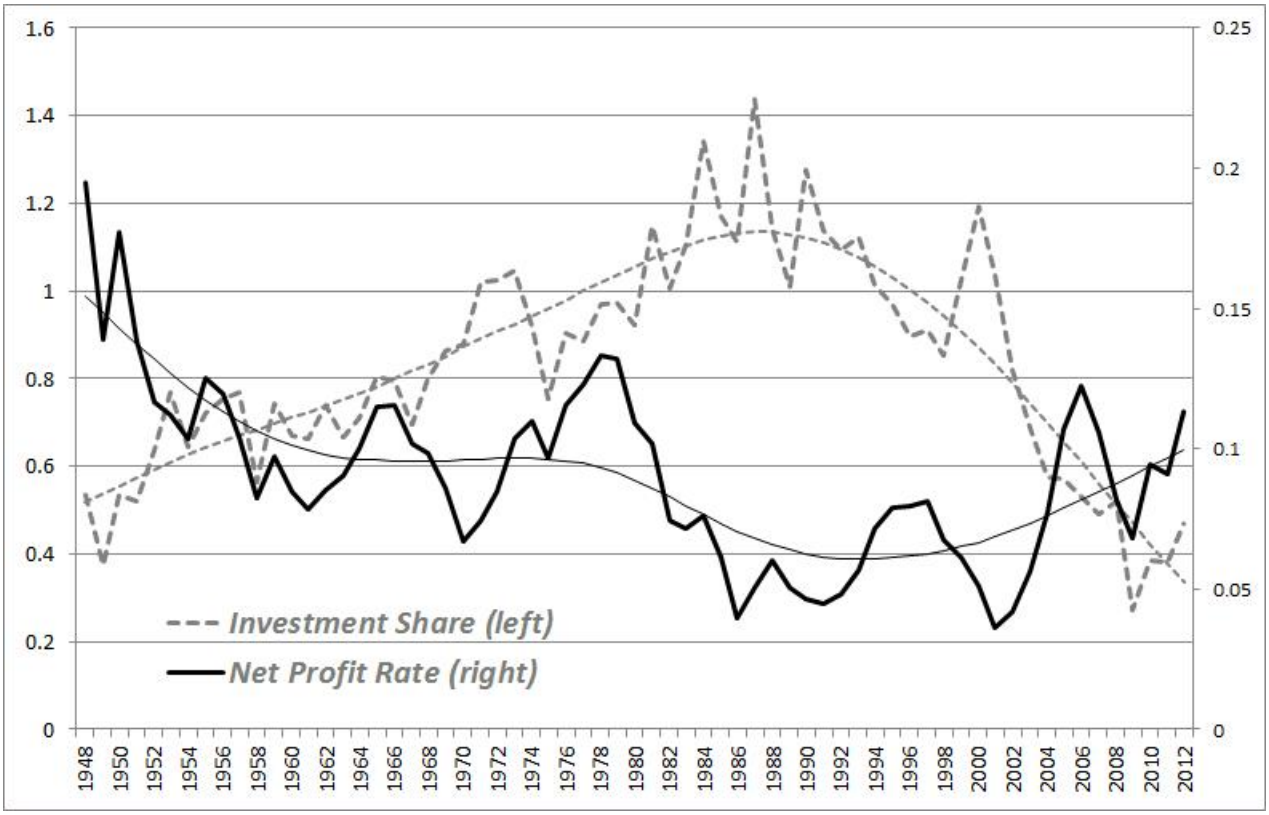
Fig. 1. US. Non-Residential Fixed Investment Deflator/Gdp Deflator and Equipment Deflator/Gdp Deflator (2009=1). 1929-2013 [5]



The falling trend of the Fixed Capital Deflator/Gdp Deflator seems to be a rather regular (statistical) feature of the US capitalism, spanning over both the postwar boom and the subsequent stagnation; hence, it cannot have much to do with the Investment Paradox of the mid'80s-today period (see Fig.2).

[5] Fig. 1 is constructed by means of Nipa Table 1.1.9 (*Implicit Price Deflators for Gross Domestic Product)*. In Nipa Table 1.1.4 (*Price Indexes for Gross Domestic Product*) we have the same price indexes calculated with extremely tiny quantitative differences with respect to Table 1.1.9. Results are obviously the same.

