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The Hawtrey Connection

–Fisher, Hawtrey and Keynes on the Nature of Money–

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I Introduction

It was expressed in *A Treatise on Money* by Keynes himself that he belongs to Wicksell's intellectual genealogy, and Hayek (1931) also regarded the book as a trial to merge Wicksell's monetary theory into the traditional Cambridge monetary doctrine. But I think that the idea of the Wicksell connection is wrong because it disregards the fundamental distinction between real analysis and monetary analysis by Schumpeter. I believe that on the view point of monetary analysis,it is not Wicksell but Hawtrey who influenced Keynes. Hawtrey has been neglected in the studies on Keynes. Although Davis (1980) and Patinkin (1976) pointed out the importance of Hawtrey, they are also wrong because they focused on the shift from *A Treatise on Money* to *The General Theory*. However, Hicks rightly indicated that the important parts of *A Treatise on Money* took a form of an answer to Hawtrey's *Currency and Credit* (Hicks (1977), p. 118). Nothing gives me greater encouragement than the sentence that the author wants to assert that the story began from Hawtrey (*ibid.*). Harrod wrote in *The Life of John Maynard Keynes* that Hawtrey had given a great influence to Keynes through his writings on the subject of banking policy ((1951), p. 352). In fact, Keynes himself regarded not Wicksell but Hawtrey as the "grandparent" in the process of escape from habitual modes of thought and expression (JMK, Vol. 14, p.

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202, n. 2). However, neither Keynes nor Harrod clarified what had been the influence.

I think that the meaning of Keynes' "grandparent" is expressed in the following two points:

1. Keynes' theory of money in *The Treatise* was based on Hawtrey's theory of "an abstract money of account" developed in *Currency and Credit.*
2. The "circular" view as seen in the first fundamental equation is found in critical acceptance of the framework of Hawtrey's monetary theory of production developed in *Good and Bad Trade* and *Currency and Credit.*

This paper discusses on the first point.

II Fisher

The view on money and monetary economy and the definition of money are mutually related, so considering the definition of money is never trivial. Minsky says that money and the monetary system are the natural starting point for economic theory (Minsky (1975), p. 72). Now, let's begin the discussion from the definition of money by Fisher, "the great-grandparent" of Keynes, because the character of monetary theory by Hawtrey and Keynes seems to become clearer by comparison with Fisher.

In *The Purchasing Power of Money*, Fisher defined commodities as all movable wealth (except human beings) and included money in commodities. "Any commodity to be called 'money' must be *generally acceptable* in exchange, and any commodity generally acceptable in exchange should be called money" ((1911), p. 2). It is not essential that the general acceptability is enhanced by law and the necessary condition for commodities to be money is only to possess general acceptability. "[W]hile a note is generally acceptable in exchange,a cheque is *specially* acceptable only, *i.e.* only by the consent of the payee". Therefore, A "bank deposit transferable by cheque is included as circulating media, it is not money" ((1911), p. 11). However, bank deposits are excellent substitute for money. Fisher then categorized goods into three types of money, deposits (deposit currency) and all other goods and reached six possible types of exchange:

(1) Money against money,
(2) Deposits against deposits,
(3) Goods against goods,
(4) Money against deposits,
(5) Money against goods,
(6) Deposits against goods,

Of these types, (1) means money changing, (3) barter and (2) and (4) banking. After all, Fisher placed emphasis on types (5) and (6). Fisher first omitted deposit and started from the proposition that in each sale and purchase, the money and

goods exchanged are *ipso facto* equivalent (p. 16). Let p_i is an average price of goods i, q_i the total quantity of it exchaged and E_i amount of money expended for it, then $E_i=p_iq_i$. Summing over all goods gives the equation of exchange

$$\Sigma E_i=\Sigma p_iq_i.$$

"The equation of exchange is simply the sum of the equations involved in all individual exchage in a year" (p. 16). The left side of the equation shows the money side and the right side shows the commodities side. Suppose that the amount of money expended for goods is E and an average amount of money M, then E/M means the velocity of circulation of money denoted by V and the left side is expressed by MV. Therefore,

$$MV=\Sigma p_iq_i.$$

The right side is simplified by inserting PT. P denoted the price level calculated by a weighted average of prices, and T is the volume of trade. Therefore,

$$MV=PT.$$

Considering deposit currency, the money side becomes $MV+M'V'$, where M' is the total deposits subject to transfer by check and V' their velocity of circulation. Thus, well-known equation

$$MV+M'V'=PT$$

is obtained.

