

An incomplete temporalization: The reason and way for Böhm-Bawerk's regression

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Introduction

This paper tries to explain the reason and consequence for Böhm-Bawerk's intellectual shift with respect to time element from his earlier to later models. The remarkable phenomenon has been already noticed and was once reported by the present author as the regressive temporalization from Fisherian two (present and future) to Wicksellian one dimensional (the average period of production) conceptions.¹ But there seems to have not been clearly given any explanation for the theoretical necessity for Böhm-Bawerk's ostensible regression.

The answer will be that Böhm-Bawerk's detemporalization must be required for the purpose of establishing a macroeconomic model of distribution explicitly reflecting the fundamental recognition that capitalist production takes time. In order to evaluate inputs and outputs for specifying the amount of heterogeneous wealth (total or surplus value) to be distributed, it is required to assume a price system which remains constant during the production process. The assumption is the easiest way. But in order to rigorously take into consideration the empirical fluctuation of market price over time, its reality would immediately break down. Furthermore, for earlier Böhm-Bawerk who had learned in 1875/6 from Turgot the economic intertemporality that two things of physically the same kind and quality must be economically regarded as different, if they exist at the different points of time,² and then in 1884 criticized Menger and Marx by referring to it,³ there should have existed a kind of tremendous hardness in his introducing in 1888 the concept of the average period of production, which violates the economic intertemporality.

In what follows, showing Menger's dyed-in-wool hidden subjectivism as one of major hardnesses beyond which Böhm-Bawerk must have gone towards a distribution theory, this paper will provide a new interpretation of Böhm-Bawerk's detemporalization with respect to price phenomena as a methodological turn from the "quantity into price" to the "price into quantity" approaches. This

¹ Tomo, Shigeki (1997), the contents of which had been partly presented at the 7th HETSA conference in Wollongong in July of 1993, two years after the submission of my Ph.D. dissertation at Innsbruck.

² Böhm-Bawerk (1876) – Yagi Kiichiro ed. (1983)

³ Böhm-Bawerk (1884) Chap 8 and Chap 11.

contraposition was once mentioned by Hicks.⁴ He used it only in order to evaluate the Marshallian demand curve. But it would be more helpful to apply this distinction to a better understanding of Böhm-Bawerk's intellectual evolution. It must be underlined that Böhm-Bawerk's construction of distribution theory must be highly evaluated, not because of its unique component parts, especially like the average period of production and temporal wage fund doctrine, which have many deficiencies, but by its constituting an earliest typical case of consciously adopting "price into quantity" approach for macroeconomic distribution model building. It would be very natural that Böhm-Bawerk's new way of approach could not be accepted by Menger, who thought that market price as formed by exchange should not be capable of being economically objective, so that the constant or given price assumption contradicts reality.

Non-objectivity of price

Menger's second⁵ subjectivism can be found in Chapter V of his *Grundsätze*. It is his recognition of non-objectivity of market price: any price determined even at a free competitive market for a commodity does not indicate any objective equivalence, like the quantity of labour expended on that commodity, but also any objective value in which everybody could exchange that commodity for money or buy it any time after its determination. While the former point has been often referred to as a criticism of the labour theory of value, the latter has not fully received attention. Not for all economists, but for those who observe free competitive market like Stock or Commodity Exchanges, it is common to see that it is completely not universal but accidental to buy or sell a stock at yesterday's price of the same kind, because the price can become the actual value in exchange exclusively for those stock holders who participated in its determination by their ordering of sale or purchase.

The ordinary experience of newspaper journalist reporting market prices of stocks traded at *Wiener Börse* must have allowed Menger to recognize that the price at a free competitive market is not objective value in exchange for all economizing individuals as long as they are not all the participants trading at the market. If non-participants newly want to buy a stock, they must normally pay the price different from that established at previous market sessions. Or it is almost impossible to resell the most saleable commodities like stocks at the same price as that at which they were bought. From the general observation in economic life that "every exchange is not capable of reversal,"⁶ Menger arrived at a non-objective or subjective conception of market price: a market price is strictly subject to time and place of transaction.