Fig 2. Us. Non-Financial Corporations. Net Rate of Profit and Net Investment Share. 1948-2012



Why deflators behave in this way? Just because they are deflators. Deflators have been conceived of to the aim of measuring *real* magnitudes which are supposed to lay concealed beneath the surface of nominal prices, hypothesized as essentially driven by inflation. Yet, since in capitalism you have ever changing use-values, especially in the field of means of production – for instance, systems of machines or complex machinery replacing simple machines – you cannot know whether changes in nominal prices come from technical progress and innovation or from inflation or from both. This compels statisticians, who don't work in a vacuum but are steered by the so-called "economic theory", to invent methods of adjusting prices according to some (arbitrary) parameters

introduced to measure variations in the quality or efficiency or whatever of productive goods and durable goods. The more ways you find to improve the qualitative coefficients of the produced use-value under scrutiny, the slower will be the movement of the deflator for this commodity. In certain cases, it might even become a declining index producing a negative inflation rate, as has happened for semiconductors and computing equipment.[6] Measuring use-values, i.e. assigning them a scalar as if they were one-dimensional physical entities, is quite an egregious illusion leading to ideological constructions.

As far as the Fixed Investment Deflator/Gdp Deflator ratio is concerned the effect of the Service industry is even more powerful than the qualitative indexes. A good portion of the Services industry does not produce anything that could even have the semblance of measurability; dealing with this section of Gdp NIPAs don't follow the standard procedure of calculating the magnitude of valued added by subtracting the value of the intermediate inputs from that of gross output but the opposite way of adding up whatever amount can be *independently* considered as a part of the value added. Once obtained the sectoral value added, a certain set of qualitative coefficients is implemented to get the sectoral deflator and through this the sectoral real value added: something which renders meaningless any real magnitude and any measure of labour productivity

[6] To a great extent the US productivity boom of the late '90s-early'00s has been the byproduct of the implementation of the so-called hedonic price index, which in 2012 has been able to bring down the value of the deflator for "Computer and Electronic Products" to a tiny 5.44% of its 1987 level. The outcome is that the productivity boom is largely confined within the "Computer and Electronic Products" industry and has spread over the manufacturing sector only because the enormous weight of its deflator as compared to the average deflator of the remaining subsectors.

within this sector of the economy (see Foley 2011). With nothing physical to measure it is obvious that little room is left for implementing qualitative coefficients and that the deflator for Services must run much faster than that for Durable Goods and Equipment, with the general consequence that the deflator for Gdp, in which services tend to get an increasing nominal share, must rise in relation to the deflator for "physical" commodities. From Fig. 3 it is evident that the behavior of the two ratios Non-Residential Fixed Investment Deflator/Services Deflator and Equipment Deflator/Services Deflator is the same we have in Fig.1 with the Gdp deflator in place of the Services deflator. If the Gdp were made solely of goods and investments, the decline in the Investments Deflator/Gdp Deflator ratio would not show up (see Fig.4, where the ratio between Investments Deflator and Goods Deflator is approximately constant since the late '50s). Together with the circumstance that, from the materially reproductive viewpoint, services are a form of social consumption of means of production and consumer goods, this explains why it is simply impossible to combine together deflators for goods and for services to work out a general deflator for Gdp and to infer anything grounded out of it.[7]

[7] See (Whelan 2000)

Fig. 3. US. Non-Residential Fixed Investment Deflator/Services Deflator and Equipment Deflator/Services Deflator (2009=1). 1929-2013

