Has the US rate of profit been falling or rising?

Comments on Bill Jefferies recent paper.

In a recent paper and in comments on a recent post on my blog site (https://thenextrecession.wordpress.com/2022/12/18/the-us-rate-of-profit-in-2021/), Bill Jefferies disagrees with the methods of measurement being used in many empirical studies of the US rate of profit. https://thenextrecession.files.wordpress.com/2022/11/03098168221084110.pdf

Jefferies argues that these estimates, which generally reveal a long-term fall in the rate of profit on capital stock, are based on theoretically bogus data produced by the US Bureau of Economic Analysis (BEA). According to Jefferies, the BEA seriously overestimates the value of the stock of fixed capital (C) to be used in Marx's rate of profit formula s/(C+v), where s is the surplus value or profit appropriated capitalists; C is the stock of capital (fixed and circulating); and v is the wages or 'compensation' paid to labour.

Jefferies says that when you use more accurate accounting data from the US Inland Revenue Service (IRS), the stock of capital (C) is found to be much smaller than the BEA data and thus the US rate of profit is much higher and actually rises over time, rather than falls.

First, let me remind ourselves that we are looking only at the profit rate on capital stock for the US corporate sector and so we exclude non-corporate firms and the wider economy. And second, I am not going to deal with Bill Jefferies' long account of how to measure the turnover of capital stock and variable capital which can affect the measure for the rate of profit. I think this requires a separate discussion on the theory of turnover and the best methods of estimation to be used. Anyway, the turnover of capital does not make a significant difference to the long-term trend in the rate of profit.

Let's take the first argument of Jefferies is that the BEA NIPA measure of fixed capital is a bogus one. Jefferies reckons it is based on the false neoclassical theory that the value of capital is really just the 'present value' of all future profits. To quote BJ: *"The quantity of capital advanced forms the denominator of the rate of profit calculation. The use of neoclassical valuations of the fixed capital stock grossly overestimates that value. These neoclassical estimations are not a measure of capital advanced, but of revenues generated by new investments."* This neoclassical estimation is circular as it is arguing that the value of capital is really a stream of future profits; but future profits are also the return on capital stock.

As BJ eloquently puts it: *"The key conceptual point to note is that these discounted aggregates of future services would only equal costs, they would only equal capital advanced, if there were no profits. Those who argue it makes no difference whether you use aggregates of future services or measures of actual capital advanced are essentially arguing that there are no profits – a curious assertion given that these measures of fixed capital stock are to be used in estimating the profit rate. This is absolutely wrong. It makes no logical sense. You're assuming the linear passage of time, by itself, create profits. Well, if the mere passage of time generates profit, then there would be no need for capital advanced in the first place: humans would just sit idle and wait for progress to happen by the pure action of Kronos. In the real world, the capitalist knows exactly how much he advanced and how much he needs to "earn" after the rotation of said capital is over in order to make a profit or a loss, and how much exactly he/she profited or lost.* (But) *If the Marxist methodology is applied,* (the) *worst case scenario* (is that) *there's a problem with approximation."*

I agree that the neoclassical view of capital stock and profits is nonsense. But is the measure of fixed assets used by the BEA based on that view? Does the BEA really estimate capital stock by revenues from future investments?

If you consult the BEA's explanation of how they measure fixed assets it becomes clear that fixed assets are added to each year by annual investment net of depreciation. And these estimates are found by the BEA directly from corporate accounts provided by the Inland Revenue Service and by the Bureau of Census. They are not some fictional attempts to estimate the stream of future earnings from an asset as in the neoclassical theory.

Bill Jefferies says to the contrary and cites some paras from the BEA methodology: Click to access Fixed-Assets-1925-97.pdf Here he argues that the BEA states *"unambiguously"* that *"In principle, the current-cost net stock is the market, or replacement, value of the stock; that is, the value for which the assets in the stock could be bought or sold in that year. In equilibrium, this market value will equal the present value of all expected future services embodied in existing assets."* (M-8). And he adds the comment of the OECD that the BEA uses the Hulten and Wykoff methods here; namely that the *"value of this asset at the beginning of period t, P0t , to its owner corresponds to the discounted stream of future incomes generated by the asset."* Click to access 43734711.pdf.