Monetary view of the quantity theory is obvious even up to here. As D.H. Robertson referred to "rigorous Fisherine concept of a certain flow of money in a given time-interval meeting a certain flow of commodities in the same time-interval" ((1931), p. 401), Fisher watched monetary economy basically from the viewpoint of "exchange" between money and goods.

Later, Fisher included deposit currency in money. He stated that, "when modern man invented the check system, he did not dream that deposits subject to check would come to be regarded as money, but to all intents and purposes they are money" ((1932) p. 21). In *100% Money*, however, "money in the bank" or "check-book money" is clearly distinguished from cash to be called "pocket-book money". Of course, "pocket-book money is more basic of the two" ((1935), p. 3). "Many people imagine that check-book money is really money and really in the bank, Of course, this is far from true" ((1935), p. 4). The chief practical difference between check-book money and pocket-book money is that "pocket-book money is bearer money good in anybody's hand, whereas check-book money requires the special permission of the payee in order to pass" (*ibid.*). This is the same as *The Purchasing Power of Money*.

Once bank deposits are included in money, it is natural to think that money is endogenously supplied, so Fisher told about creation and extinction of money. "A typical depositor deposits neither gold nor silver nor any other money but merely his promissory note. What he thus accomplishes is to trade his debts to the bank for a debt from bank's debt to himself. ··· He converts his own non-circulating credit into the bank's circulating credit. New "money" is thereby created, not by the mint nor Bureau of Engraving, but merely by pen and ink of the banker and his customer. ···

When a debt to a commercial bank is paid by check out of a deposit balance, that amount of deposit currency simply disappears" ((1932), pp. 14-15). "[J]ust as check-book money is manufactured by loan incurred, so check-book money is destroyed by loans paid" ((1935), p. 37).

Fisher consider that the endogeny of money supply, to be exact, the fractional reserve banking system (which Fisher calls the 10% system in comparison with 100 per cent reserve system) itself causes great booms and depressions. According to Fisher, "An expansion of business loans usually causes check-book money to expand faster than business, ··· a liquidation of such loans usually causes check-book money to shrink faster than business" ((1932), p. 160). Under 10% system, "an increase in business, by increasing commercial bank loans, and so increasing the circulating medium, tends to raise the price level. And, as soon as the price level rises, profits are increased and so business is expanded further. Thus, comes a vicious cicle in which business expansion and price expansion act each to boost the other — making a "boom". Reversely if business recedes, loans and prices also recede, which reduces profits and so reduces business volume — again causing a vicious circle, making a "depression" ((1935), p. 164). "But, take away the 10% system and you take away these unfortunate associations between business and the price level" ((1935), p. 164), stated Fisher. "[A]n underlying cause (or pre-condition) of great booms and depressions is the 10% system itself" ((1935), p. 106).

According to Fisher, under the 10% system banks are many (14,500 (1935), p. 37) "irresponsible private mints" ((1935), p. 7), and there is little practical defference between the 10% system and permitting banks to issue paper currency as they did during the "wild cat bank note" period. "It is essentially the same unsound practice" ((1935), p. 18). The 100% system proposal is a plan of the nationalization of money, but it is "the opposite of radical" ((1935), p. 18). The proposal is "a return from the extraordinary and ruinous system of lending the same money 8 or 10 times over, to the conservative safety-deposit system of the old goldsmiths, before they began lending out improperly what was entrusted to them safekeeping" ((1935), p. 18). I think it is clear that Fisher is within the framework of "monetary theory of credit"[1].