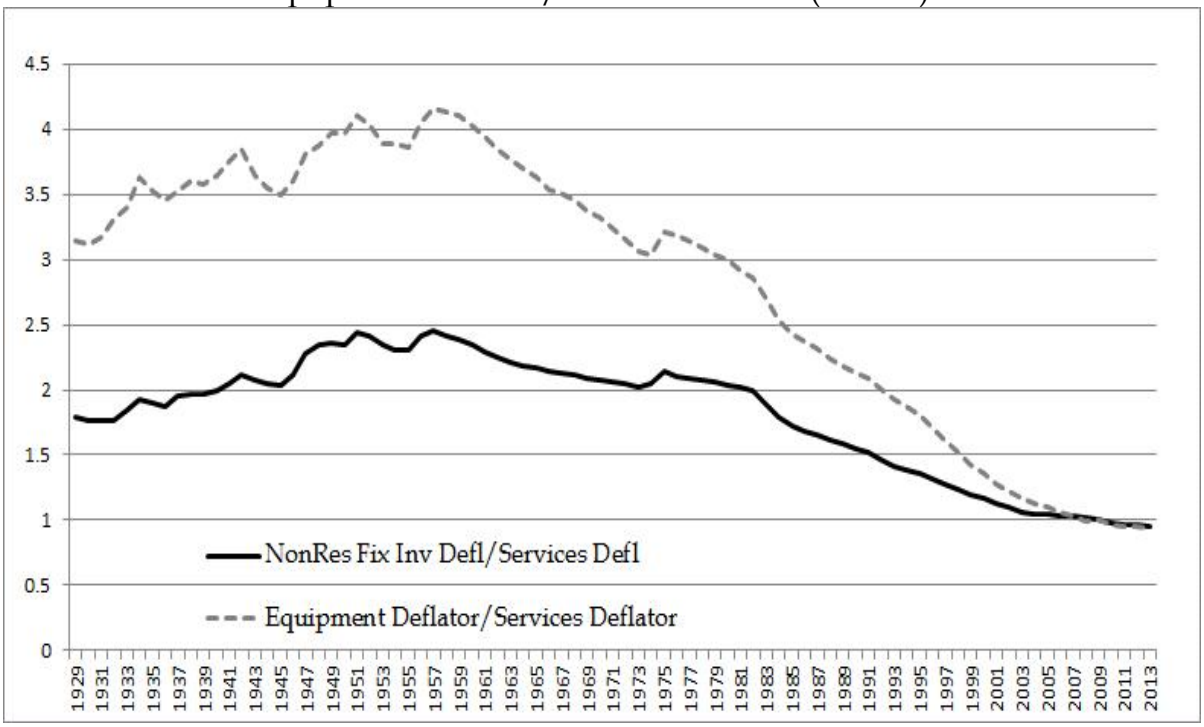
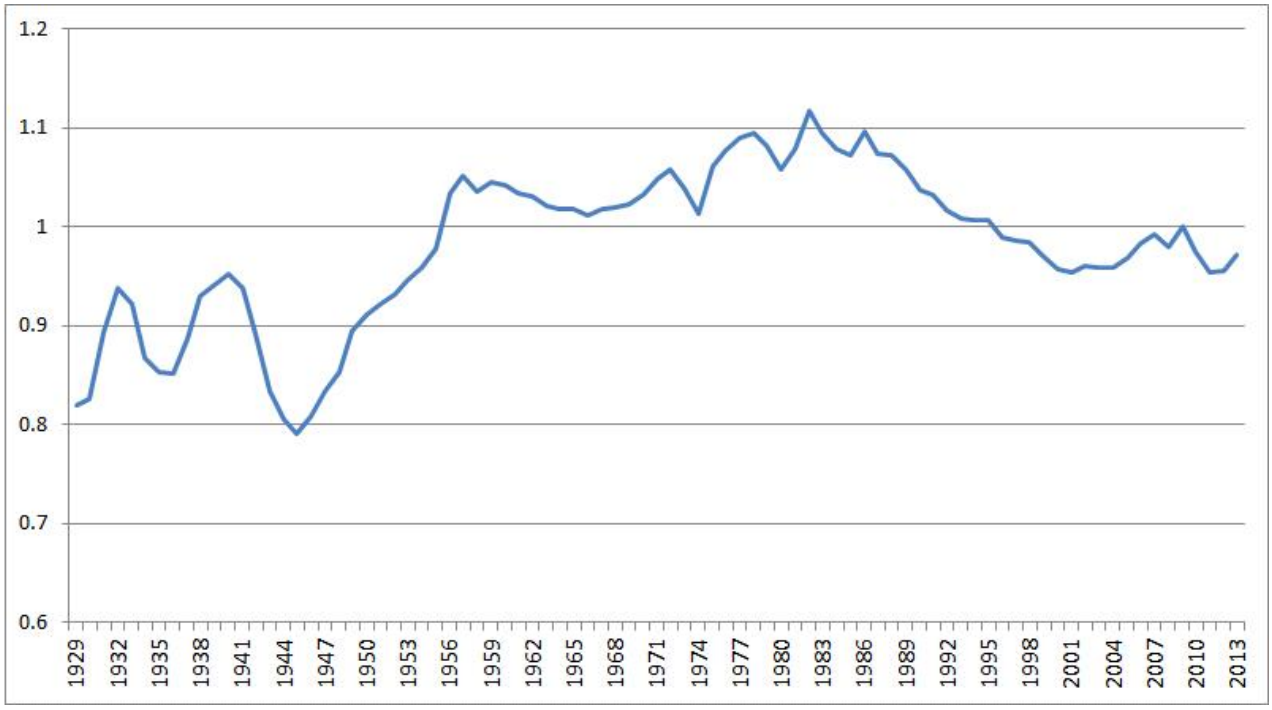