Jefferies concludes that the methods used by the BEA do not measure the past amount of capital advanced and "*it really is as simple as that.*" But it is not "as simple as that". It may well be that the BEA statisticians think that *"in principle"* that capital stock is equal to the present value of all expected future assets "*in equilibrium",* BUT that is not how they <u>actually measure</u> the stock of capital. They use real data from corporate accounts – in other words, 'capital advanced' in the Marxist sense.

It may be that the very first measure of capital stock (back in 1925 for the BEA) was based on some estimate of future profit streams to kick things off. It is certainly the case that the EU Commission's AMECO data for net capital stock starts with such an arbitrary assumption (from 1960). Indeed, the AMECO data are very suspect from 1960 to about 1980 for that reason.

Jefferies says that *"if you only read the primers/introductions then you can be mislead (sic). Yes, the BEA produce historical, real and current cost estimates of the value of fixed assets – but these values are neoclassical aggregates of their future services flows, not past estimates of the capital advanced to install them."* But they are not.

As one commentator on the BEA calculations points out: "*Hulten, Wyckoff and Fabricant have been so diluted by 80 years of continuous investment and depreciation, that they exist only as a memory in the data. The point being that both investment and depreciation are largely real. The BEA goes to great length to ensure that what is being counted is a product produced within a given period, which is why they deduct inventories brought forward from a previous period, while adding in inventories carried forward to the next period. If gross fixed investment was a number which included value imported from other periods, say discounted cash flows from the future, then the T accounts that form the SNA (System of National Accounts) would be disrupted.*"

And indeed, the AMECO data are much more reliable from about 1980 because they no longer depend on an arbitrary starting stock measure but on the accumulated net investment of the following 20 years from 1960. Net investment is the difference between gross fixed investment and depreciation. So the stock of capital in the BEA data should be growing by the amount of the net investment. And it does. See the BEA NIPA Fixed Asset Table 5.10:

But let us move on. Having rejected the BEA data as not being a realistic measure of capital stock, Bill Jefferies looks for an alternative measure and he focuses on data provide by the IRS. Here he claims that *"The IRS' depreciable capital less depreciation provides the actual amount of capital advanced; it is around 4.5 times lower than the BEA's historical cost fixed capital stock"* (see BJ's paper, p18).

Here, in my opinion, BJ has made an important mistake in calculating the IRS figure for capital stock. If you look at the IRS tables on corporate balance sheets, you find the line 'depreciable assets'. According to the IRS tax stats metadata (https://www.irs.gov/statistics/soi-tax-stats-2005-metadata-for-us-possessions-corporation-returns), depreciable assets are defined as *"depreciable assets from the end-of-year balance sheet were the book value of tangible property subject to depreciation (such as buildings and equipment with a useful life of one year or more). In general, depreciable assets were the gross basis amounts before adjustment for accumulated depreciation."* In other words, this is a contribution to gross capital stock. In order to get *net* capital stock, we must deduct 'accumulated depreciation', which the IRS defines as *"the portion of depreciable assets written off in the current year and all prior years."* The data for these are found on (lines 21-22) of IRS SOI Tax stats Historical Table13 1990-2013). *https://www.irs.gov/statistics/soi-tax-stats-historical-table-13*.

If you take that line 21 *less* line 22 as a measure of net fixed assets, you get a result that is way below the BEA measure, more than 50% lower. This is what Bill Jefferies does. But this is a mistake. Those two lines are not the TOTAL amount of net fixed capital stock that the IRS estimates. You also need to include the net figures for 'depletable assets' defined as "*the gross end-of-year balance sheet value of mineral property, oil and gas wells, other natural deposits, standing timber, intangible development and drilling costs capitalized, and leases and leaseholds*" – in other words, the capital stock in energy and resources industries. And you also need to include 'intangible assets' defined as *"the total gross value of goodwill, contracts, copyrights, formulas, licenses, patents, registered trademarks, franchises, covenants not to compete, and similar assets that were amortizable for tax purposes.* And then there is land, which the IRS considers is *"a depreciable asset."* These other contributions to capital stock are found on lines 23-27.