III Hawtrey's Theory of An Abstruct Money of Account

Hawtrey objects to the notion that direct exchange is inevitable without medium of exchange. He regards every sale of goods or services not as exchange of goods and services with money but as making a debtor and a creditor. "It must not be thought of arising only from the borrowing of money or from the postponement of payment. Every sale of goods or service rendered gives rise to a debt" ((1927), p.

1) 100 per cent reserve plan is an old idea which can date back to 19th century. In fact, Fisher writes: "Sir Robert Peel applied essentially a 100% principle to a part of the English note issue" ((1935), p. 46).

3). He pointed out that the doctorine that one kind of commodity has been selected as money in order to avoid the intolerable inconvenience of the direct barter is apt to compare an uncivilized society where use of money is not known with monetary economy in order to show the roles of money. But Hawtrey says such comparison exagerates the importance of money. By inventing the hypothesis of a completely organised and civilised society without money, Hawtrey considered the "logical origin of money".

Hawtrey states that a debt can be paid by being set off against another debt. "If a man sells a ton of coals to another, this will create a debt from the buyer to the seller. But the buyer will have been himself a seller to some one else, and the seller will have been himself also a buyer. The dealers in the market can meet together and set off their debts and credits" ((1919), p. 2). This seems to have been so in England in the 19th century. Tooke stated in *An Inquiry into the Currency Principle* as follows: "Bank notes are not only not essential to that interchange, but it must be manifest to any one having even a slight knowledge only of the manner in which such interchange is conducted, that in point of fact, bank notes are rarely used in the larger dealings of sales and purchases. The great bulk of the wholesale trade of the country is carried on and adjusted by settlement or sets-off of debts and credits" (Tooke (1844), p. 34-35).

Hawtrey thought that a chain or "network" of debts is the "very foundation of the economic systems" and A debt is an "economic relation which requires to be expressed as a number or quantity" ((1923), p. 48). In order that it may be so expressed, some units are indispensable and the unit for measurement of debts is the very "money of account".

As James Stuart stated that money of account is "no more than an arbitrary scale of equal parts" (vol. 1, p. 526) and "there is no necessity of its having any other than what by convention mankind think fit to give it" (vol. 1, p. 529), in a state of society without money "the unit must be something wholly conventional and arbitrary" (Hawtrey (1919), p. 2). But Hawtrey says, "However traditional and arbitrary the unit may be, once it is established as the basis of debts and prices and values of a market, it is bound to assume a certain continuity" ((1919), p. 3). In other words, debts and credits within a day are not balanced in the day and brought to the following day, so the same unit will necessarily be used from day to day and becomes the basis of evaluation of goods. Therefore, money of account also gives the unit of price measure. In other words, prices are "themselves potential debts", because "the quatation of a price is an offer, the acceptance of which completes a contract and gives rise to a debt" (Hawtrey (1923), p. 49). Relating to effective demand, Hawtrey stated, "the total effective demand for commodities is limited to the number of units of money of account that dealers prepared to offer, and the number that they are prepared to offer over any period of time is limited according to the number that they hope to receive" ((1919), p. 3). Therefore, even though the unit is arbitrary, capricious and discontinuous changes of purchasing power will not occer (p. 3).

According to Adam Smith, Tooke discriminated "the interchange between dealers and dealers" and "the interchange between dealers and consumers" and stated, "as far as relates to the interchange between dealers and consumers (including the payment of wages, which constitute the principal means of the consumers), coin, and the smaller denomination of notes serving as coin, are essential to such interchange" ((1844), p. 34). Money is indispensable to the circulation between dealers and consumers. In a society without money, can credit be used as the means of payment between employers and employees? Hawtrey stated, "Umbrella-maker might pay wages by creating a debt from himself to his workmen, but in order that his workmen may spend their wages, liability must be transferred to other shoulders than those of the umbrella-maker, for he can sell them nothing but umbrellas" ((1919), p. 4). Since such situation is common to all producers, specialization of the third party as a "dealer in debts" will make the solution easier. In other words, a producer sell to this dealer in debts the debts due to him for his products, and in return the dealer in debts take on himself the liability for the producer's debts to his workers. The setting off of debts against one another becomes to be enormously faciliated by transfers in the books of the dealer in debts or by the delivery of documents representative of his obligations. "A dealer in debts or credits is a *Banker*" ((1919), p. 4).