Fig. 4. US. Non Residential Fixed Investment Deflator/Goods Deflator (2009=1). 1929-2013



3. Investments and Profits

From Fig. 2 it rather obvious that the Net Rate of Profit for Non-Financial Corporations has stopped its tendential decline and begun a rising trend around the mid '80s, albeit not extraordinary. At the same it is also evident that the investment share (Net Non-Residential Fixed Investments/Net Profits) is in a downward path since the same date. This circumstance does not prevent variations in profits and investments being positively correlated with profits generally taking the lead. Two series can enjoy a very good short run correlation in their first differences and, at the same time, follow two opposite long-run trends: the key phenomenon *is not* their positive short run correlation but their diverging long-run movement.

Several people seem to be happy with a profit-rate theory of the level of fixed capital investments even though there is little evidence supporting it. If the rate of accumulation were a fixed proportion of the profit rate the investment share should be approximately constant over time. Unfortunately it is not so; its postwar pattern is rather similar to a parable, rising over the post-war boom and then falling (Fig. 2).

Moreover, according to the theory of the falling rate of profit as caused by the rising organic composition, the profit rate theory of investments has to be a logical non sequitur. If the profit rate tends to decrease, this means that share of accumulation is rising, otherwise it could not hold up a rising proportion of fixed capital, especially if capitalism has restarted from a previous deep crisis during which the rate of

accumulation had fallen to a minimum while the rate of profit was rising to a peak, as in the depression-war period.

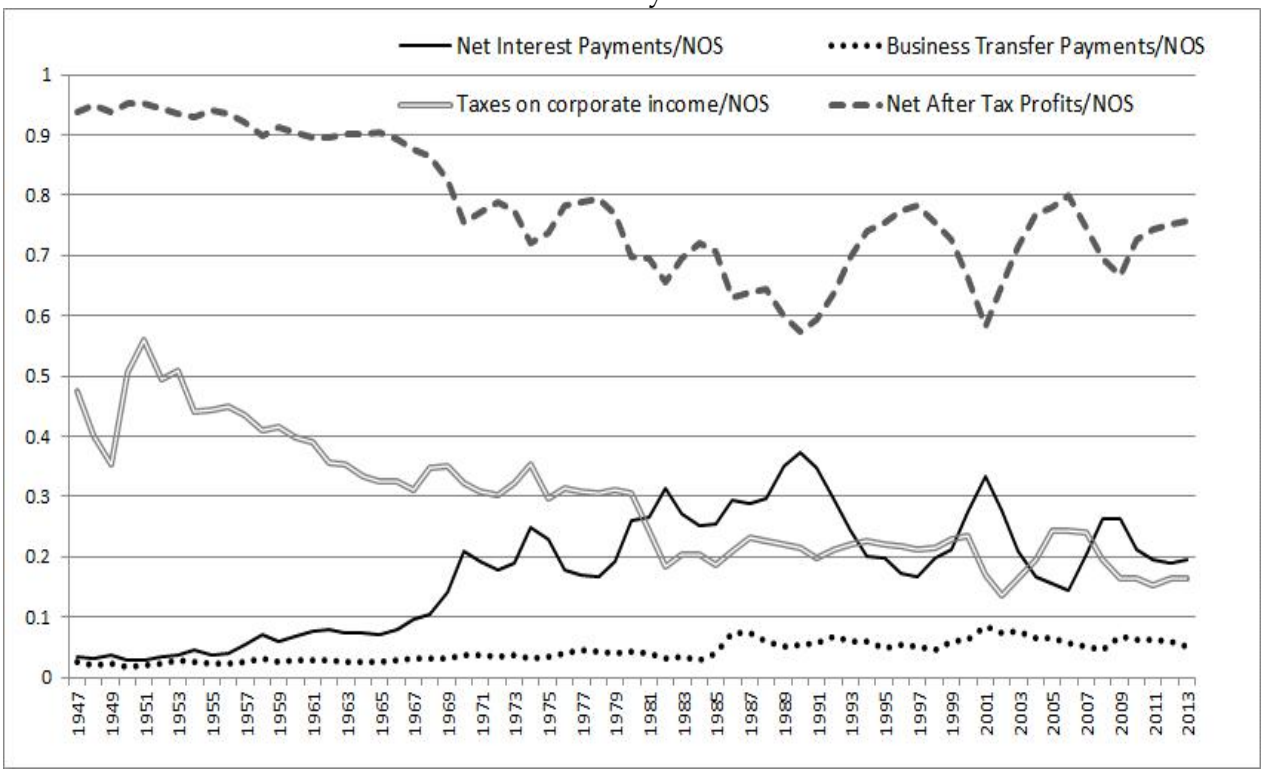
Another basic fallacy laying in the profit-rate theory is that it must believe in the metaphysics of something called "capitalist decisions" or "choices". Of course, the agents of capital are free to decide to go out of business and to be no longer part of capital, but generally speaking they are captive of the competition mechanism which forces its needs upon them. If the accumulation share exhibits two opposite behaviours over time, these must be explained mostly through variations of the pressure of competition upon the capitalists, and those variations have to be explained with changes in the machanism: this is the phenomenon to be investigated.[8]