If you add these in and then deduct annual depreciation, you get an IRS figure for net fixed capital stock that is very close to the BEA's. Take the year 2013. The BEA reckons net capital stock (on an historic basis) in that year was $11.403bn – see BEA NIPA Fixed Assets table 4.3. https://apps.bea.gov/iTable/?ReqID=10&step=2#eyJhcHBpZCI6MTAsInN0ZXBzIjpbMiwzXSwiZGF0YSI6W1siVGFibGVfTGlzdCIsIjQ2Il1dfQ== The IRS (based on my calculation above) reckons the net capital stock in 2013 was $11.076bn, a difference of about 3%, not 50%.

When it comes to the annual depreciation of fixed assets, Bill Jefferies thinks that the IRS depreciation figure is 4.5 times lower than the BEA figure. And it is - if you only include the annual depreciation on 'depreciable assets' from the IRS data. However, if you include the annual depreciation from 'depletable' and 'intangible' assets and land, the IRS depreciation is much closer to that of the BEA.

For 2013, the IRS figure comes to $942bn in 2013. In the BEA's supplementary Table 7.13, it reckons the IRS depreciation figure for 2013 is $933bn (line 1). Then the difference between the IRS and BEA estimates are entirely down to *extra* depreciation made by the BEA for intangibles (see line 6 in Table 7.13). Once this is taken into account, there is little difference in the annual depreciation of capital stock between the IRS and the BEA (not four or more times lower as Jefferies claims).

BJ's conclusion is that "*The rate of profit from this calculation shows that the period of globalisation, particularly during the high period of globalisation after 2001, has not been one of profitability crises but of dramatically rising profit rates, notwithstanding wild fluctuations after 2006.*"

But he reaches this conclusion because his results for the US rate of profit are wrong. That's because he has misunderstood how the BEA measures fixed capital stock and miscalculates the IRS measures of capital stock and depreciation. The BEA data are perfectly realistic measures of capital stock and indeed the IRS data confirm that: because there is little difference between the two – not surprisingly because the BEA uses IRS data as one of its sources.

In conclusion, BJ is wrong and previous empirical research by other scholars on the US rate of profit based on the BEA data holds water; and they deliver the result that there has been a long term decline in the profitability of US capital and not one of "*dramatically rising profit rates*".

