The General Rate of Profit and Turnover of Capital

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*Page numbers indicated for the Marx's manuscripts in 1875 and 1878 are from MEGA II/14. They are translated into English by H. A.

Essence of My Talk at SSK First Round

- The most important factor of the law of tendential fall of the general rate of profit is that the rate of profit falls and the quantity of profit increases at the same time during the organic composition is rising.

- This factor generates some counteracting factors. But the latter cannot diminish the former.

- In his 1867-1868 manuscripts, Marx tried to integrate the effect of turnover into his argument for the rate of profit.

- After the publication of *Capital*, in my opinion, Marx did not abandon this law, but he wanted to elaborate this law by including the effect of turnover.

- However, Marx could not accomplish this elaboration in the end.

Two Questions: 'Marx in 1870s' and 'Social Average'

- Professor Seongjin Jeong asked me a question about Marx's argumentation of this law in 1870s. Because Michael Heinrich thought that Marx doubted his own law in 1870s. (Heinrich 2013a)

- Mr. Guhyeon Jeong asked me what 'social average' means.

- I would like to introduce Marx's manuscripts in 1870s and explain 'social average' in the context of the turnover of capital additionally.

Heinrich's Opinion ①

$$p = \frac{s}{c+v}$$

$$p = \frac{s/v}{(c/v)+1}$$

- According to Heinrich, "an increasing organic composition as such is not enough to prove a falling rate of profit" (Heinrich 2013b).

- He emphasized that Marx doubted his own law by studying the credit system, etc. in 1870s. (Heinrich 2013a)

Heinrich's Opinion ②

- "These doubts were probably amplified in the course of the 1870s. In 1875, a comprehensive manuscript emerges which was first published under the title *Mathematical Treatment of the Rate of Surplus-Value and Profit Rate*. […] it quickly becomes apparent that in principle all sorts of movement are possible. Several times, Marx makes note of possibilities for the rate of profit to increase, although the value-composition of capital was increasing. In the case of a renewed composition of book III, all of these considerations would have had to find their way into a revision of the chapter on the "Law of the Tendency of the Rate of Profit to Fall". A consistent regard for them should have led to the abandonment of the "law". (Heinrich 2013a)

Saito's Critique ①

- Kohei Saito opposed to Heinrich's interpretation (Saito 2018).

- "In other words, Marx arbitrarily changed the quantity of 'c', 'v', and 's' [in the manuscript in 1875] to see how a change in one factor would mathematically take effect on the rate of surplus-value and the rate of profit <u>without considering underlying actual changes in the material and technical components of capital</u>. Marx's calculations are so abstract precisely because he did not consider whether these mathematical changes actually correspond to a certain tendency of capitalist development, or whether these changes are even possible in the first place." (Saito 2018: pp. 195-6)

Saito's Critique ②

- As Saito showed, Marx mentioned this law in the same manuscript; "As already examined in Volume I, this progressive percentage decrease on the part of variable capital exhibits a tendency to reduce the amount of surplus-value, calculated in percent, and thus also the rate of profit =m/$\mathcal{L}$." (MEGA II/14. p. 28. translated by Kohei Saito)

- '$\mathcal{L}$' means c + v.

Marx's Manuscript in 1878 ①

- Marx wrote the short manuscript in 1878 which is titled "On the rate of profit, Turnover of Capital, Interest and Discount" by editors of MEGA. (MEGA II/14, Apparat p. 697)

- "In calculating the rate of profit, which the social capital brings about, it was assumed that 1) the rate of surplus value is the same for the different masses of capital in the different branches of industry, 2) and apart from the turnover, i.e. the turnover of the social capital in the year = 1." (p. 158)

- "In fact, the different masses of capital have different rates of surplus value and different turnover times. First, the different turnover times are to be reduced to the same denomination, e.g. months. [...]"

- "Hereupon one multiplies each capital with the turnover time and the rate of profit, which belongs to it (this is expressed in percent, like interest)." (p. 158)

Marx's Manuscript in 1878 ②

➥ "These are only differences arising from purely economic conditions, namely, different sizes of the capital masses invested in each branch of business, different rates of exploitation of labor power, different turnover times. But other aspects of equalization, such as inconvenience, dangerousness, respectability of the business, etc." (p. 158)

➥ "In the case of branch of businesses which form natural monopolies [natürliche Monopole] in the capitalist economy, this is proved by the fact that their rate of profit does not at all enter the same division [Theilung], that is, a extra profit [Surplusprofit] is left hanging on the fingers." (p. 158)

Marx's Manuscript in 1878 ③

- "Here are now two kinds. Either this monopoly is only temporary and fragile by development of the capital investments in above mentioned businesses, thus by the usual capitalist competition. Then the extra profit does not fix itself to the rent." (p. 161)

- "Or the opposite case. Then the extra profit fixes itself to the rent, which however again is subject to big changes in its quantity; ex. the ground rent." (p. 161)

- I think the former case is more important than the latter because of the current competition among capitalists. New technology is rapidly improving and quickly making a new standard universal. (Konishi [小西] 2020: 116) Natural monopolies and extra profit seem to disappear sooner or later.