The precarious way the net rate of profit of the non-financial corporate sector has recovered over the last thirty years, and the measure of this recovery show that the competition mechanism does not act upon the individual capitals like it used in the past. Despite the ubiquitous dirty rhetoric about competitiveness, in the last decades the intensity of competition has been much weaker than during the golden age. Or better,

[8] Mino Carchedi has rightly pointed out the following to Anwar Shaikh (Shaikh 2010): "«Marx argues that it is the difference between the two rates [rate of profit and rate of interest, G.C.], which he calls the rate of profit-of-enterprise (r – i), that drives active investment. Keynes says much the same thing» (Shaikh, 2010, p.46). Actually Marx says no such thing. For Marx, 'active investment' is basically moved by competition, by the need to keep technologically abreast of the competitors. It is Minsky, not Marx, who says much the same thing as Keynes." (Carchedi 2011, p.1). Yet, later on, Carchedi seems having somewhat changed his mind: "So there is reasonably strong evidence *that profitability determines capital accumulation. Capitalists see increasing profits and accumulate* [My emphasis, P.G.]. And yet they generate a decreasing share of surplus value relative to assets. The ARP explains the capitalists' behaviour and the CE-ARP explains the way capitalism works. " (Carchedi and Roberts 2013, p.3). This resembles a Catch 22-type situation: capitalists see increasing profits and accumulate. But, as they accumulate, capitalists must also see decreasing profits - given that the Surplus Value/Constant Capital ratio falls - hence they cease to accumulate.

today inter-capitals competition works mainly through the competition between wage workers which has reached historical highs because of the creation of a very huge world industrial reserve army in the '80s and '90s, which is a phenomenon without antecedent.

Fig. 5. US. Non-Financial Corporations. Net Operating Surplus, Interest and Tax Payments. 1947-2013

