Hitotsubashi Journal of Economics 24 (1983) 153-158.

COMMENTS ON PROFESSOR MINOGUCHI'S INTERPRETATION OF THE *TREATISE* AND THE *GENERAL THEORY*

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I. *Introduction*

The object of this paper is to comment on some aspects of Minoguchi's interpretation of the *Treatise* and the *General Theory*. In an interesting series of papers, Minoguchi (1981, 1982) has examined the evolution of Keynes' thought from the *Treatise* to the *General Theory* and has argued persuasively and, I think, correctly that this evolution must not be looked at from the narrow viewpoint of 'effective demand theory' or 'multiplier theory' but from the broader perspective of a 'monetary theory of production.' A 'monetary theory of production' describes an economy in which money is non-neutral and affects the motives, decisions and real behaviour of economic agents.

Minoguchi argues that the *Treatise* should be re-assessed from the viewpoint of a 'monetary theory of production.' But Minoguchi concentrates almost entirely on the *General Theory*. In this paper, we deal with the *Treatise* and argue that Keynes' bearishness theory of the price of securities developed in the *Treatise* is of fundamental importance. It provided the basis for subsequent developments in multiplier theory and for the construction of a 'monetary theory of production.' We conclude by criticizing some aspects of Minoguchi's treatment of multiplier or effective demand concepts in the *Treatise*.

II. *The Bearishness Theory of the Price of Securities*

In contrast to the views of Klein and Patinkin that the theoretical frameworks of the *Treatise* and the *General Theory* are utterly different and that the theory of effective demand is to be found only in the *General Theory*, Professor Minoguchi argues that the evolution of Keynes' thought from the *Treatise* to the *General Theory* should be seen as an attempt on Keynes' part to broaden the scope of monetary theory and construct a 'monetary theory of production.'

The object of this paper is to supplement what Minoguchi has to say by pointing out that the antecedents of a 'monetary theory of production' are to be found in the *Treatise* primarily in Keynes' conceptualization of the price of securities. According to Keynes, the price-level of investments as a whole, and hence of new investments, is determined by the desire of public to hold securities and the willingness of the banking system to create savings-deposits. This theory has strong implications. It implies, for example, that excess-saving will not automatically lead to investment. What is not so well-known is that this view was fully and explicitly stated by Keynes in the *Treatise* as a consequence of the bearishness theory of the price of securities. For if saving exceeds the cost of investment, entrepreneurs in the consumer industries are making losses. To finance those losses they will sell securities. The excess supply of securities will be matched exactly by the excess demand for securities on the part of the savers. Hence, if there is no change in the bearishness function, the price of securities will not change and investment will be unaffected. This denial of an automatic linking mechanism between saving and investment is fundamental for Keynes' theory as stated in the *Treatise* and the *General Theory.*

The bearishness theory of the price of securities implies that money is non-neutral. The amount of new capital goods created depends on the price of securities. The price of securities depends partly upon an 'objective' factor like the supply of savings-deposits. But it also depends upon the psychological attitude of agents with respect to securities. Thus the decision to invest in real capital goods is *intimately linked* with the motives and decisions of agents with respect to money. Money becomes non-neutral because decisions about how much money to hold affect the price of securities and the amount of investment in real capital.

The bearishness theory of the price of securities is at the basis of the theory of effective demand. If saving were always equal to investment, it would not matter if the marginal propensity to consume is less than unity, since the excess saving at full-employment would be offset by investment. The economy would always be at fullemployment and there would be no need to explain why and how output variations bring saving and investment into equality. It follows that the problem of effective demand, the problem that is of explaining how output variations bring about saving-investment equality makes sense only in the context of a model in which the bearishness theory of the price of securities, or some refined version of it, is assumed to hold. Thus even if it is true, which it is not, that multiplier concepts are not even foreshadowed in the *Treatise*, it does not follow that the theoretical framework of the *Treatise* is irrelevant to the subsequent evolution of Keynes' thought and his development of a theory of effective demand, as Patinkin and Klein have suggested. It is curious that critics of the *Treatise* overlook the fact that the problem of effective demand and under-employment equilibrium becomes meaningful only in a model which includes the bearishness theory of the price of securities, because it is only in such a model that the link between saving and investment is severed.

