

Hi Aris,

You are quite right to pick up the variation produced by the final sales. My general assumption is that given the tens of millions of individual sales which are aggregated in the national accounts, there is an averaging out process. However, between industries there is clearly a difference in turnover which reveals the structure of that industry. This is primarily due to the contribution to the total value made by the final sale. If it is larger turnover slows down and if it is smaller turnover speeds up.

This was brought out in the example of Warburtons versus BP when I examined the British economy. (<https://theplanningmotivedotcom.files.wordpress.com/2018/10/uk-economy-part-2-pdf1.pdf>)

In the case of Warburtons, the baking phase adds proportionately more value than the milling or growing phases. Hence Warburtons, the final producer adds above average value to total GVA for the industry. In the case of BP, which is a major reseller of oil, for example from government owned oilfields in the Middle East, its share of the final sale is much smaller.

In the case of Warburtons industry, its individual turnover is <10% different to the industry average while BP's is spot on. The industry turnover is 3.84 while Warburtons turnover is 3.56.

Now subsequent to that article I revisited Warburton's balance sheet and looked at both their 2016 and 2017 figures. This is a more recent filing. You can find the filing on the following link at Company's House. <https://beta.companieshouse.gov.uk/company/00178711/filing-history>

Having reworked the figures, they now correlate. The first calculation is based on cost of sales/working capital. This will be used as an independent proof for the formula.

	2017	2016
Revenue in millions	£524.7	£526.3
Cost of sales	£146.7	£136.3
= cost of revenue	£378	£390
Stocks	5.4	5.1
Debtors	178.3	187.1
= Current assets	183.7	192.2
Less Creditors	73.8	82.5
Equals working capital	109.9	109.7

Using the cost of revenue divided by working capital the result is 3.44 and 3.56 annual turnovers for 2017 and 2016 respectively.

So what does the turnover formula yield? Revenue is listed above and serves as gross output.

Gross Value Added is found in the Profit and Loss Account and is the sum of total staff costs + depreciation + ordinary profits. This yields £237.3 million and £244.2 respectively.

$$\frac{524.7}{237.2} + \frac{(524.7 - 237.2)}{237.2} = 3.42 \qquad \frac{526.3}{244.2} = \frac{(526.3 - 244.2)}{244.2} = 3.32$$

The formula yields 3.42 and 3.32. Over the two years the average difference between the turnover formula and the cost formula is an insignificant 3.7%.

Regards Brian.