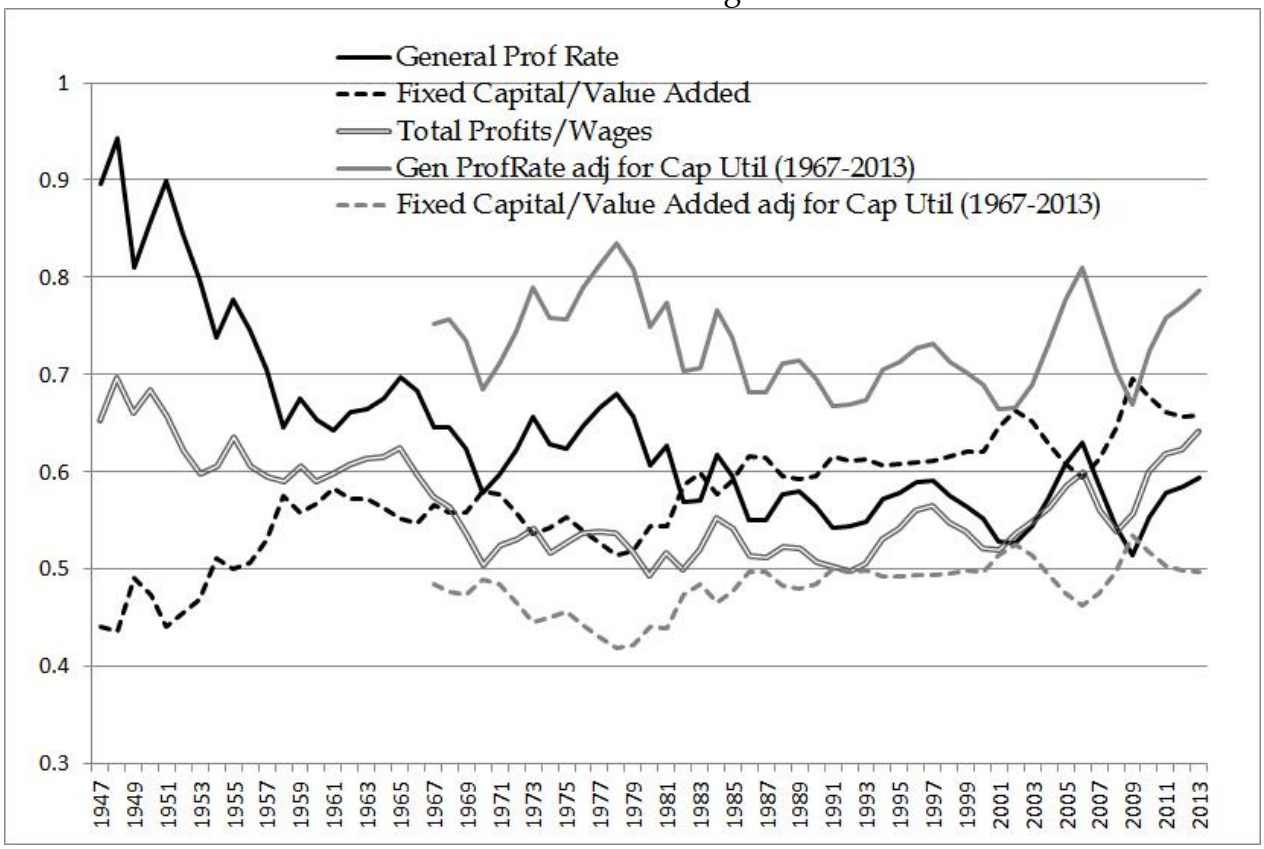


The overall rate of profit[9] has stopped falling because of the stagnation of real wages *and* the slowing down of accumulation (Fig.6); whilst the *net* rate of profit has started an upward trend because the declining relative weight of both interest payments (-48% with respect to the peak of 1990) – owing to the long run fall of the interest rates – and taxes on

[9] It is the statistical counterpart of the general rate of profit: Total Profits/Productive Fixed Capital (See *Statistical Sources*).

corporate profits (–46% in relation to the 1980's level) - thanks to the deliberate policies of the last 40 years (Fig.5).

Fig. 6. US. General Rate of Profit, Ratio of Fixed Capital to Value Added, Ratio of Total Profits to Wages. 1947-2013



From Fig.6 it is manifest that capitalism *by no means* is on some path of recovering from the depletion of the postwar boom as no potential energy for anything like another golden age is being accumulated.[10] Starting with the late '80s the overall rate of profit has simply flattened out, the rate of exploitation has decidedly improved beginning a decade before, whereas the capital/output ratio has just stopped increasing, as we can see from the series adjusted for the degree of capacity utilization that is flat since the late '80s –

[10] The so-called Golden Age of Capitalism was introduced by a fall in the capital/output ratio of about 75% and a rise in the overall rate of profit of nearly 300% in the interval 1932-1947.

what is logical from the decline of accumulation and the almost permanent all-encompassing process of restructuring which amounts to forced shrinking of production costs without formation of new fixed capital. More than anything else the overall picture is that of a standstill. A cul de sac coupled with a speculative boom built upon a process of indebtedness, both the hugest in contemporary history. But, albeit strictly related, this is another story.