- It means that the general rate of profit tends to fall further.

The Rate of Profit in Railways Industry ①

- "On the other hand, industries which form <u>natural monopolies, such as railways</u>, since <u>their profits do not enter into the regulation of the general rate of profit</u>, i.e. cannot be depressed by competition to the level with it, so on the other hand, with occasional mishap, overall constitution, they can also fall below the general rate of profit. The enormous fixed capital invested in railways, [which is] difficult and partly impossible to withdraw. And the equalization [of rate of profit] can proceed only by expansion or contraction of the part of the social capital invested in each particular branch of business. In the calculation of the general rate of profit, as far as the extra profit is taken into consideration, the calculation is the same as in the calculation of the society, where some of the associates receive a special share in addition to the equal share with the others." (p. 161)

The Rate of Profit in Railways Industry ②

- Marx mentioned the railways in the context of the general rate of profit in 1878, too. Here, he did not directly deal with the law of tendential fall of the rate of profit. But it reminds us of his explanation in the main manuscript for Vol. 3 (in 1864-1865) as follows:

- "These[railways] do not therefore enter into <u>the equalization of the general rate of profit</u>, since they yield a profit rate less than the average. <u>If they did enter into this process, the average rate would fall much lower</u>. Theoretically speaking it is possible to include them, and we should then obtain a profit rate lower than that which seemingly exists […], since it is precisely in these undertakings [railways] that <u>the proportion of constant capital to variable is at its greatest</u>". (MEGA II/4.2, p. 344, S. 309)

- But in 21 century, the business style of joint stock has already been generalized and many branches need huge fixed capital investments. They seem to enter into the equalization of the general rate of profit.

Social Average in the Context of Turnover of Capital ①

- In Chapter 1 of the main manuscript for Vol. 3 of *Capital*, Marx wrote only the title about the influence of changes in circulation time on the rate of profit (MEGA II/4.2, p. 246, S. 208)

- <u>Marx could not enough deal with the effect of turnover on the fall in the profit rate</u> in his manuscripts of *Capital* before 1867 (Moseley 2019: 135-136).

- In the 1867-1868 manuscripts Marx investigated two types of rate of profit from the viewpoint of the turnover of capital. These manuscripts were published for the first time in MEGA Ⅱ/4.3.

Social Average in the Context of Turnover of Capital ②

- Let's see Marx's simulation in 1867-1868, once again.
- Marx distinguished two types of the rate of profit as "p" on the total advanced capital and as "π" on the cost price. (MEGA II/4.3, S. 201-234)
- Two types of the rate of profit will be basically different, because "p" has a denominator which includes non-consumed fixed capital and "π" has a denominator which will change according to the speed of turnover of capital components.
- But "p" and "π" can be equal in the specific case as follows:

Social Average in the Context of Turnover of Capital ③

- The advanced capital 500 is composed as follows: C = 500 = 400fc (fixed constant capital) + 78+6 / 23crc (circulating constant capital) + 21+17 / 23v (variable capital). (MEGA II/4.3, p. 210)

- Total circulating capital (cc)=100 . fc:cc=400:100=4:1 (cf. Marx and Engels' letter on 7 and 10 May 1868)

- The rate of surplus value = 100%.

- The fixed capital of 400 turns over once in 10 years, i.e. only 40 a year.

- The working year = 50 weeks for the sake of simplification. (S. 210)

Social Average in the Context of Turnover of Capital ④

- If the circulating capital (= 100) turns over 23/5 times per year, it would lead to recovery of the total advanced capital (= 500), since only 1/10 of the fixed capital turns over once per year (∵ 100crc × 23/5 + 400fc×1/10 = 460 + 40 = 500). It means that the total advanced capital virtually turns over once per year.

- In this case:

- p = s/C (total advanced capital) = 100/500 = 20%.

- π = s/K (annual cost price) = 100/500 = 20%.

Social Average as an Ideal Average

- In this case, can we see one possibility where two types of profit rate will be equal <u>not only for individual capital, but also for social capital as a whole</u>?

- If so, we can regard this case as an "ideal average" which theoretically means <u>the average of social capital as a whole</u>.

- "… we only need to present the internal organization of the capitalist mode of production in its <u>ideal average</u>, so to speak." (MEGA II/4.2, p. 898, S. 853)

Capital Transfer Regarding the Speed of Turnover ①

- In the bundle titled "The Rate of Profit, Cost price and Turnover of Capital" by editors of MEGA II/4.3, Marx takes two steps in order to analyze the effect of turnover on the rate of profit. (MEGA II/4.3. pp.244-280)

- "I. The difference between the rate of profit calculated on the cost price and on the advanced capital. Assumption that the commodity is sold at its value and therefore the amount of profit = the amount of surplus value produced by functioning capital."

