Kyoto University
Economic Review

MEMOIRS OF
THE DEPARTMENT OF ECONOMICS
IN
THE IMPERIAL UNIVERSITY OF KYOTO

Volume XVII
1942

Published by the Department
of Economics in
the Imperial University of Kyoto
ON THE MONETARY IDEAS AS SEEN IN THE RECORDS OF ECONOMIC AND FINANCE IN THE SUNG HISTORY

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It is my object in this article to evince the monetary ideas revealed in the Shi Huo Chih 伸貨志 of the Sung Shih 伸史 i.e. the Records of Economics and Finance in the Sung History. Observing the truth that ideas and facts are but the two sides of the same shield, and that from the fertile soil of facts bloom the flowers of ideas, I feel that I must first clarify the monetary circumstances of this dynasty before proceeding to examine its monetary conceptions. I have thus decided to make a historical sketch of monetary conditions in the Sung Dynasty from the above-mentioned source.

The central currency of the Sung Dynasty was copper money. At first, following the example handed down from the Five Dynasties, the copper money of the Tang 朧 Dynasty was put into circulation. With the gradual restoration of peace and the increasing economic activities, demand for money increased. In the second year of the Chienlung 建隆 era (961 A.D.) during the reign of the founder of the dynasty, a new copper coin named Sung Tung Yuan Pao 宋通元寶 was made; and in order to assure its circulation, the old coins were withdrawn from circulation and their use was forbidden by law. Later, government mints were established in various parts of the Empire for making copper money. New coins were made in every era of the country. But the fundamental fact underlying the monetary conditions during
the Sung Dynasty, as is the case of other dynasties for that matter, was the scarcity of copper money, due to the scarcity of copper material. Various phenomena in connection with copper money during the Sung Dynasty may truly be ascribed and reduced, indeed, to this fact.

As has been just stated, when the founder of the Sung Dynasty coined the Sung tung yuan pao coins, the old money was withdrawn and their outflow to the outlying territories and other countries was strictly forbidden. This action reveals the scarcity of copper money due to lack of copper material. Similar incidents are mentioned in Shih Huo Chih or the Records of Economics and Finance in the Sung History. An example of the fact of copper-ware turned in to the government office by people is given in the following quotation: “All residents in the Capital having copper-ware shall turn them in to the government office within the next two months”. In an extreme case, “family graves were dug up and dwelling houses were destroyed”, in order to obtain copper. A vehement attack on the outflow of copper was often made. For instance, in the fourth year of the Chun Yu 㷅ὖ era (1244 A.D.), one Liu Chin-chih 刘晋之 said: “Accumulation of copper money by big families may be detected and the melting of copper-ware may be prevented. But once copper be taken by an ocean vessel, it never will be returned”. Again, in the eighth year of the same era (1248 A.D.), one Chen Chiu-ju 鍾求恕 said: “The trouble lies in .... monetary famine .... Gigantic vessels like mountains come from distant lands riding on winds and waves and sell to China strange and useless things, and they take out of our land what is essential to the wealth of the Empire”. In the tenth year of the same era (1250 A.D.), an edict forbidding exportation was issued. Again, in the first year of the Hsien Chun  sesso era (1265 A.D.), another edict prohibiting smuggling was promulgated. All these edicts show the deficiency of the supply of copper material for copper money in proportion to the demand of society for them. The Records of Economics and Finance frankly tells of the
"scarcity of copper, lead and tin all the time"

The same historical source and examination also shows the existence of "deficient or short money"—known as sheng mo 取銅 or tuan chien 短錢, in the following words:

"In the early part of the Sung Dynasty, people making payments to the Government in copper money, used 80 pieces or sometimes 85 pieces for 100 pieces. In provincial states, different rates prevailed according to the different customs of places, so that in some cases 48 chien 斤 was taken as 100 chien. Accordingly, an Imperial decree was promulgated and 77 chien came to be adopted for 100 chien".