I am sure that BJ will continue to disagree and claim that the rate of profit has been rising since the late 1980s. And it has, at least up to 2000. But Jefferies results show that the rate of profit is now much higher than even in the 'golden age' of the 1950s and 1960s.
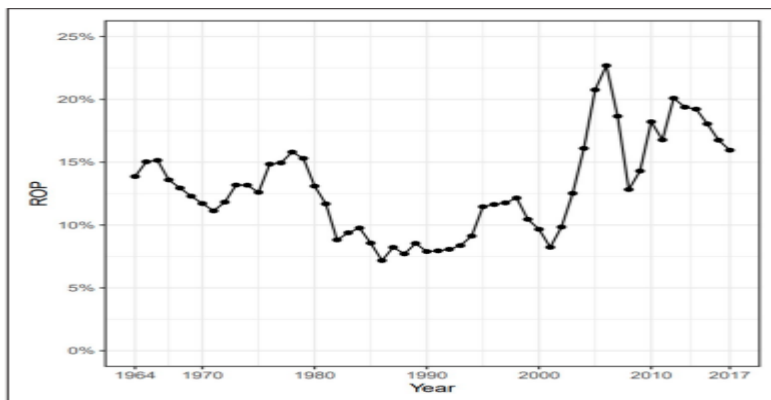
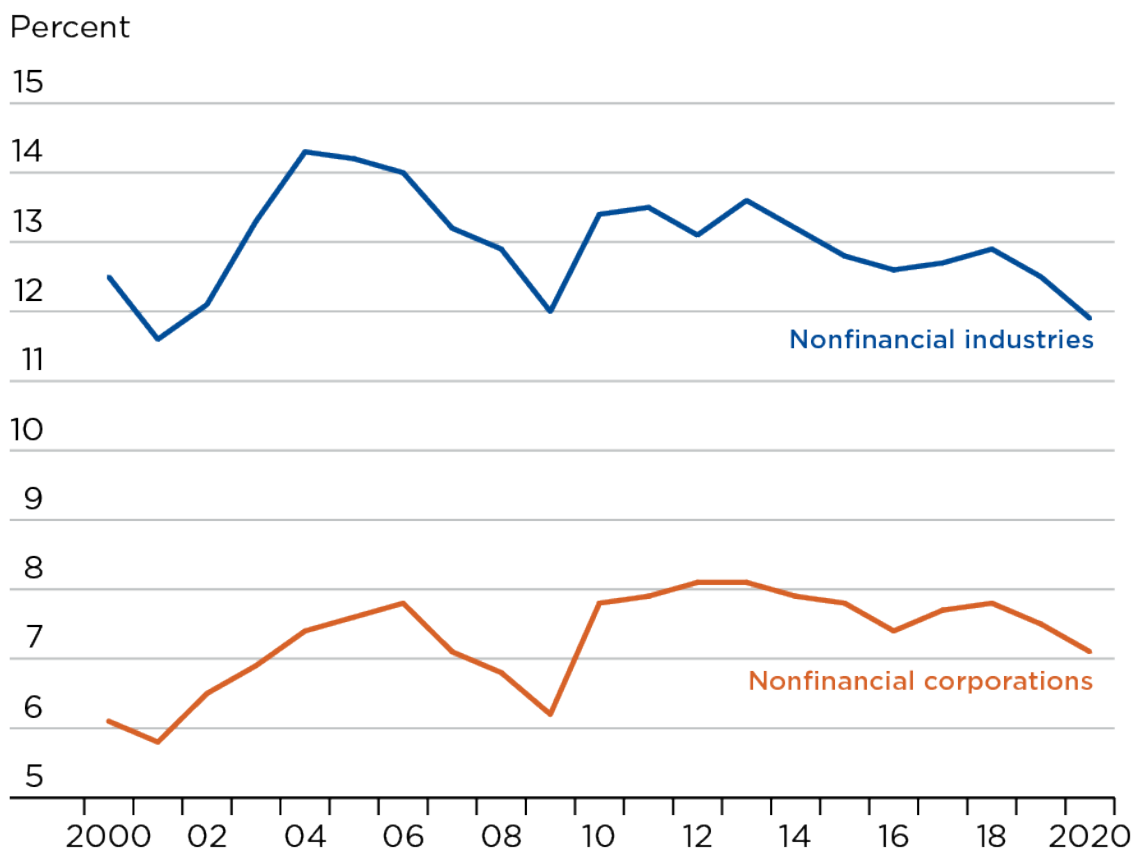**Figure 2.** The US rate of profit, 1964–2017.

If that were true, the question then arises, how do we explain the series of slumps that the US economy and other economies have experienced since the 1980s ie 1990-1, 2001, and the Great Recession of 2008-9.

As one commentator says: "*I've been alive for most of the period covered by Dr Jefferies' study and in that span, indeed even in the past 20 years, I have seen repeated large scale breakdowns of the capitalist system requiring massive state interventions to preserve the entire structure from collapse….. And yet to read Dr Jefferies' paper it seems that capitalism, to judge by its (arguably) most basic vital sign, has been in rude health the entire time. I don't necessarily think that a falling rate of profit is the only possible or currently active cause of capitalist crisis, but those crises, persistent low-to-negative real interest rates, low levels of business investment, plus flat-lining productivity all seem hard to reconcile with strong profit growth.*"

Bill Jefferies responded to this point by arguing that "*Marx's theory of crisis does not rest on falling profit rates alone, it includes the anarchy of production, disproportionality, under consumption and the tendency of the rate of profit to fall.*" But Jefferies's results *exclude* the LTRPF completely as a cause of crises. Instead, we are to fall back on a mish-mash of alternative theories (underconsumption, disproportion, anarchy etc) that Marx and Engels and other authors have already debunked and proven empirically invalid. In other words, we would have no Marxist theory of crises at all – indeed as some claim.

Luckily, BJ's data are faulty and using BEA estimates for capital stock and profits can produce realistic data showing a US rate of profit falling over the long term and despite a recovery in the last two decades of the 20th century, still at a level well below the 'golden age'. This helps to confirm that Marx's law of profitability still holds as the underlying cause of crises under capitalism.

Chart 2. Rates of Return for Domestic Nonfinancial Industries and Corporations, 2000–2020

Percent

Nonfinancial industries

Nonfinancial corporations

U.S. Bureau of Economic Analysis