References

Guglielmo Carchedi, *Behind and Beyond the Crisis*, Toronto, 2011.

Guglielmo Carchedi and Michael Roberts, *Reply to Paolo Giussani's paper on* "La Great Recession e il Saggio del Profitto", manuscript, 2014.

Duncan Foley (2011), *The Political Economy of U.S. Output and Employment 2001–2010*, SCEPA Working Paper, n.5.
http://www.economicpolicyresearch.org/images/docs/research/political_economy/Foley%20revised%20WP%202011_5.pdf

Sam Gindin (2014 a), *Clarifying the Crisis*, Jacobin, n.1, January.
https://www.jacobinmag.com/2014/01/clarifying-the-crisis/

Sam Gindin (2014 b), *Underestimating Capital, Overestimating Labour: A Response to Andrew Kliman, New Let Project*, 14 March.
http://www.newleftproject.org/index.php/site/article_comments/underestimating_capital_overestimating_labour_a_response_to_andrew_kliman#_ftn7

Andrew Kliman (2014 a), *What Lies Ahead: Accelerating Growth or Secular Stagnation?*, E-International Relations, 14 January.
http://www.e-ir.info/2014/01/24/what-lies-ahead-accelerating-growth-or-secular-stagnation/

Andrew Kliman (2014 b), *Clarifying 'Secular Stagnation' and the Great Recession*, New Left Project, 3 March.
http://www.newleftproject.org/index.php/site/article_comments/clarifying_secular_stagnation_and_the_great_recession

Marc Lavoie (1996) *Traverse, Hysteresis, and Normal Rates of Capacity Utilization in Kaleckian Models of Growth and Distributio*n, Review of Radical Political Economics, 28(4), pp. 113-147.

Anwar Shaikh (1978), *Political economy and capitalism: notes on Dobb's theory of crisis* Cambridge Journal of Economics, n. 2, pp.233-251

Anwar Shaikh (1980) *Marxian competition versus perfect competition: further comments on the so-called choice of technique*, Cambridge Journal of Economics, n. 4, pp.75-83

Anwar Shaikh (2010), *The first great depression of the 21st century*, Socialist Register, Fall, pp.44-63.

Karl Whelan (2000), *A Guide to the Use of Chain Aggregated NIPA Data*, FRB.

Statistical Sources

1. Fig.1.
   BEA *NIPA Table 1.1.9*
2. Fig.2.
   Investment Share.
   The denominator is the "Net After Tax Profit of Non-Financial Corporations" from *NIPA Table 1.14*, Line 47. The numerator is the yearly difference in the "Historical Cost Net Non-Residential Fixed Stocks of Non-Financial Corporations " from BEA *Fixed Assets Table 4.3 Line 47.* The denominator is lagged one year the numerator.
   Net Profit Rate.
   The denominator is the "Historical Cost Net Non-Residential Fixed Stocks of Non-Financial Corporations" from *BEA Fixed Assets Table 4.3 Line 47*. The numerator is the same as in Investment Share. The denominator is lagged one year.
3. Figg. 3 and 4.
   BEA *NIPA Table 1.1.9*
4. Fig.5.
   BEA *NIPA Table 1.14.*
5. Fig.6
   General Profit Rate.
   On the numerator we have the difference between National Income and Employees Compensation, *NIPA Table 1.12, Lines 1 and 2.* The denominator is the same as in Net Profit Rate of Fig.2
   Fixed Capital/Value Added
   Denominator is the same as above. Numerator is National Income of *NIPA Table 1.12 Line 1.*
   Total Profits/Wages
   Numerator is the same as that in General Profit Rate. Denominator is the Employees Compensation in *NIPA Table 1.12 Line 2.*
   Capacity Utilization Index
   It is the index worked out by the Federal Reserve Bureau since 1967 for the whole US economy.