The existence of such "short money" was due to the great scarcity of money in circulation. The Government publicly recognized this practice because of its incapability to coin the needed money in a sufficient amount for circulation. This, in turn, was due to the insufficient supply of material for copper money.

Since "short money" is intended to enable the circulation of coins less than 100 in value for 100, it is on the same principle that three coins are circulated as ten coins. In consequence, it is also on the same principle with ta chien 大錢 or "big money" which is based on the coinage of "one big coin which corresponds to three small coins having the value in actual circulation of ten such coins. Thus, the appearance of "big money" also indicates the insufficient amount of copper supply and in consequence of copper money in circulation.

Again, during the Sung Dynasty such moneys as iron coins and paper moneys were extensively circulated. These, too, may be taken as an evidence of the scarcity of copper money, for they would not have been necessary if the latter existed in a sufficient amount. True, paper moneys are traceable to the chiao tzu 交子, which originated in the State of Shu 蜀 and which was intended to eradicate the inconvenience of transporting heavy iron coins having comparatively small value. However, since iron money was necessary because of the scarcity of copper money also in that State,
the existence of the *chiao tzu* may be also ascribed to the scarcity of copper money.

Against my contention, one may argue that the appearance of paper money is an inevitable phenomenon in monetary development and therefore it is not necessarily due to the scarcity of copper money. One may further point to the fact that there are many cases in the monetary history of the world in which paper money came into existence without reference whatsoever to the question of the scarcity of copper money. Such a general refutation is uncontestable. However, in the case of the Sung Dynasty such a refutation cannot adequately explain monetary circumstances there. For a great confusion came into existence because of the reckless issue of paper money—so much so that the government authorities wished to withdraw paper money from circulation and some even went so far as to consider the plan of abolishing the system of paper currency altogether. Despite all such wishes, the Government was unable to do away with the *chiao tzu* and other paper moneys, because there was not a sufficient amount of copper money that could be put into circulation. This, in turn, was due to the deficient supply of copper material. Because of all this, may I not ascribe the existence of paper moneys in the Sung Dynasty to the insufficient supply of copper?

The quantity theory of currency teaches us that, if the amount of copper in existence is not sufficient and consequently the amount of copper money is not sufficient to meet the demand of society, the value of copper coins will expand. Thus, if the value of copper money is great and the prices of commodities are small, as in the case of the Sung Dynasty, we can refer therefrom that copper coins were insufficient in that dynasty. We can know this also from the memorial made to the Throne by one Wu Ch'i to the effect that "if coins are made in the government mints, the evil of the high value of money could be eradicated", and specially in view of the fact that "at the time copper money was very dear". Against such an assertion, one may say that the
Records of Economics and Finance give many instances of low money and of dear commodities. This is true enough. But this is due chiefly to the reckless coining of iron money and the equally reckless issuing of paper money; and this in turn, is due to the scarcity of copper and consequently of copper money, as I have explained rather tediously.

Of course, the phenomenon that money was low and goods were dear was not limited to iron and paper money: it was also true of copper money. This phenomenon in the case of copper money, however, is due to the fact that, because of its high value, debased coinage was practiced and thin and bad money was put into circulation. In the case of ta chien or big money, counterfeit and debased coins were circulated because their nominal value was too high over their actual value. The latter phenomenon may be considered as due to the shortage of copper, because of the fact that the Sung Dynasty could not free itself from the metallic conception of money, whether its belief in such a conception was conscious or not. And, it goes without saying that the high value of copper money was due to its shortage which in turn was ascribable to the shortage of copper material. Conversely, it may be said that we shall have to admit the insufficient amount of copper money in circulation and consequently of that of copper material, in the fact of the depreciation of the value of copper money.

