WHEN ESTIMATING THE RATE OF PROFIT IT IS IMPERMISSIBLE TO USE MARKET VALUE INSTEAD OF CURRENT COST & ANNUAL COMPENSATION INSTEAD OF VARIABLE CAPITAL.

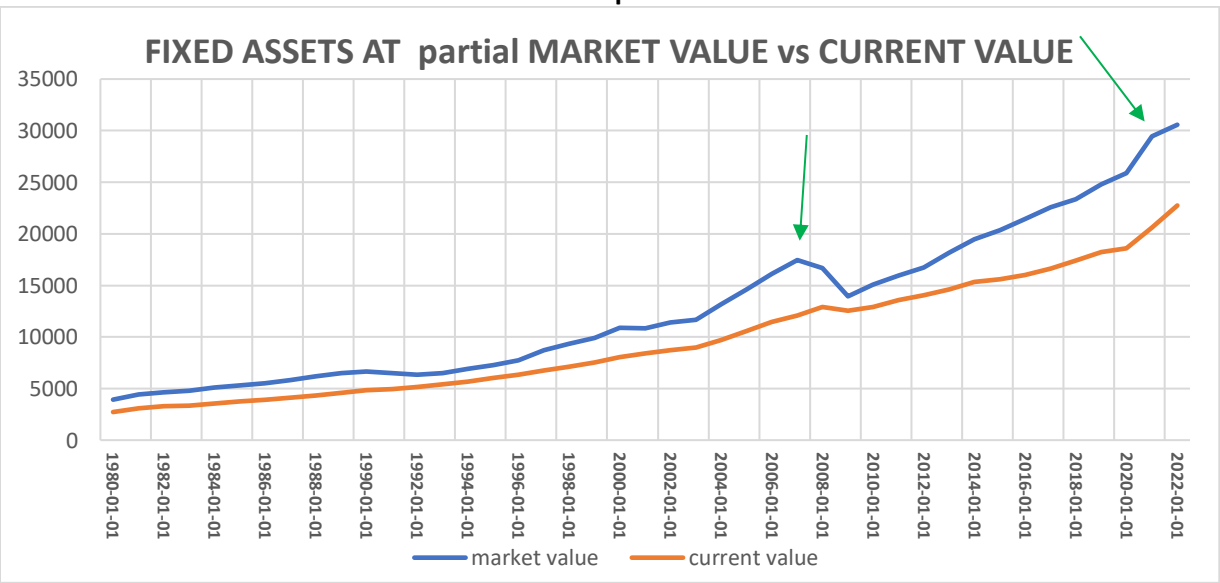
In the comment section of a recent Michael Roberts Blog titled: Prices Profits and Debt Again there was a link to the Federal Reserve Board estimate for the rate of profit using market values for non-financial assets as well as annual compensation instead of variable capital. I decided to follow that link and it has led to this article.

The valuation of fixed capital can be quite vexing. It can be measured by means of historical cost, current cost, or market value. Michael Roberts was quite right to say he eschews market value which is a misnomer if ever there was one, in favour of current cost as found in the BEA Fixed Asset Table 4.1. One of the reasons I spent time on this analysis is that a few months ago Dr William Jeffries accused Michael Roberts, myself and others of being neo-classicists because we used Table 4.1 which he insisted was estimates based on future discounted cash flows, truly a case of the child being pregnant with the mother.

Could it be the case that when contrasting market value to current cost, the market value would be greater than the current cost, as Dr Jeffries insisted? And yes it is. Bravo Dr for stating the obvious. The market value of the fixed assets used by the FED is higher, because while the BEA values structures in terms of the cost of reproducing them, the FED values real estate on the basis of discounted cash flows which vary with market conditions. And as we know up to 2022, aided by Covid Funding, real estate appreciated. So the esteemed Dr was right except of course his criticism did not apply to us.

