# WHY IT IS NO LONGER PERMISSIBLE TO CONFUSE
# THE RATE OF SURPLUS VALUE WITH THE RATE OF EXPLOITATION!

*The graph below is taken from an article I wrote and published on the academia website titled: APPLYING THE TURNOVER FORMULA TO THE SYSTEM OF NATIONAL ACCOUNTS TO DETERMINE BOTH THE AMOUNT OF WORKING CAPITAL AND ITS ANNUAL RATE OF TURNOVER. This graph is of great consequence because it proves once and for all that it is impermissible to substitute the rate of exploitation for that of surplus value. The rate of exploitation is arrived at through dividing the annual surplus by annual compensation, while the rate of surplus value is arrived at through dividing the annual surplus by variable capital. In turn, variable capital is arrived at through dividing annual compensation by the number of annual turnovers based on GO/GV + (GO-GV)/GV.*

The rate of exploitation and that of surplus value are different. The former excludes the turnover of circulating capital while the former includes it. The rate of surplus value is therefore more complex because it not only includes the rate of exploitation, but in addition, how much faster or slower that exploitation is converted into realised profits. Simply put, the annual mass of profits can rise even if the rate of exploitation falls, provided there is a disproportionate increase in the rate of turnover of circulating capital. Conversely, the annual mass of profits can fall even if the rate of exploitation rises provided once again there is a disproportionate fall in the rate of turnover.

This is demonstrated by the graph below. Non-durable manufacturing has been chosen for three reasons. Firstly, because it has manifested a sustained and vigorous increase in the rate of turnover. Secondly, because more of its output and consumption is nationally based compared to durable manufacturing. Thirdly, because its industries embody less intellectual property (I.P.), whose mistreatment in the national accounts, affects the turnover formula negatively.



NON-DURABLE INDUSTRY
profit + interest vs the rate of surplus value
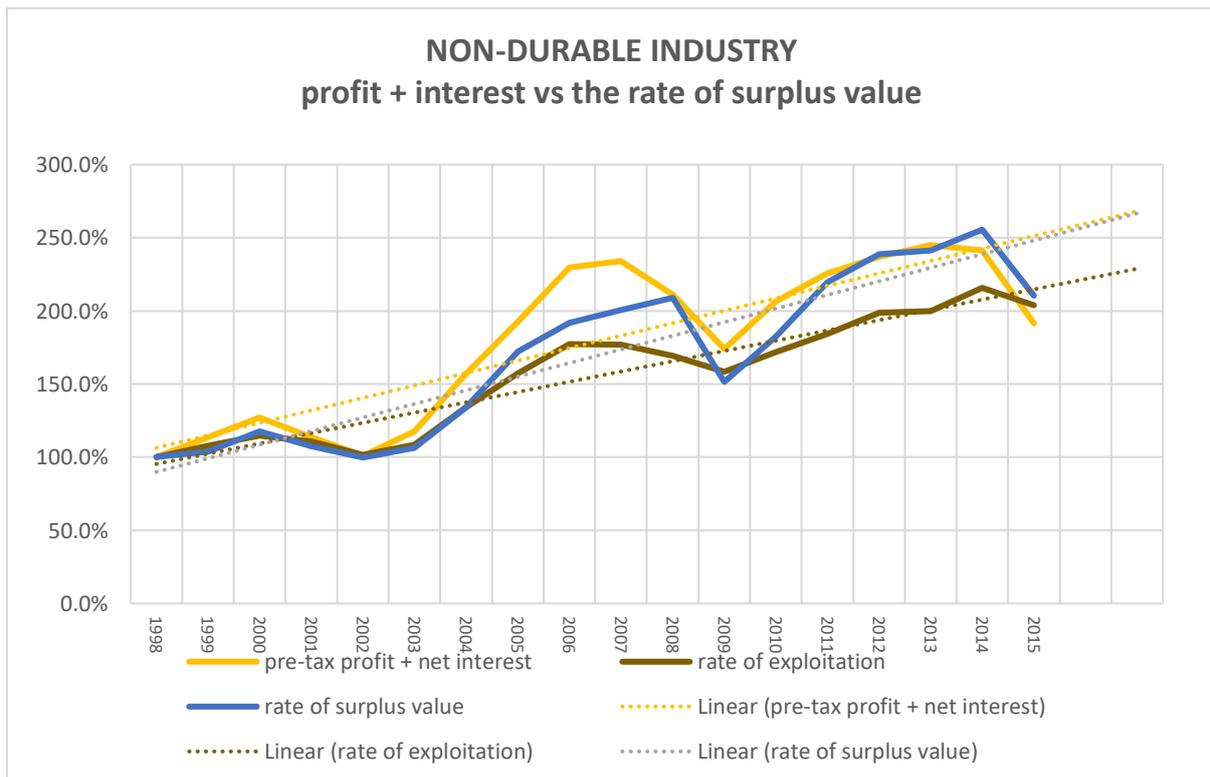
(Source: BEA Tables 6.15D for net interest, and 6.17D for pre-tax profits, GDP-by-Industry Gross Value and Gross Output for turnover calculation yielding rate of surplus value.)