Now, when the amount of copper in existence is deficient, its value will inevitably rise. As shown by the quantity theory, if the amount of copper money is small in proportion to commodities, its value will undoubtedly rise; but so long as it maintains its existence as currency, it cannot rise over and above its limit. Supposing, however, that copper material rises over that limit, there will be a discrepancy in value between copper money and copper material, and there will appear the evil practice of private melting of copper money. Thus, one Chang Fang-pei says:

"Again, after the abolition of the law prohibiting the exportation of copper, copper money has been destroyed and
melted in stupendous amounts. If ten-chien coins are melted and thereby one liang of refined copper is secured, a profit five times the original expense could be gotten. Should such a condition remain unimproved, it would be but in vain, even if mints are established in all provinces and the existing ones are multiplied."

It was also said, in the second year of the Ching Yuan 保護 era (1196 A.D.) during the Dynasty of South Sung 蘇, that “making of copper-ware by melting money was prohibited and those violating the law were severely dealt with.”

In the fourth year of the Chun Yu era (1244 A.D.) one Liu Chin-chih said: “The melting of copper-ware should be prohibited by all means”. One Chen Chiu-lu in the eighth year of the same era (1248 A.D.) said:

“The gold plated ware of the Capital, the brass and copper ware of Chu 常 and Hsin 興 and the musical instruments of Lichuan 竹... all these have been made from copper money. Only a negligible amount of money escapes destruction, turning it into ware. Brass and copper ware are openly sold in metropolises and cities. But if laws prohibit their sale first in the Capital and then in distant parts of the Empire, the evil of melting money for the purpose of making ware will be stopped in the end”.

When the amount of copper in existence is not sufficient and causes the shortage of copper money and its enhanced value, counterfeit money and debased money are put into circulation; and thus what is known as Gresham's law takes place:—bad money drives out good money from circulation, and normal copper money comes to be hoarded. A similar phenomenon was also seen in the relation between iron money and paper money, on one hand and copper money, on the other. When the former were circulated side by side with copper money, the latter eventually disappeared from circulation to be hoarded away. This tendency became much keener, as will be explained more fully later, when iron money came to be recklessly coined and paper money came to be recklessly issued. It is said of the monetary
conditions during the reign of Hui Tsung. "As the iron money is heavy, it is impossible to carry it over any great distance, and all people wish to see copper money used again instead. While both the public and private people are in dire material needs, both public and private copper moneys are accumulated in stupendous amounts in the various parts of the land and cannot be used!"

The foregoing quotation betrays that the persons who having experienced the difficulty of transportation in trade because of the circulation of iron money, as copper money both public and private was hoarded in all parts of the empire, longed for the advent of the day when copper money should replace iron money as the principal medium of exchange. The above quotation also indicates the fact that copper money was hoarded also by the Government. An Imperial decree issued at that time also stated that "copper money shall be used only in government purchases in corns". We know from the foregoing decree that the Government prohibited in principle the use of copper money in its disbursements, presumably because of its recognition of the certainty that, if copper money is used in public disbursements, it would be hoarded among the people. We know from all this the great extent to which copper money was hoarded among the people at that time. The Government's basic policy in regard to copper money must indicate the hoarding of the same currency by the Government itself. Later during the reign of the Emperor Kao Tsung in the South Sung Dynasty, a government decree in the 29th year of the Shao Hsing era (1159 A.D.) was to the following effect:

"Each noble family may keep in store cash up to 20,000 kwan or strings of copper money and a commoner family one half of that amount. The remainder of cash in their possession may be turned into gold and silver within the limit of two years to buy objects of luxury such as tea, salt, aromatics, paper, etc. In case their cash is kept in
store in excess of the legal limit, private reporting thereon shall be accepted.” Again, in the fourth year of the Chun Yu era (1244 A. D.) once Liu Chin-chih, already quoted, said: “Accumulation of copper money by big families may be detected”. In the eighth year of the same era (1248 A. D.) one Chen Chiu-lu, also already quoted, said: “They believe . . . . coins have fallen into disuse because it is hoarded away . . . . Thieves are abetted to search the innermost chambers of people, and laws are made rigid in order to detect the store houses of people.” The last named two writers attached no importance to the fact of money hoarding. Chen Chiu-lu, in particular, censures the critics of monetary conditions by saying that “they fail to recognize the fact that the trouble lies not in the accumulation of money as they think, but in monetary famine”. But from his very words, we may imagine to what a great extent money hoarding was carried on at that time.