III. *Antecedents of the Effective Demand Theory in the Treatise*

According to Minoguchi, the theory of effective demand contains the following three mechanisms: (1) quantity adjustment process, (2) amplification of a change in demand by the consumption-income relation and (3) the idea that output variations bring about saving-investment equality. Minoguchi (1981, p. 38) says that it is "dubious that we can find the effective demand theory already in the *Treatise*," although he arugues that a re-assessment of the *Treatise* is necessary. We argue below that the three mechanisms exist in an inchoate form in the *Treatise*.

With respect to the quantity adjustment process, Minoguchi agrees with the argument presented in my book on Keynes [Mehta (1979, Chapter 5)] that this mechanism is there in the *Treatise*. But Minoguchi says that "in the *Treatise*, it is the price adjustment which comes first" [Minoguchi (1981, p. 37)]. In response to Minoguchi's criticism it should be observed that Keynes knew and emphasized the fact that, strictly speaking "it is the *anticipated* profit or loss which is the mainspring of change" [Keynes (1971, p. 143)]. This means that if entrepreneurs can forecast an excess of saving over investment at the current or contemplated level of output, they will contract the volume of output even *before* there has been a fall in prices [Keynes (1973, p. 142)]. Thus, strictly speaking, excess saving can lead to a fall in the output of consumption-goods without any change in the price level.

Secondly, it should be noted that in response to Hawtrey's criticism that demand first affects output and then price, [Keynes (1973, pp. 142–145)] pointed out that Hawtrey overemphasizes changes in stocks in response to demand disturbances. Keynes agreed with Hawtrey that in so far as stocks adjust to demand disturbances, the difference between fixed investment and saving will be partially eliminated and the price change will be much smaller. With full adjustment of stocks, there will be no change in price and demand will affect output.

To start our discussion of the other two mechanisms consider the following quotation from Keynes' *Treatise*:

> When for any reason an entreprenuer feels discouraged about the prospects, one or both of two courses may be open to him he can reduce his output or he can reduce his costs by lowering his offers to the factors of production. Neither course, if adopted by entrepreneurs as a whole, will relieve in the least their losses as a whole, except in so far as they have the indirect effect of reducing savings or of allowing (or causing) the banking system to relax the terms of credit and so increase investment (neither of which is what the entrepreneurs themselves have in mind); whilst, on the other hand, both courses are likely to aggravate their losses by reducing the cost of investment [Keynes (1971, p. 144)].

When there is an excess of saving over investment entrepreneurs in the consumption industries make losses. In such circumstances, reduction of the costs of production is not necessarily a good thing for entrepreneurs because the money demand for consumption goods will also fall with the costs of production. This is the gist of the argument of chapter nineteen or the *General Theory* in which Keynes says that a wage cut will cure unemployment only if demand in money terms is unchanged. He goes on to argue that, in general, demand in money terms will not be unchanged.

Minoguchi is right in arguing that in the *Treatise* there is no *systematic discussion* of the equilibrating effect of output changes on the relationship between saving and investment or demand and supply. In other words, in the *Treatise* Keynes did not have any idea of the aggregate demand and supply functions for output as a whole. This meant that Keynes could not develop a precise, quantitative saving-investment theory of output which would enable him to show why output is at precisely one level and to explain the precise nature of the forces that would push the system back to the point of equilibrium.

But is Minoguchi right in maintaining that there is *nothing* to show the effects of output change on demand and supply or saving and investment? We shall give evidence to show that the *Treatise* contained a saving investment theory of output and price. In the quotation from Keynes given above intrepreneurs are discouraged about the prospects because the excess of saving over investment has resulted in a lower money demand for their goods. Because of the losses they will reduce their offers to the factors or production and they might also lower the rate of remuneration of these factors. At this stage both money income and real income have fallen. It is clear that for equilibrium to be re-established the excess saving has to be eliminated. In the passage quoted above Keynes refers to two 'mechanisms' by which this might be brought about. On the one hand, the fall in the costs of production and the level of output will reduce the requirements of the industrial circulation and make possible a transfer of resources to the financial circulation. If the financial market is not unfavourable there will be a tendency for the price of securities to rise. This may stimulate investment.

But are we to assume that the level of saving has remained the same in spite of the profit and income deflation? Did Keynes assume a constant level of saving in the *Treatise*? If this is the case, as Patinkin has pointed out, we would have to assume that the marginal propensity to consume is equal to one and equilibrium can only be established by changes in investment via the Keynes effect. However, there is evidence in the *Treatise* to show that the level of saving is not constant so that the excess saving is cured partly by a fall in saving.