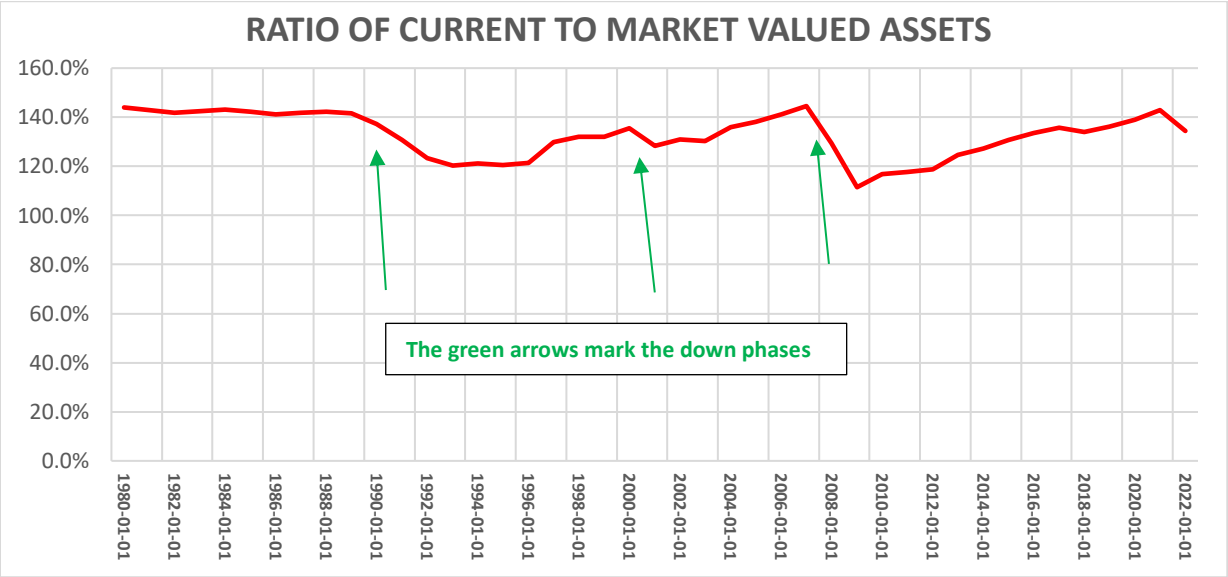
So let us examine the data which I will present in a series of graphs. Firstly the source material is found on page 141 of this downloadable version *of Z.1 Financial Accounts of the United States* released on the 7th December 2023. It confirms that while equipment, IP and inventories are valued at current cost real estate (structures) is valued at market value and this is confirmed by comparing it to Fixed Asset Table 4.1. However, despite the tag, inventories are also at market value which means they are about 25% overvalued compared to the BEA estimates, but as they only represent 2% of total assets this isn't material. The first graph tracks the difference real estate estimates at market value makes in aggregate.

Graph 1.