Let us summarize what has been already stated. The scarcity of copper material resulted in the decrease in the amount of copper money in circulation. This, in turn, caused the rise in the value of copper money and the flood of counterfeit and debased currencies followed. All this further caused the soaring of prices of commodities. The appearance of iron money and paper money, both for the purpose of coping with the deficient amount of copper money in circulation, also resulted in the hoarding of copper money and consequently in a further decrease in the amount of its circulation. To make the matter worse, the private melting and deterioration as well as outflow of copper money also had the effect of decreasing its amount in circulation. Thus, the coined word “money-famine” came to be used to describe the general monetary conditions of the time.

As has been already pointed out, in order to meet the deficient amount of copper money in circulation, the so-called “short money” or tuan chien was originated. In the Sung Dynasty the ta chien or the big money was extensively coined, but this led to the appearance of privately coined
money and resulted in the depreciation of its value.

Then came iron money to play the important role of money side by side with copper money. The fundamental fact in the case of iron money is just the opposite of copper money: its amount in circulation was excessive. Various phenomena about iron money appear to have originated from this fact and to be reducible to the same fact.

Now, the low value of iron money, with the increasing of the amount of goods exchanged or transacted thereon and also of the frequency of such exchange and transaction and expanding of the sphere of such exchange and transaction, promotes the heavy inconvenience of transporting the money. The Records of Economics and Finance often give instances of large iron coins claiming to have much greater value than their actual worth. But such large iron coins not only caused the flood of counterfeit and debased money and the consequent depreciation of monetary value, but also gave rise to results just the opposite of what had been intended. Thus, the sphere of the circulation of iron money was limited to localities. It appears that the central district thus attempted to mollify its tight circulation of copper money at the expenses of local districts. According to the Records of Economics and Finance, iron money was circulated chiefly in the State of Shu and the Shan Hsi Hsi district. These districts prohibited both the circulation therein and inflow thereto, of copper money, so that iron money would be exclusively used. The coining of the latter money was extensively made. But there was also an extensive coining of counterfeit and debased money, with the dire consequence of the soaring of commodity prices and of unspeakable hardships for the people in general. Moreover, since the outflow of iron money was prohibited, it had to circulate within a narrow sphere which fact had the effect of aggravating the already serious monetary situation . . . so much so that the circulation of iron money often came to a deadlock.
It was of course impossible to circulate copper money and iron money in different spheres in the same district. The increasing demand for money and the scarcity of copper had the effect of extending the sphere of the circulation of iron money to the central district. On the other hand, the development of frontier economy gradually gave rise to the inconvenience of iron money and demanded the circulation of copper money. Thus, the simultaneous circulation of both copper money and iron money was inevitably accompanied by the question of ratio between the two currencies; and it was clear from the fundamental fact already observed about these currencies that the ratio was in favour of copper money. In the early years of the Sung Dynasty, one copper coin was held as equal to ten iron coins. With the appearance of various denominations of both currencies, ratios among each of these two currencies became highly complex, because of various new phenomena such as the variation in their circulation, the appearance of counterfeit and debased money, restriction of their circulation in tax payments, and government officials' scandalous profit-making out of money exchange. It was only too natural then that ratio between copper and iron moneys was so highly complex that their adequate description is almost impossible. Needless to state, all these monetary circumstances are only the reflection of unsound finance and corrupt politics during the Sung Dynasty.

