

CHINA 2018: RATE OF PROFIT & TURNOVER

On the 29th January the industrial profits data for China was released by the NATIONAL BUREAU OF STATISTICS OF CHINA. This has enabled the profitability and turnover figures for 2018 to be prepared. I have cut and pasted the relevant section of the report below for ease of reference.

Below this report please find the relevant calculations. As I have said before, Chinese statistics, whether by design or not, allow for the spontaneous estimation of the period of turnover, or when viewed annually, the rate of turnover.

I have used three methodologies to calculate the rate of turnover. Firstly, by using the days provided in the data highlighted in **turquoise** and the value data highlighted in **yellow**. In order to complete the formulaic calculation of turnover, GVA is additionally obtained from the current quarterly release issued by the Bureau and is referenced below. These three methods corroborate each other with the former two acting as empirical proof for the accuracy of the turnover formula.

It is important to note that the rate of return is called the complex rate of return here because **Total Assets** on which it is based are larger than fixed assets. See *Note 1* at end which is an explanatory note published by the National Bureau of Statistics of China in their Year Book, at the end of section 11. As state led enterprises have much larger cross holdings, therefore larger total assets relative to fixed assets, they appear to have lower rates of profit.

It is also important to note that profits in December and November were down compared to the same two months last year. This is the most serious cause and result of the industrial slowdown in China which is impacting the global economy, because China is the world's largest industrial economy.

THE REPORT. *"In 2018, the profits made by industrial enterprises above the designated size achieved 6,635.14 billion yuan, a year-on-year increase of 10.3 percent (calculated on comparable basis, taking into account factors such as the standard adjustment according to the statistical system, the enhancement of statistical law enforcement, the elimination of data, and the enterprise reform and divestiture, see Annotations II for details).*

In 2018, the profits of state-holding industrial enterprises above the designated size gained 1,858.31 billion yuan, an increase of 12.6 percent year-on-year; that of collective-owned enterprises reached 10.22 billion yuan, a decrease of 1.0 percent; that of joint-stock enterprises stood at 4,697.51 billion yuan, up by 14.4 percent; that of foreign funded enterprises, and enterprises funded from Hong Kong, Macao and Taiwan achieved 1,677.55 billion yuan, increased by 1.9 percent; and that of private enterprises gained 1,713.7 billion yuan, an increase of 11.9 percent.

In 2018, the profits of mining and quarrying reached 524.64 billion yuan, an increase of 40.1 percent year-on-year; that of manufacturing was 5,696.45 billion yuan, an increase of 8.7 percent; that of production and distribution of electricity, heat, gas and water reached 414.05 billion yuan, up by 4.3 percent.

In 2018, within 41 branches of industrial divisions, the industrial profits of 32 industrial divisions increased year-on-year, and that of 9 decreased. In view of the profit growth of major industries, the profits of mining and washing of coal increased by 5.2 percent year-on-year, that of extraction of petroleum and natural gas increased by 4.4 times, that of processing of food from agricultural products increased by 5.6 percent, that of manufacture of textile up by 5.3 percent, that of processing of petroleum, coal and other fuels increased by 10.7 percent, that of manufacture of chemical raw material and chemical products increased by 15.9 percent, that of manufacture of non-metallic mineral products increased by 43.0 percent, that of manufacture and processing of ferrous metals increased by 37.8 percent, that of manufacture of general-purpose machinery up by 7.3 percent, that of manufacture of special-purpose machinery up by 15.8 percent, that of manufacture of electrical machinery and equipment increased by 1.0 percent, that of production and supply of electric power and heat power up by 3.1 percent, that of manufacture and processing of non-ferrous metals decreased by 9

percent, that of manufacture of motor vehicles decreased by 4.7 percent, that of manufacture of computer, communication equipment and other electronic equipment decreased by 3.1 percent.

In 2018, the revenue from principal activities of industrial enterprises above the designated size reached 102.2 trillion yuan, increased by 8.5 percent year-on-year. The costs of principal activities were 85.7 trillion yuan, up by 8.3 percent. The profit rate of revenue from principal activities was 6.49 percent, an increase of 0.11 percentage point year-on-year.

By the end of 2018, the total assets of industrial enterprises above the designated size was 113.4 trillion yuan, increased by 6.1 percent year-on-year; the total liabilities reached 64.1 trillion yuan, increased by 5.2 percent; the total owners' equity was 49.3 trillion yuan, increased by 7.2 percent. The asset-liability ratio was 56.5 percent, a decrease of 0.5 percentage point year-on-year.

By the end of 2018, the total volume of receivable accounts for industrial enterprises above designated hit 14.3 trillion yuan, went up by 8.6 percent year-on-year. The total value of finished products for industrial enterprises accounted for 4,311.91 billion yuan, increased by 7.4 percent.