The Umbrella-maker purchase the bank credits out of the proceeds of his umbrella. But a banker has no intention to deal in umbrellas nor to buy for own use. It will be more convenient for him to lend his credits rather than to buy goods. As Cencini pointed out, "if what is used as a medium of exchage is an acknowledgement of debt, the IOU has to be issued by an element logically external to the set of purchasers" ((1978), p. 78). Therefore, it is important that the banks have no intention to deal in umbrellas nor to buy them for themselves. "It is of the essence of the banker's position that he sells to all sorts of producers and dealers", so that his credits may be accepted in payment by all sorts. He will find it more convenient (as actual bankers do) to lend his credits rather than to buy goods" ((1919), p. 6). When a banker lends, two credits or debts, that is, the banker's obligation or bank credit and the customer's obligation are created and only the former is used as a means of payment ((1919), p. 9).

However, in the absence of money there is a difficulty in closing transactions. Value of a debt depends on the solvency of the debtor. As credit of ordinary debtors is not sufficient for his debt to be a means of payment, use of bank credits would be necessary for this reason alone. Even banks, however, are not always fully solvent and the need for a medium of payment which cannot legally be disputed is obvious. Thus, Hawtrey regarded the first function of money as the means for legal discharge of a debt ((1919), p. 15).

While Gregory (1928) pointed the similarity between Hartrey and Tooke, in this regard, James Stewart is nearer to Hawtrey than Tooke. James Stewart wrights:

"[Paper credit or symbolical money] is an obligation to pay intrinsic value of certain denomination of money contained in the paper. Here then lies the difference between a payment made in intrinsic value, and another made in paper. He who pays in intrinsic value, puts the person to whom he pays in real possession of what he owed; and this is done, there is no more place for credit. He who pays in paper puts his creditor only in possession of another person's obligation to make that value good to him; here credit is necessary even after the payment is made (vol. 1, pp. 524-5).

A purchase for money can always be analysed into the creation and discharge of a debt[2]. So the means of discharging a debt is more general conception than the medium of exchange[3]. Since a legal means of discharging a debt is a substitute for the debt itself for creditors, it is more accurate to say that money is a substitute for credit than that credit is a substitute for money (Hawtrey (1919), p. 15).

"It is more correct to say that the value of gold is due to its convertibility into credit than that the value of credit is due to its convertibility into gold" (Hawtrey (1919), p. 371).

The distinction between "monetary theory of credit" and "credit theory of money" introduced by Schumpeter correspond to his distinction between real analysis and monetary analysis. A credit theory of money "look upon capitalist finance as a clearing system that cancels claims and debts and carry forward the differences —so that 'money' payments come in only as a special case without any paticularly fundamental inpotance" ((1954), p. 717). Hawtrey, who treated "credit as a major payment medium and money as an auxiliary to credit" ((1919), p. 377), developed the credit theory of money. In effect, Hawtrey maintained that:

"Currency is better explained in terms of credit than credit in terms of currency. That is so in theory, in practice and in law" ((1927), Preface).

IV Keynes

In "Review of 'Currency and Credit'", Keynes, appreciating Hawtrey very highly, states that *Currency and Credit* is "one of the most original and profound treatises on the Theory of Money which has appeared for many years" and likely "to exercise a significant influence on future expositions of monetary theory, at any rate in England" (Keynes (1920), p. 362). Keynes had studied ancient money from 1920, the following year when *Currency and Credit* was published. Like Hawtrey, Keynes

2) It is Hicks who appreciated most highly Hawtrey among modern economists. Hawtrey's influence can be found in his last book ((1989), ch. 5).