Then paper money made its appearance in order to eradicate the inconvenience felt in the circulation of iron money, and it was only too natural that the beginnings of this change were made in the State of Shu where the inconvenience of transporting iron money had been very great. True, as I have already explained, paper money is an inevitable product of the development of money and would have made its appearance without regard to the fact of inconvenience of iron money in the State of Shu. On the other hand, one may say that it was only too natural that
paper money originated in such a State where the circulation of iron money was highly inconvenient because of its heavy weight. Again, one may say that the process of the appearance of paper money in the State of Shu only betrays a theory of the origin of paper money in monetary development.

The first paper money originated in the State of Shu was called chiao tzu. The chiao tzu was originally made and circulated by private citizens and then made a government enterprise. So long as it was circulated for the purpose of overcoming the inconvenience of iron money in trade transactions, it would have been in consonance with the logic of the origin of paper money in monetary development, and would have been without any evil result. But the fact was far more complex than such a theory. Issue paper money once and you will have the same effect as borrowing money as much as you wish without any interest thereon at all. Thus, the original object of overcoming the inconvenience of iron money in trade transactions was forgotten and paper money came to be issued mainly for the object of financial disbursements. Inasmuch as paper money was immune from the restriction of material unlike the case of copper money, its volume steadily expanded. This tendency was aggravated by the slack finance of the Sung Dynasty, and the chiao tzu was issued in reckless amounts culminating in its exorbitant depreciation. Moreover, there were other paper moneys such as chien yin 銀引, kwang tzu 契子, hui tzu 購子, etc. all of which had the same destiny as the chiao tzu as far as their nature of paper money was concerned. Thus, the fundamental fact about paper money during the Sung Dynasty consisted in its circulation in reckless amounts and its paucity in value. There was no phenomenon about paper money in that dynasty that was not related to the above basic fact or could not be traced to it.

I have stated that unlike copper money, the chiao tzu was free from the restriction of material. But it was not issued as unconvertible paper money. On the contrary, it
was a convertible paper money. "One chiao tzu can be converted into one min ~, or a string of coins each consisting of 1,000 pieces, in cash and its term of circulation is three years." Thus, with the expiration of the term, the chiao tzu must be exchanged with cash. In this respect, this paper money was also subject to the restriction of metal material. When the chiao tzu came to be issued as a financial patchwork, it became increasingly difficult to exchange this paper money with cash at the end of the term. Thus, the Records of Economics and Finance says: "The chiao tzu has been issued in great amounts but the chien is insufficient. Their nominal value is dear but their real value has fallen to almost nothing. Law cannot be enforced."

Thus, discount payment became inevitable. What is worse than the practice of discount is that no cash payment is actually made but payment is made by the chiao tzu issued anew. For example, the Records of Economics and Finance says:

"In the fifth year of the Hsi Ning ~ era (1027 A.D.), the twenty-second term of the chiao tzu is about to expire. And the amounts for the latter terms are already great. An Imperial decree is promulgated by which 1,250,000 chiao tzu for the twenty-fifth term are to be issued in order to compensate the amount of the chiao tzu in the twenty-third term."

There are countless other similar examples. This is an inevitable consequence of the issuing of paper money as a financial patchwork.

The above method amounts to extending the term of paper money for temporary purposes. But the actual cases of extending the terms of the chiao tzu and other paper moneys are often shown by the Records of Economics and Finance. For example, an Imperial decree in the third year of the Chun Hsi 休寧 era (1176 A.D.) "extended the third and fourth terms of the hui tzu by three years each."

Again, in the first year of the Shao Hsi 襄熌 era (1190 A.D.) "an Imperial decree extended the seventh and eighth
terms of the *hui tsu* by three years each*. In some extreme cases, such extension of terms was made for an indefinite period. The same record says: "In the seventh year of the Chun Hsi era (1180 A.D.) the eighteenth and seventeenth terms of the *hui tsu* were left without any stated period of termination. They were to be for an indefinite period".