- "II. The general rate of profit is given. How does the equalization of value to the price of production take place when the turnover of various capitals in different spheres of production is different?" (MEGA II/4.3, p. 244)

Capital Transfer Regarding the Speed of Turnover ②

- Part II is characterized by the consideration of the relationship between social capital and individual capital, <u>taking the general rate of profit as given</u>.

- Individual capital's turnover and organic composition diverge from those of social capital as a whole.

- The equalization of effects on the rate of profit between various production spheres which have different organic composition and the turnover time of capitals is supposed to form a general rate of profit. (MEGA II/4.2, p. 252, S. 216)

- But Marx did not analyze such a process. In other words, he did not adopt a method of consideration based on the order in which the effects of two factors on the rate of profit are first equalized and then a general rate of profit is formed.

Capital Transfer Regarding the Speed of Turnover ③

- Why? At first I thought Marx's procedure would be a little strange.

- I supposed Marx should have dealt with capital transfer from industries with a higher organic composition and a slower speed of turnover to those with a lower organic composition and a higher speed of turnover, and then he should have taken the general rate of profit as given.

- As far as I know, he did not analyze the capital transfer regarding the speed of capital's turnover.

- If Marx had simulated the equalization of turnover's effect on the rate of profit, we would have seen the capital transfer from the industry with lower speed turnover to the industry with higher speed turnover.

- And the latter would face more competitive condition , and then the rate of profit in this industry is going to fall.

Social Capital and Individual Capital ①

- In part II, <u>Marx took the general rate of profit as given, which would have presupposed the social average mentioned above (p=π)</u>.

- By doing so, he analyzed how the organic composition and the turnover of an individual capital affects price of production (PP) of its commodity, if surplus value rate is equal between an individual capital and social capital.

- PP = cost price + average profit (<u>general rate of profit</u> × total advanced capital)

- The two factors, turnover and organic composition, act in the same direction or in opposing directions. The positive and negative effects of both factors (with the magnitude of each) on PP determine the degree to which the deviation in PP from the value of commodity is amplified or canceled out.

Social Capital and Individual Capital ②

- Positive effects on PP: Individual capital's organic composition is higher than social capital. Its turnover is slower than social capital.

- Negative effects on PP: individual capital's organic composition is lower than social capital. Its turnover is faster than social capital.

- If these effects on PP are positive, PP is much larger than the value. If they are negative, PP is much smaller than the value.

- If two factors affect PP in opposite direction (positive or negative), they offset each other. Therefore, PP can be the same quantity as value in some cases.

Conclusion ①

- Marx still mentioned the law of the tendential fall of the rate of profit in 1870s.

- He analyzed natural monopolies which can lead to the temporary rent and fixed rent. Many branches having huge fixed capital investment seem to lose extra profit or rent sooner or later because of the competition among capitalists. That is why the general rate of profit continues to fall. (MEGA II/14)

Conclusion ②

➥ In my view, if two types of rate of profit (p and π) are equal, we can also regard this case as a kind of social average as a result of equalization of turnover's effect by the capital transfer.

➥ Marx should have simulated the process in which the effect of turnover on the rate of profit would be equalized by the capital transfer.

➥ When he dealt with the relationship between PP and value of individual capital's commodity, he would have presupposed social average by taking the general rate of profit as given. We can see the possibility that individual capital's PP and value can be equal, although its organic composition and turnover time are different from those of social capital as a whole. (MEGA II/4.3)

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Appendix ①

- "The rate of profit, if calculated simply on the price elements of the individual commodity, […], would be expressed higher than it is in reality. For in the individual commodity the constant capital figures only from the point of view of its wear and tear". (MEGA II/4.2, p. 352, S. 317)

- If p is much lower than π because of the large proportion of the fixed capital in society as a whole, the tendential fall of the general rate of profit will proceed more sharply than before.

- "The greater the increase in fixed capital resulting from the increase in the productivity of labour, the greater the portion of the capital that has not been consumed or the longer the turnover period during which the reproduction process of this portion of the constant capital runs its course". (MEGA II/4.2, p. 371, S. 336)

Appendix ②

- Although the fixed capital becomes greater, its turnover time must be shortened as much as possible in the current competition among capitalists.

- Even if the depreciation of machinery becomes slower, each capital needs to replace it with new machinery before it would be outdated.

- In the main manuscript for Vol. 3 of *Capital*, Marx did not enough mention the possibility that <u>circulating capital turns over more than once per year</u> in contrast to the fixed capital's annual turnover as wear and tear.