3) Cencini maintained that "the medium of exchange function of money has to be played by a unit which is also a true means of payment" ((1988), p. 79).

stated that "the presumption of many wrighters that where there were no coins there was barter is far from accordance with the truth" (JMK, 28, p. 255). he wrights:

"An article may be deemed to have some at least of peculiar characteristics of money (1) if it is regularly used to express certain conventional estimates of value such as religious dues, penalties or prizes, or (2) if it is used as the term in which loans and contracts are expressed, or (3) if it is used as the term in which prices are expressed, or (4) if it is used as an habitual medium of exchange" (JMK, 28, pp. 252-3).

In cases (1)-(3) the article is the term in a money of account, and Keynes stated that:

"Now for most important social and economic purposes what matters is the *money of account*; for it is money of account which is the subject of contract and customary obligation. The currency reforms which matter are those which change the money of account" (JMK, 28, p. 253).

Also in *A Treatise on Money*, money of account is considered to be the "primary concept of a theory of money" (JMK, 5, p. 3). A money of account comes into existence along with debts and price lists, since the debts and price lists can only be expressed in terms of money of account. And the "money proper" corrresponds to Hawtrey's definition of money, that is, the means established by law or custom for the payment of debts.

It seems that Keynes' starting point was Hawtrey's theory of logical origin of money and Keynes changed it into a historical reconstruction of the origin of money. Keynes emphasized the intervention of the state, which had appeared only in the form of custom or law in Hawtrey's argument. "[B]y the mention of contracts and offers, we have introduced law or custom, by which they are enforceable; that is to say, we have introduced the State or the community" (JMK, 5, p. 4). The State first appears "as legal authority of law which enforces the payment of the thing which corresponds to name or description in the contract" and next "it claims the right to determine and declare *what thing* corresponds to the name, and to vary its declaration". Then, money proper becomes chartalist State money.

Although Fisher and Hawtrey pointed out that the use of bank credit had been predominant, they did not regarded bank credit as money. However, Keynes said that, when acknowledgements of debt are used themselves a substitute for money proper in the settlement of transactions, "we may call it bank money". Of course, he added a note that "not forgetting, however, that they are not money proper" (p. 5). Up to here, Keynes' theory is the same as that of Hawtrey except that bank credit is renamed bank money. "Bank money is simply acknowledgements of a private debt, expressed in money of account, which is used by passing from one hand to another, alternatively with money proper, to settle a transaction" (p. 5).

But Keynes points out that by the intervention of the state, bank money changes the caracter of money proper. "The bank money may represent no longer a private debt, as in the above definition, but a debt owing by the State" (p. 5). Bank money which is trasformed into money proper "has changed its character and should no longer be reckoned as a debt. Keynes called such bank money "representative money". "Since it is of essence of a debt to be enforceable in terms of something other than itself" (p. 6). The concept of representative money is innovative. It is not merely because of quantitative importance that Keynes regarded bank credit as money. Such attitude of Keynes is contrasting with the modern dominant treatment which defines money merely in the relation with other macro variables such as GDP.

Keynes includes as the State money "not only money which is itself compulsory legal tender but also money which the State or the central bank undertakes to accept in payments to itself or to exchange for compulsory legal tender money" (p. 6), and classifys it into "commodity money" and "representative money". Further, he classifys the two forms which representative money can take, that is, "fiat money" and "managed money". Now, starting from Hawtrey's theory of an abstruct money of account, we reach the concept of managed money of Keynes. Managed money is "in a hybrid" between commodity money and fiat money and "for this reason, its qualities are not so easily understood"; It is similar to commodity money in that they are related to an objective standards of value, and similar to fiat money in that they have relatively little or no intrinsic value apart from law or prctice of the State (p. 7). Keynes thought that "the best typical modern moneys approximate more and more to the form of managed money" and that managed money is "the most generalized form of money" in that it degenerates into commodity money when it has 100 per cent of the objective standard and it degenerates into fiat money when it loses its objective standards (p. 7). Therefore, as Keynes says that his theory "is expressed with primary reference to a managed money; but the formulas reached will be easily modifiable, if necessary, to suit the special conditions either of a commodity money or of a fiat money" (p. 8), *A Treatise on Money* is a book intended to be the general theory on money.