"Thus commodities that can be exchanged against each other in certain definite quantities (a sum

⁴ Hicks, John Richard (1956) p.83

⁵ His first subjectivism can be found in Chap. II of his *Grundsätze*, where by introducing the viewpoint of individuals' knowledge of available quantities, from which Hayek should later learn Austrian subjectivism, Menger subjectified the objective concept of command (*Verfügung*), which constitutes the fourth condition for a thing to be a goods in Chap. I of his *Grundsätze*. See Tomo (2006) in Japanese.

⁶ Dingwall, James and Hoselitz, B. F. tr. (1981) p. 193

of money and a quantity of some other economic good, for instance), that can be exchanged for each other at will by a sale or a purchase, in short, commodities that are equivalents in the objective sense of the term, do not exist even on given markets and at a given point in time.”⁷

Unlike Jevons and Walras, Menger thus unconsciously went beyond Cournot who defined market as “the entire territory of which the parts are so united by the relations of unrestricted commerce that prices there take the same level throughout, with ease and rapidity”⁸. Almost all the economists followed Cournot’s definition and extended it over time: since the same level of market price remains holding for all the members of an economic society as long as the market remains freely competitive, everybody could buy and sell any amounts at the price unlimitedly. But Menger did not take this 19th-century definition of market and the conception of competitive price, and instead underlined the non-objectivity of market price.

This way of thinking can be interpreted as questioning one of the major settings in microeconomics. It was once called “price into quantity” approach by Hicks⁹: economics tries to find economically optimal resource allocation (consumption and production) under a given price system. Whereas one of major examples belonging to this approach is the doctrine of marginal productivity, the Austrian theories of imputation can be counted as a typical instance for the “Quantity into Price” approach. The latter tries to explain the price formation of productive means, which the former presupposes in order to determine the amounts of product and employment. The presupposition of given price system could be easily justified by regarding all the markets as free competitive. This convenient justification became very dominant in accordance with the demonstration of the existence of competitive prices in the Walrasian general equilibrium model. But in the very beginning of microeconomics, Menger was fully aware that it is totally unjustifiable to assume prices as given even at any free competitive market, because there is nothing objective in price phenomena in the sense that there has never existed such a social institution that could allow every individual to exchange at will at that price.

Böhm-Bawerk’s violation and beyond

After his 1884 declaration that the theory of interest belongs to that of value, Böhm-Bawerk started his reformulation of Mengerian subjective theory of value and price until 1886, and violated Menger’s second subjectivism. The direct evidence can be procured in the subtitle of Second Part of Böhm-Bawerk’s 1886 article, “Grundzüge der Theorie des wirtschaftlichen Güterwerts”: Die Theorie des objektiven Tauschwertes¹⁰. This title clearly shows that Böhm-Bawerk sees something objective in the price phenomena. Since, according to a letter from Böhm-Bawerk to Menger, the reformulation project

⁷ Dingwall, James and Hoselitz, B. F. tr. (1981) p. 193

⁸ Bacon, Nathaniel T. tr. (1897) p. 51

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¹⁰ London School of Economics edition (1932) p. 83

took place not by Menger's recommendation, but on Böhm-Bawerk's own side, this subtitle must have exclusively belonged to Böhm-Bawerk. The fact that it was removed when the contents of that article were included in Böhm-Bawerk's *Positive Theorie des Kapitaless* could allow us to speculate that Menger must have criticized Böhm-Bawerk's objective conception of price phenomena, and as a result Böhm-Bawerk omitted it.

But the omission does not necessarily mean Böhm-Bawerk's acceptance of the criticism by Menger. It must be also compatible with Böhm-Bawerk's thought that it is unnecessary to recognize something objective in price for the purpose of constructing a model of distribution. Instead of some objectivity in price, what he needed for his period-of-production model was to presuppose the price level as constant for the calculation of market value of total products to be distributed. For its foundation, he adopted the long run equilibrium of the 19th century, called the law of cost (*Kostengesetz*: average cost = market price in the long run), and asserted that it is, as a partial law of price (*ein partikuläres Preisgesetz*)¹¹ within the law of supply and demand, consistent with the marginal utility theory of value and the theory of marginal pairs.¹²