Here it must be added that the withdrawal of paper money was often made through gold, silver, and other goods, as well as *tu tieh* or certificates issued for Priests. Since paper money issued was not accompanied by adequate preparations for exchange with cash, their withdrawal did not take place smoothly, and often not at all. The result was that their credit fell flat and their value steadily depreciated. The extreme depreciation of the value of paper money made the amount of its further issue unavoidable, and this, in turn, stimulated the further depreciation of its value. Thus, the value of paper money fell headlong.

Now, as has been already stated, paper money can be free from the restrictions of both raw material and its value, and since its face value is great, their counterfeiting is most profitable. Thus, the counterfeiting of paper money was extensively made and the market was flooded with such counterfeit paper money. This is shown in the frequent decrees prohibiting the counterfeiting of paper money and memorials made to the Throne on this matter, in the Records of Economics and Finance. This must be one potent cause of the violent depreciation of the value of paper money.

Thus, the value of paper money continued to fall flat. In the second year of the Ta Kuan era (1109 A.D.) one Chang Chih stated in his recommendation to the Throne: "The *chien yin* in this province was worth 1,000 copper moneys but now it has been reduced to one-tenth." During the same era mention is made that the *chien yin* which was to be equal to one *min*, that is 1,000, *chien*, became equal to more than 10 *chien* in value". In some extreme cases, their circulation came to a deadlock.

We have seen how paper money during the Sung Dynasty
was utilized as a financial patchwork, how it was issued recklessly without being accompanied by cash reserves, how it failed to be converted or withdrawn, how its value depreciated headlong, how it caused the inflation of commodity prices, and that all this was aggravated by the counterfeiting of paper money. Of course, efforts were made in order to restrict the amount of its issue, to provide cash reserves, to assist its conversion and withdrawal and to prohibit its counterfeiting. However, such endeavours failed to be effective as intended until the Sung Dynasty declined and passed away.

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We have seen above, the monetary circumstances of the Sung Dynasty. We have observed that the monetary system of the dynasty consisted mainly of copper money, iron money and paper moneys; that copper money was characterized by its paucity and both iron money and paper moneys by their excessive amounts; and that the monetary circumstances of the time revolved around these basic facts. Now, ideas come from facts and are circumscribed by them. Monetary ideas originate in monetary circumstances and are circumscribed thereby. Thus, the monetary ideas of the Sung Dynasty must have been formed above basic monetary facts and circumscribed and determined thereby. This we can see in the Records of Economics and Finance. We find therein the fact that the monetary ideas during this dynasty are developed from the amount of money in existence, their consequent value and the rise and fall of commodity prices. The Records of Economics and Finance contain numerous arguments concerning money but they are almost entirely confined to the above fact. Let us see how this is.

Regarding monetary value it is pointed out that it forms the other side of commodity prices and is in an inverse ratio with them. For example, an Imperial decree promulgated in the first year of the Cheng Kwa era (1111 A.D.) declared—
“the dearer the money the lower the prices of goods. The lower the money the dearer the prices of goods. This is but inevitable.” - The expressions of such ideas are not seldom made in the Records.

Imperial decrees were often promulgated in order to equalize commodity prices. This may be taken to indicate the idea that prices can be controlled artificially. Thus, we can find in the back of this idea the principle of controlled economy. There is another idea that there are certain laws working in connection with commodity prices and that such prices should be enabled to have their right places in accordance with these laws. We can find the expression of such ideas in the memorial presented to the Throne by one Chien Chi to the following effect:

“According to the Imperial decree, the chia hsi or coins containing a large portion of tin is to be put into circulation side by side with iron money. I greatly fear that this may induce people to use their power over prices. What is desirable is to adjust the conditions so that a right relationship may exist between money and goods. It is not a right idea to exercise physical power on the people in order to reduce prices within a month or two. At present, the officers of peace are determining the prices of cereals, cloth and precious metals. This is not in harmony with humane principles.