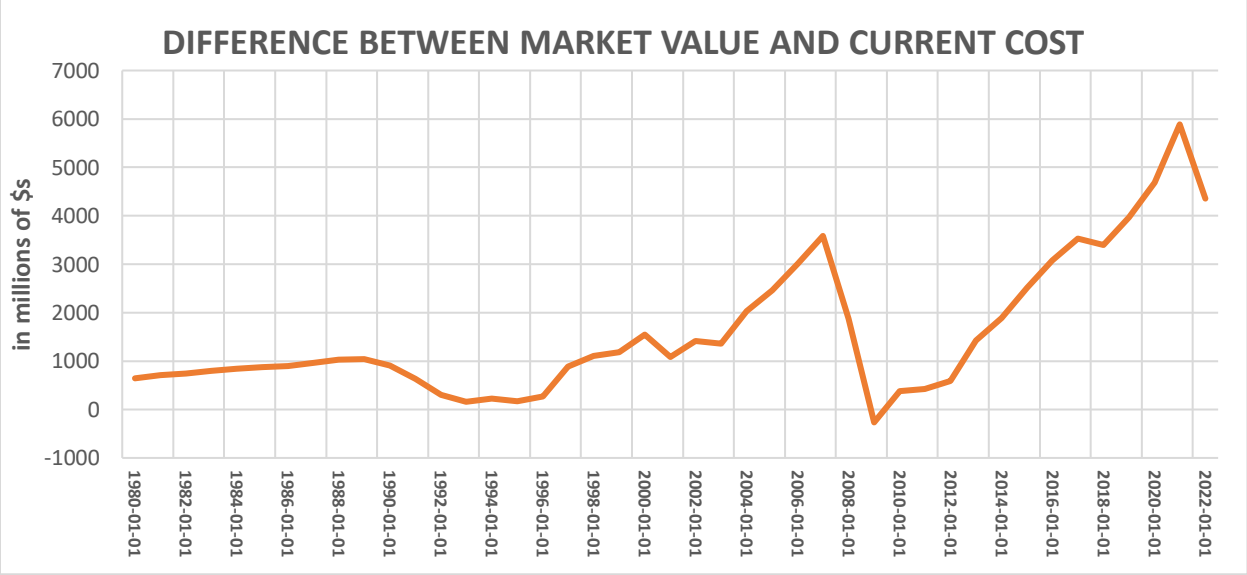
We note how at the top end of the up cycles when overvaluations predominate, the gap expands. And conversely how in the recessionary phases the market value depreciates as expected returns fall. This can better be seen in the graph below which tracks there relative relation.

Graph 2.



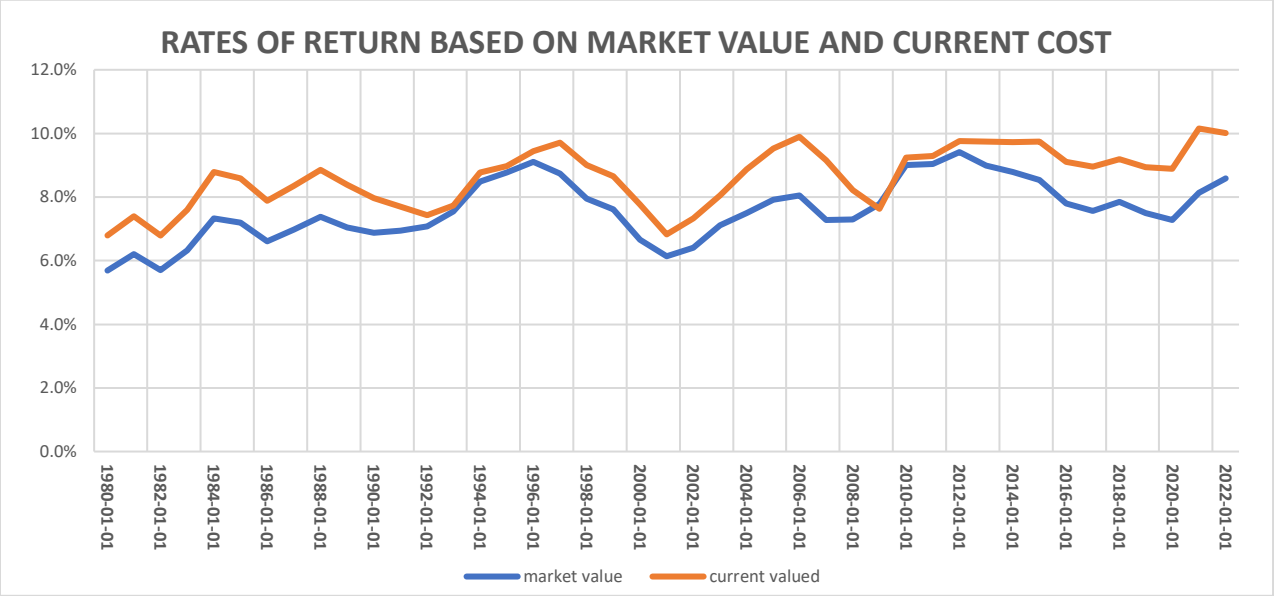
The dollar difference in valuations can be seen below. I have included inventories on both sides thus the difference is purely due to the market value estimate for real estate. We note how the market value is wiped away during recessions and elevated at the peak of the business cycle, especially over recent years where it is double the amount registered prior to the financial crash in 2008.