At this stage, Böhm-Bawerk flexibly changed his approach from "Q into P" to "P into Q". This methodological turn could be traced also in the dual structure of *Positive Theorie des Kapitaless*, which consists of the explanation of the existence of positive rates of interest as well as that of the determination of the average period of production, the amounts produced and profit under given rates of wages (price of productive means). Though authorizing Böhm-Bawerk to construct a macroeconomic model of distribution, it resulted in the retraction of his earlier conscious recognition on the effects by economic intertemporality. Once he consciously applied his idea of economic intertemporality in criticizing Marxian exploitation theory of interest in 1884, but he did not repeat it any more in his arguments in *Karl Marx and the close of his system*, in 1896. One could also interpret this transformation as a circumstantial evidence for Böhm-Bawerk's temporal regression.

Menger and Böhm-Bawerk

Unlike Böhm-Bawerk, Menger could not develop any macroeconomic model or discussion on distribution in his *Grundsätze*, partly because he so strongly kept his realistic subjective conception of price that he could not introduce the methodological assumption of constant price, and partly because he could not accept P-into-Q approach due to his fundamental view of economy: since price appears after exchange, it cannot be the starting point of economy:

"The starting point of every economy, however, is the goods *directly* available to economic subjects. In respect to future times, or periods, we also have goods available in an *indirect* way (through the means of production or exchange in our possession). The goods which we have

¹¹ London School of Economics edition (1932) p. 81, 141

¹² London School of Economics edition (1932) p. 146

available in this way (the pertinent products and materials) are, however, limited quantitatively and qualitatively by the goods that we have directly available".¹³

Quantitative and qualitative limitations cause economic problems, the solution of which would be found in the formation of price. Needless to say, this is the Q-into-P philosophy prevailing in the chapter structure of the first edition¹⁴ of Menger's *Grundsätze*: goods, economic goods, value, exchange and price. Probably from this dyed-in-wool subjectivist methodological poison, Menger evaluated Böhm-Bawerk's theory as one of the greatest errors ever committed.¹⁵

Nevertheless, since Böhm-Bawerk's regression with respect to time element at least brought a theoretical achievement in the field of distribution theory, one might not completely say that Böhm-Bawerk was not satisfied with his period-of-production model,¹⁶ although there are several circumstantial evidences for this interpretation: the definition of average period of production violates the intertemporality of labour inputs existing at different points of time; and he confessed to Wicksell in 1892 that he would revise the contents of *Positive Theorie des Kapitals*; and there does not exist Böhm-Bawerkian concept of capital in his period-of-production model.

Concluding Remarks

An irreconcilable conflict can be thus detected in the evolution of Böhm-Bawerk's doctrines, especially between the economic intertemporality and the methodological assumption of given price or the "P into Q" approach. But for himself, it seems to have not become any serious matter, because of his mind flexibility according to circumstances or agenda. In his lectures in economics at the Innsbruck University, he taught the use theory of interest, which he had strongly criticized. After Innsbruck, Böhm-Bawerk, as a *Hofrat*, a high-ranked civilian at the Finance Ministry, promoted to completely abolish the old system of income taxation, which he had protected as a representative for the FM at the administration court established in 1876. Many episodes would allow us to speculate that Böhm-Bawerk was much more flexible than Menger in developing economic doctrines. The difference in two founders of the Austrian School could be explained by that in their agenda. Böhm-Bawerk gave priority to the making of economic model for showing the positive share of capitalists without exploitation of labour, which was lacked in Menger's *Grundätze*. From this point, the role of Schäßle who had taught economics to Böhm-Bawerk and Wieser at Vienna in 1871 should be reexamined once again.¹⁷

¹³ Menger, Carl (1883) - Nock, Francis J. tr. (1963) p.216

¹⁴ Its second edition published by his son, Karl Menger, in 1923, begins with non-quantitative elements: human needs. This editorial modification would gradate Menger's Q-into-P philosophy.

¹⁵ See Endres, Anthony M. (1987)

¹⁶ On this interpretation, see Tomo (1994), Tomo ed. (1998)

¹⁷ Hennings was the first to emphasize it. Kurz, Heinz D. ed. (1997)

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