There is evidence to show that the level of saving is not constant because saving is a function of income so that the level of saving will fall when income falls. Consider first the passage quoted above from page 144. In that passage Keynes refers to two mechanisms that will restore equilibrium. One is the Keynes effect described above. The other one is the 'saving effect.' Keynes says that the reduction of the income of the community 'will have the indirect effect of reduced savings.' This means that equilibrium is partly re-established by a fall in the amount of saving (because of a lower level of income) and partly by an increase of investment. The following is Keynes' theory of saving [Keynes (1971, pp. 251–252)].

> The business of saving is essentially a steady process. If there are disturbances in the economic world, these by affecting prosperity may react on the rate of saving. But a disturbance will seldom or never be initiated by a sudden change in the *proportion of current income which is being saved* (emphasis added).

It is clear from the above that Keynes regarded saving (or consumption) as being a constant proportion of income. It follows from this proposition that the amount of saving is not constant. As income falls, the level of saving will also fall because it is a constant proportion of income. Further evidence to support this interpretation can be obtained from Keynes's banana parable [Keynes (1971, pp. 158–160)] and from his discussion of the 'modus operandi' of the bank rate [Keynes (1971, pp. 180–187)]. In the banana illustration Keynes assumes that equilibrium is disturbed by a thrift campaign. He concludes by listing three 'mechanisms' that will restore equilibrium. The first 'mechanism' is not interesting. Keynes says that equilibrium might be established by the whole population starving to death. The other two mechanisms are the ones we have discussed above. On the one hand, Keynes says that the thrift campaign would peter out as a result of the growing poverty. On the other hand, investment might be stimulated due to the Keynes effect of transferring resources from the industrial to the financial circulation. It is clear from the above that Keynes felt that equilibrium would be partially restored by the fall in saving due to the fall in income. A similar conclusion can be drawn from Keynes' discussion of the 'modus operandi' of bank rate.

The above discussion proves that there is evidence in the *Treatise* supporting our interpretation that excess saving disequilibria are cured partially by a fall in the amount of saving as the output and income of the community decline. We have argued that the tenor of the theoretical segments of the book suggests that Keynes was working with a saving-investment theory of output and price. Since saving leads to losses for entrepreneurs, which leads them to contract the volume of output in the consumption-goods industries and since saving, in general, is not offset by an increase in the production of capital-goods (the bearishness theory of the price of securities plays a crucial role here) a discrepancy between saving and investment leads, not to a change in the rate of interest but to a fall in prices and the level of output and employment. Interest rates *may* fall *after* the reduction in the costs of production and the level of output. It is in this sense that the *Treatise* has a saving-investment theory of output. The *Treatise* does not tell us how much output will fall as a result of an excess of saving over investment, since at that time Keynes had not clearly formulated the idea of the demand and supply functions for output as a whole. But it does tell us that if at a certain level of output, saving is greater than the cost of investment, the amount of demand in terms of money will not be as great as entrepreneurs expected. The result will be that there will be a fall in the price and output of consumption-goods. Equilibrium may, and in general will, be restored at a lower level of price and output partly by a fall in saving at the lower level of income and partly by a rise in investment which takes place because the lower income has pushed released resources to the financial circulation. We may conclude by observing that the *Treatise* surely *suggests* that an excess of saving over investment at 'full-employment' might lead to the re-establishment of equilibrium at a lower price-level and output level.

IV. *Conclusions*

The discussion in the preceding pages confirms Minoguchi's view that the evolution of Keynes' thought from the *Treatise* to the *General Theory* must be seen as an attempt on Keynes' part to broaden the scope of monetary theory and to construct a 'monetary theory of production.' We have argued above that the bearishness theory of the price of securities provided the basis or 'gestalt' for these subsequent developments. In opposition to the views of Klein and Patinkin, we contend that the bearishness theory provides the link between monetary theory and effective demand theory. This contrasts sharply with the view of Klein and others that the Keynesian theory of money merely rounds out the theory of effective demand [Klein (1947, p. 43)]. Furthermore, we have argued that the antecedents of the effective demand theory are to be found in the *Treatise*.

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