

Subjectivism and Individualism

: A note on the Marxian theory of exploitation

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This note examines the compatibility between the microeconomic application of the New Interpretation and an axiomatic approach to the Marxian concept of exploitation provided by Veneziani and Yoshihara (2011). Illustrating a simple numerical example considering heterogeneous labor, it will be shown that the most important result of Veneziani and Yoshihara (2011) should be modified or generalized further.

Keywords: Exploitation, Labor theory of value, the New Interpretation.

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Recently, some meaningful development in the mathematical formulation of the Marxian theory of exploitation was provided (Matsuo, 2008; Veneziani and Yoshihara, 2011).

Matsuo (2008) tried to give strong subjectivism on the concept of Marxian exploitation by directly introducing subjective preferences into the definition of labor value itself. Veneziani and Yoshihara (2011), however, showed that the so-called Fundamental Marxian Theorem (FMT) does not hold and that no meaningful exploitation index can be derived from Matsuo's framework.¹⁾ Furthermore, they argued that a minimal objectivism is needed in Marxian theory of exploitation and the so-called 'New Interpretation' (NI) is a promising candidate. Two novel features of Veneziani and Yoshihara (2011) are; First, the setting of a general convex cone technology is adopted, unlike the standard Leontief economy or the von Neumann technology (e.g. Matsuo, 2008). Second, an axiomatic approach is provided to capture the objective character of the concept of exploitation.

Veneziani and Yoshihara (2011) is also premised upon the extension of the NI to microeconomic level, which was suggested by Rieu (2008). Although the NI theorists conventionally argued that the NI is only about the aggregate relationship between total labor expenditure and the net product (e.g. Mohun, 2004), Duménil, Foley and Lévy (2009) explicitly applied it to microeconomic level such as an individual industry and a category of labor under the linear production model.

This note examines the compatibility between the microeconomic application of the NI and an axiomatic approach. Illustrating a simple numerical example considering heterogeneous labor, it will be shown that the most important result of Veneziani and Yoshihara (2011) should be modified or gen-

1) Although Matsuo (2008)'s context is somehow different, this proposition recalls that, in the traditional interpretation, the rate of exploitation depends on the consumption choice of workers. See Lipietz (1982).

eralized further.

The effect of skill differences in the 'New Interpretation'

According to Veneziani and Yoshihara (2011: Theorems 6 & 7), under the definition of the NI, the FMT is compatible with two concepts of equilibrium, von Neumann's and Roemer (1981)'s. A necessary and sufficient condition for the existence of positive profit is alleged to be every worker is exploited in the sense of the NI. However, if one introduces heterogeneous labor with regard to skill differences, these theorems are faced with a new difficulty. A simple numerical example will be sufficient to show this point.

Example: There are two groups of workers, group A and B, whose quantitative weight is 50%, respectively. The monetary expression of labor time (MELT) in the NI sense is assumed to be 2 dollars per hour.

(Case 1) There is no skill difference between two groups of workers. In Marxian terms, all of the workers are simple labors. Hourly wages of two groups are equalized to 1.5 dollars. In this case, value of labor power of every worker is calculated as 0.75 in the NI. This implies that every worker is exploited. She takes only 75% of her labor expended. Therefore, the rate of exploitation is equal to $(1-0.75)/0.75=1/3=33.3\%$.

(Case 2) Group A is composed of skilled workers, while group B is made up of unskilled workers. There are significant skill differences, as evidenced by the money wage difference between the two groups of workers. Hourly wages of groups A and B are 2.5 dollars and 0.5 dollars, respectively. Once the quantitative weight of each group is equalized, the average hourly wage is 1.5 dollars. Therefore, the aggregate exploitation rate in NI sense is still 33.3%, which is

equal to that in Case 1. However, not every worker is exploited. If one applies the NI's micro-level definition of value of labor power (Rieu, 2008; Duménil, Foley, and Lévy, 2009), the workers of group A are not exploited because the value of labor power is equal to 1.25. Only the workers of group B are exploited.

One solution is to ignore this anomaly in favor of the proposition that exploitation is a collective phenomenon which cannot be examined on any micro-level. However, it is frustrating not to be able to compare exploitation rates across different industries or workplaces. Furthermore, it is inconsistent with the NI theorists' definition of sectoral rates surplus value (Duménil, Foley and Lévy, 2009).

Another solution is to admit that the 'correct' sectoral rate of exploitation, independent from value transfer between sectors, cannot be measured. Only a proxy can be used to measure sectoral rates of exploitation empirically. Otherwise, decomposing the MELT into the product of 'value expression of labor time (VELT)' and 'monetary expression of value (MEV)' may be a promising theoretical direction of the NI (Rieu, 2008; Rieu, 2009).²⁾ In this case, Veneziani and Yoshihara (2011)'s main results should be extended to incorporate the issue of heterogeneous labor.

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2) If this is the case, Case 2 above can be treated differently by considering the fact that the unequal values are created by the workers of group A and B for a same time of labor.

□ References

- Duménil, G., Foley, D. and Lévy, D. 2009. "A Note on the Formal Treatment of Exploitation in a Model with Heterogeneous Labor." *Metroeconomica* 60: 3.
- Lipietz, A. 1982. "The So-Called Transformation Problem Revisited." *Journal of Economic Theory* 26: 1.
- Matsuo, T. 2008. "Profit, Surplus Product, Exploitation and less than Maximized Utility." *Metroeconomica* 59: 2.
- Mohun, S. 2004. "The Labour Theory of Value as Foundation for Empirical Investigations." *Metroeconomica* 55: 1.
- Rieu, D.-M. 2008. "Estimating Sectoral Rates of Surplus Value: Methodological Issues." *Metroeconomica* 59: 4.
- _____. 2009. "The 'New Interpretation': Questions Answered and Unanswered." *Metroeconomica* 60: 3.
- Roemer, J. E. 1981. *Analytical Foundations of Marxian Economic Theory*, Cambridge: Cambridge University Press.
- Veneziani, R. and Yoshihara, N. 2011. "Strong Subjectivism in the Marxian Theory of Exploitation: A Critique." *Metroeconomica*, 62: 1.