Graph 3.



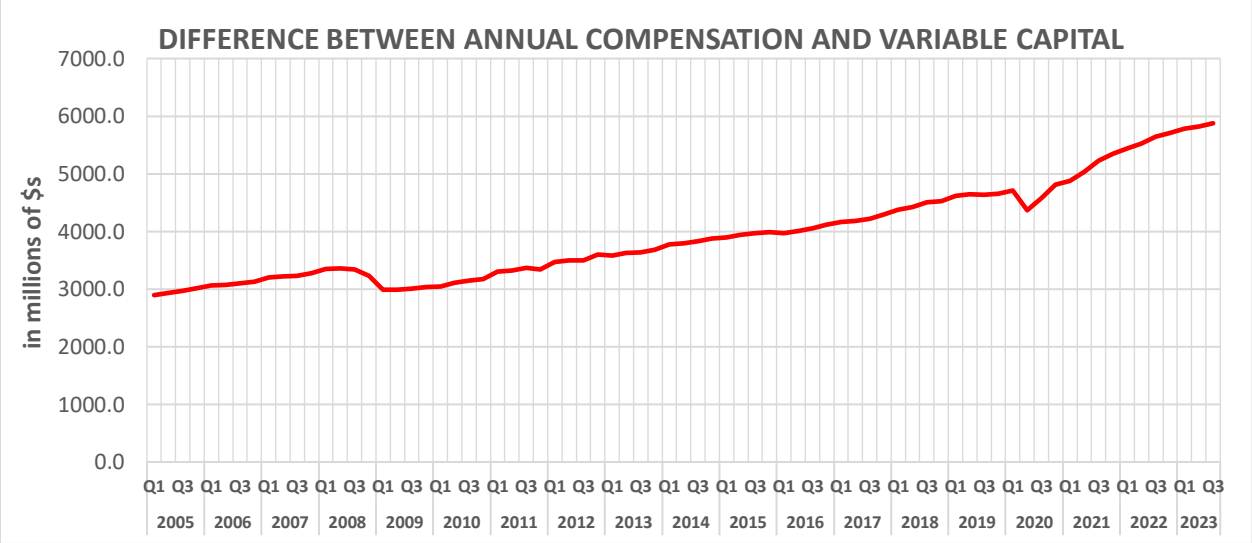
The effect on the rate of return is significant. In all cases the numerator is the net surplus found in line 24 of Table 1.14. In Graph 4 the denominator is fixed assets plus inventories as valued by the FED. & the BEA.

Graph 4.