The graph compares the rate of exploitation and the rate of surplus value to enterprise profit + net interest paid. The reason for including interest paid, is the effect of the business cycle on the rate of interest, which results in significant, but differing alterations to the mass of enterprise profits. Together enterprise profit and interest make up the bulk of the surplus value produced by workers within the non-durable sector.

To determine the correlation between the two rates and the mass of profits+interest, linear trends have been inserted into the graphs which have been indexed at 100% in 1998. Over the course of 17 years, which includes two business cycles (or industrial cycles as Marx preferred calling them), there has been convergence between the rate of surplus value and profits+interest and divergence between the rate of exploitation and profits+interest. In his day, Marx did not have access to national data, so was not able to prove statistically his hypothesis that it was the rate of surplus value that directly determined the movement in the mass of profits. Today that proof is provided.

The reason why the rate of exploitation diverged from profits is understood from the table below which shows the significant divergence in annualised rates of turnover.

**The Annual Rate of Turnover: Non-durable Manufacturing.**

| 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|------|------|------|------|------|------|------|------|------|
| **4.72** | **4.55** | **4.85** | **4.58** | **4.63** | **4.62** | **4.73** | **5.17** | **5.11** |
|  |  |  |  |  |  |  |  |  |
| 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| **5.35** | **5.82** | **4.52** | **5.01** | **5.62** | **5.67** | **5.70** | **5.59** | **4.87** |

(Source: BEA Interactive Tables, GDP-by-Industry, Gross Output and Value Added Tables)

The table reveals that in the ten years up to 2008 annual turnovers increased by an additional turnover, or from 4.72 to 5.82. This means that whereas it took 77 days to produce a quantum of profit in 1998 it took only 63 days to produce it in 2008, everything else being equal. It could also be said, therefore, that in 2008 there was an additional 63 days in which to produce profits compared to 1998. The best way to describe the relationship between the rate of exploitation and that of turnover is to describe the role of turnover as that of multiplier.

Turnover multiplies the effect of changes in the rate of exploitation. That does not mean in only one direction – upwards. In 2001, 2009 and 2015 the rate of turnover fell significantly, causing the multiplication effect to go into reverse. In 2009 there was a dramatic loss of turnovers compared to 2008. There was in fact a loss of 81 days in which to produce profits in 2009 because of the 22% reduction in the velocity of circulation of working capital that year. It was this loss of turnover that contributed to fall in the mass of profits in 2009 and 2010.

Without a detailed understanding of the role of turnover the transition from a relative fall in the rate of profit to an absolute fall in the rate of profit remains inexplicable. A relative fall in the rate of profit is a state where profits continue to increase, but their increase falls below the increase in the value of capital invested in their production. An absolute fall in the rate of profit is marked by an actual fall in the mass of profits itself, and it is this development that signals the imminence of recession. It always coincides with a fall in turnover, which is why the importance of the slowdown in the US economy during the last quarter of 2015 and first quarter of 2016 have not been understood.

In conclusion, the substitution of the rate of exploitation for the rate of surplus value is no longer necessary and has become intolerable because it devalues Marx's methodological legacy.

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