According to Keynes, A managed money came into force from 1819, but the principles and methods of currency management were but ill undertood. The Peel's Bank Charter Act of 1844 was compound of "one sound principle and one serious confusion". The confusion was "the futile attempt to ignore the existence of bank money and consequently the interrelationships of money and bank credit, and to make representative money behave exactly as though it were commodity money". Keynes stated that the confusion "was so serious that it would probably have led to an actual breakdown if it had not been for a second sound principle" (p. 15).

The first sound principle of currency management consisted in "the stress laid on the limitation of the quantity of the representative money as a means of ensuring the maintenance of the standard". The second was "the principle of bank rate". It was "a great discovery" that bank rates are useful for the management of man-

aged money. The practical efficacy of bank rate, which had been "a most novel one", became not merely "familiar" but "an artcle of faith and dogma". However, the precise *modus operandi* of bank rate were not clearly been understood. According to Keynes, it "have not been clearly understood" (p. 15).

On the *modus operandi* of bank rate, Keynes examined the traditional doctorine as a clue for theoretical construction and found three strands of thought (Chapter 13). The first strand regards bank rate merely as a means of regulating the quantity of bank money and the names of Giffen, Marshall, Pigou, Hawtrey and Cassel are mentioned. The second strand is a view of practical bankers which regards bank rate as a means of protectng a country's gold reserve by regulating the rate of foreign lending. The third strand is the one which comes nearest to what seems to be the essence of the matter for Keynes. This includes the theories of Marshall and Hawtrey which regards bank rate as influencing the rate of investment and the theories of Wicksell and Cassel "as influencing the rate of investment relatively to that of savings" (p. 171).

Keynes stated that, while Hawtrey "seems to get much nearer to the idea of bank rate as affecting the rate of investment" (p. 173), "Hawtrey has limited its influence to "one particular kind of investment, namely, investment by dealers in liquid goods", Wicksell was closer to the fundamental conception of bank rate as affecting the relationship between investment and saving" (p. 176).

In Hawtrey's monetary economics, the dealers, who "judge demand and regulate supply" ((1919), p. 8), fill a very inpotant place. It is the merchant "who takes the initiative in production". And "as he [the merchant] is so sensitive to the rate of interest, the whole machinery of credit, in which he plays such an important part, will be equally sensitive" ((1919), p. 25). However, Keynes denys the response of trader' stocks to the rate of interest[4]. The sensitivity as assumed by Hawtrey "certainly does not exist in fact" (JMK, 5, p. 173).

Although Keynes adopted the distinction between the "natural" and the "market" rates of interest, we should notice that Keynes criticized Wicksell too. Keynes stated that "while Wicksell's expressions cannot be justified as they strand and must seem unconvincing without further development, they can be interpreted in close accordance with the fundamental equation of this treatise. For if we define Wicksell's natural rate of interest as the rate at which saving and the value of investment are in equilibrium" (pp. 176-7). Keynes completely wiped off the real aspect of Wicksell's natural rate "as would obtain if in a non-monetary economy all lending was in the form of actual materials" (JMK, 5, p. 176).

4) "To deny the response of trader' stocks to the rate of interest is to deny any considerable effect of bank rate on economic activity. Ever since the publication of Keynes' *Treatise on Money* that has been the predominant view of academic economists, at any rate in this country" (Hawtrey (1961), p. 5).

V Conclusion

Keynes expressed the Wicksell connection in the chapter 13 of *A Treatise on Money*. There, Hawtrey' theory is criticized and seems to give no influence to Keynes. However, the argument on the *modus operandi* of bank rate is on the extension of Keynes' theory on the nature of money, which I think is based on Hawtrey's theory of an abstract money of account, although it is greatly modified. Therefore, Keynes'expression of the Wicksell connection also "began from Hawtrey".

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