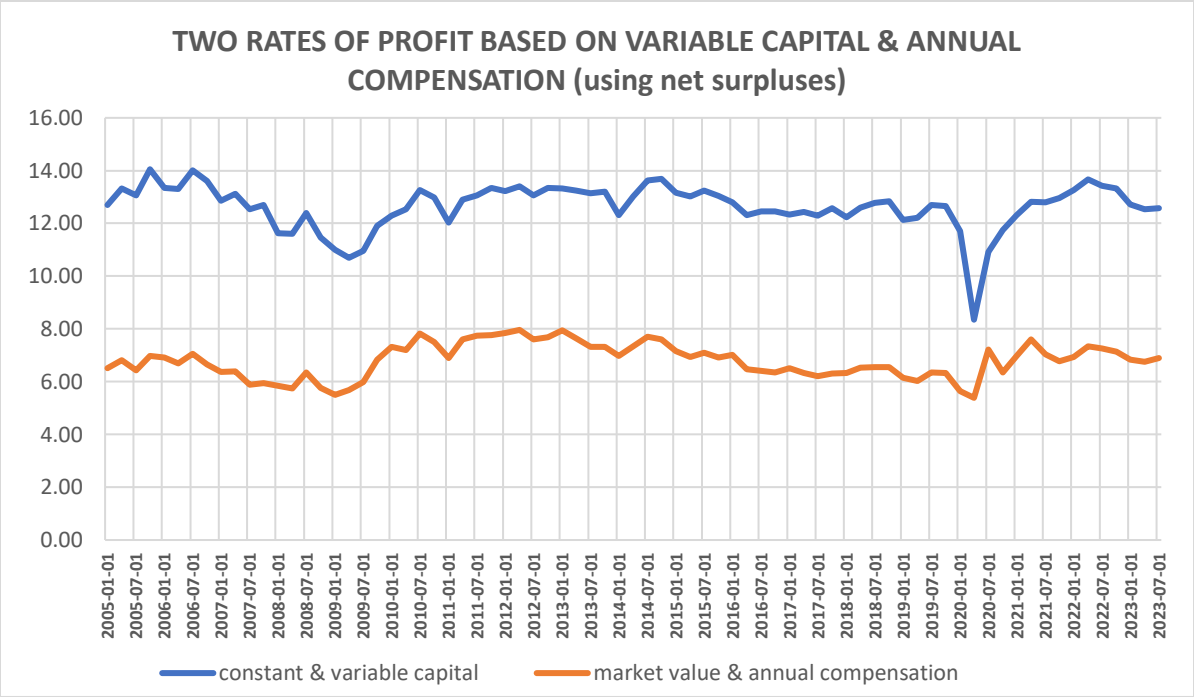
We note the two rates converge during downturns and diverge during upturns. But here comes the kicker. The mis-valuation of fixed assets is less significant than substituting annual compensation for variable capital as the FED has done. The effect can be seen in Graph 5 below.

Graph 5.



Although Graph 5 is based on quarterly data the difference is clearly larger than the data found in Graph 3. For the five-year period 2018 – 2022 the over valuation of assets averaged $4.457 trillion. On the other hand the difference between annual compensation and variable capital averaged $5.006 trillion which is one-eighth bigger. The combination of both these errors is to reduce the rate of profit considerably. This is due to the denominator being inflated by a total of $4.457 trillion plus $5.006 trillion, equal to a third of total capital measured this way. It is also interesting in the graph below to see that the Marxian rate of profit is more volatile because it more sensitive to the business cycle which in turn validates it.

Graph 6.



Which is why in my comment to Michael on his blog I made the point that the confusing of annual compensation with variable capital was the bigger error, which it is. As a result of these two compounded errors the rate of profit as measured by the FED is reduced to only 60% on average compared to the size of the actual rate of profit when properly measured. (Of course if investment decisions in the real world are informed by market values lowering the rate of profit, then this is a disincentive to invest.) This proves once again something I have insisted upon repeatedly, while it is impermissible to use annual compensation it is essential to use variable when estimating the rate of profit.

I have attached Table 1.14 which provides the data as well as the equations which made this article possible. Please pay attention to Graph 10 which compares the rate of profit based on fixed and circulating capital to the rate of profit based on constant and variable capital. The two rates vary by a tenth, with the one based on fixed and circulating capital being the lower. In today's world, given outsourcing, using circulating capital is the more accurate rate.

Conclusion.

It is impermissible to use market values for non-financial assets and it is impermissible to use annual compensation when calculating the rate of profit. It is also impermissible to exclude variable capital. The rate of profit is an essential measure of the health of the capitalist economy. No doctor would use a faulty thermometer, so why should we?

In passing Dr Jefferies should therefore withdraw his criticism that we are neo-classical economists and instead redirect his ire towards the FED who do use discounted cash flows.

Brian Green, 27th December 2023.