In 2018, the costs for per-hundred-yuan turnover of principal activities stood at 83.88 yuan, a decrease of 0.2 yuan year-on-year; the expenses for per-hundred-yuan turnover of principal activities stood at 8.7 yuan, an increase of 0.2 yuan year-on-year; the revenue from principal activities brought by per hundred yuan assets was 93.3 yuan, an increase of 1.6 yuan; the revenue from principal activities per capita was 1,287 thousand yuan, an increase of 145 thousand yuan; the turnover days of finished goods were 17.2 days, unchanged from the previous year; the days sales outstanding hit an average of 47.4 days, an increase of 0.3 day.

In December, the profits made by industrial enterprises above the designated size achieved 680.83 billion yuan, a year-on-year decrease of 1.9 percent, and the pace of decline expanded 0.1 percentage point than November." www.stats.gov.cn/enGliSH/PressRelease/201901/t20190129_1647457.html

Period of turnover. Method 1.

17.2 days for inventory + 47.4 days outstanding = 64.6 days, a rate of turnover of 5.65.
(Annual rate of turnover is obtained by dividing 64.6 days by 365 days.)

Period of turnover. Method 2.

Value of inventory Y4.31 trillion + accounts receivable Y14.3 trillion = Y18.61 trillion compared to revenue of Y102.2 trillion yields a turnover of 5.49. (This is under 3% different from Method 1.)

Period of turnover. Method 3 the turnover formula.

$$\frac{GO}{GVA} + \frac{(GO - GVA)}{GVA} = \frac{102.2}{30.5} + \frac{(102.2 - 30.5)}{30.5} = 3.35 + 2.35 = 5.7$$

(Data for GVA is obtained from the quarterly series - data.stats.gov.cn/english/easyquery.htm?cn=B01
Bottom line titled: Value-added of Industry, Current Quarter(100 million yuan.)

We thus arrive at rates of turnover of 5.65, 5.49 and 5.7 respectively, each method confirming the other. It is of course a source of growing frustration that the turnover formula, which has proved itself over and over again, is not in widespread use amongst those theoreticians calling themselves Marxist. Perhaps in the end, reputations have proven to be more important than fidelity to both history and class, and, nothing short of a burning bush will change this.

Working capital. (Formula) Revenue less profit divided by turnover, or, Y102.2 trillion less Y6.64 trillion divided by 5.7 = Y16.76 trillion. This compares to total assets which includes cross holdings of Y113.4 trillion. This figure of Y16.76 trillion also compares to Y4.31 trillion in inventory which shows once again why it is important not to confuse fluid capital with inventory. Inventory represents only the production period whereas fluid capital represents both the period of production and circulation.

Complex rate of return: $Y6.64/Y102.2 = 6.5\%$. (The complex rate of return for 2017 was $6.081/106.9 = 5.7\%$). The rate of return in countries outside China is obtained by dividing profits by fixed assets or better still, fixed assets plus inventories. In the case of China, Fixed Asset data is hard to find. The Chinese Statistical Bureau prefers to use Total Assets. This is a much broader category and its scope can be identified by *Note 1* taken from the Statistical Year Book, section 11 below. This gives a lower reading. Thus, the actual rate of return is somewhat higher than 6.5%. One of the confounding features of using Total Assets is that it depresses state holding industrial enterprises more than private enterprises, because state enterprises have substantial cross holdings which in turn boosts their Total Assets. This lower rate of return has been used by the privateers to demonstrate that private enterprises are more efficient compared to their state counterparts.

China is at the centre of the global industrial slowdown. The global industrial slowdown is accelerating. EU GDP increased by just 0.2% with Germany narrowly avoiding a technical recession with expectations for 2019 the lowest since 2013. Japanese GDP growth rate when annualised was flat at 0%. South Korea's growth rate while positive was the slowest in 6 years with exports down. Only the US remains an outlier.

Close attention needs to be paid the Chinese economy. What is occurring is a classical end to the industrial cycle. As yet no credit crash resulting from the slowdown in industrial and commercial turnover has occurred. However, given the substantial increase in corporate debt over the last ten years, such an economic emergency is highly likely. This quarter will be decisive, determining the direction of the global economy.

(Note 1.) Total Assets refer to all resources that are owned or controlled by enterprises through previous trades or transactions with expectation of making economic profits. Classified by the degree of liquidity, total assets include current assets and non-current assets. Current assets can be classified into monetary capital, trading financial assets, notes receivable, accounts receivable, advanced payments, other receivables and inventories. Non-current assets can be divided into long-term equity investment, fixed assets, intangible assets and other non-current assets. Data on this indicator can be obtained from the year-end figures of total assets in the Balance Sheet of accounting records.

Brian Green, January 2019.