What then is the factor that determines the prices of commodities or the value of money? It is explained by the so-called quantity theory of money. The ideas we find in the Records are almost entirely limited to that theory. Of numerous examples, we may cite the following:

“Money is sent annually to the Capital from various provinces. Because of this, in the provinces money has become dearer and the prices of goods lowered value.”

As money was sent to the Capital from different localities, its amount in the latter gradually decreased. As a result of this, the value of money increased and that of commodities decreased. The above quotation, therefore,
stands on the quantity theory of money. One may, however, object to this by pointing out the fact that the quotation was taken from the Records of Economics and Finance which were written not during the Sung Dynasty but towards the closing period of the Yuan Dynasty. To such an objection, I shall answer that the Records contains the materials taken from the Sung Dynasty and arranged and edited during the Yuan Dynasty. Even supposing that it was an idea of the Yuan Dynasty, there is no gainsaying that it was a monetary idea as shown in the Records of Economics and Finance in the Sung History.

At any rate, where the quantity theory of money occupies an important position, it is only too natural that monetary quantity should be held in great importance, forming the issue of arguments. Let us review various ideas expressed regarding the quantity of money in the Records of Economics and Finance. For an example, I shall cite the following quotation from the memorial presented to the Throne by one Chang Fang-pei:

"These years, all, both public and private have suffered from the scarcity of money; goods failed to circulate and have threatened to deprave human sentiments. This is known as monetary famine. Who knows where are now the coins which have been annually made? Old are the laws relating to the coinage and to the prohibition of using copper. Imperial decrees have been promulgated in sufficient numbers. The Imperial decree promulgated in the seventh year of the Hsi Ning era struck out the old provisions prohibiting the exportation of money. This has been followed by the departure of countless carriages full of copper money from the frontier regions, while vessels laden with copper money sail out from our ports. It is said that when money is sent out from the frontier regions, only petty dues are levied thereon. The money is the treasure of China. But today it is used in transactions with the foreign peoples. Again, after the abolition of the law prohibiting the exportation of copper, copper money has been destroyed and melted in
stupendous amounts. If one ten-chien coins are melted and thereby one liang of refined copper is secured, a profit five times the original expense could be gotten. Should such a condition remain unimproved, it would be but in vain, even if mints are established in all provinces and the existing ones are multiplied."

Chang Fang-pei thus traces the cause of the scarcity of copper money in circulation and the so-called tight condition of money to the outflow of money overseas and its private melting, but not to the amount of money coined. It is interesting to observe that Chang Fang-pei likens the scarcity of money to famine and calls it monetary famine and evinces a glimpse of materialism, when he points to the depraving effects of monetary famine on human sentiments. Again, one Liu Chin-chih says of the scarcity of copper money: "Accumulation of copper money by big families may be detected and the melting of copper ware may be prevented. But once copper is taken away by an ocean liner, it never will be returned." It is noteworthy that he enumerates as the causes of the scarcity of copper money the melting of copper money, its hoarding by wealthy families, and its outflow to overseas and that the last named is regarded by him in greater importance over the other two. Whereas Chang Fang-pei considers the intervention of law necessary for eradicating the causes of monetary famine, Liu Chin-chih does not touch on that matter. Another noteworthy example of discussion regarding the scarcity of copper money is that by Chen Chiu-lu who says:

"They believe that . . . . coins are fallen into disuse because it is hoarded away . . . . They fail to recognize the fact that the trouble lies not in the accumulation of money as they think, but in monetary famine that prevails today. If money is dear, commodities will be low in prices. At present, both money and goods are alike dear. This is a cause of anxiety for the entire nation. Gigantic vessels like mountains come from distant lands riding on winds and
waves and sell to China strange and useless things, and they take out of our land what is essential to the wealth of the Empire. What is it that we gain thereby? But what we lose cannot be counted. The gold plated ware of the Capital, the brass and copper ware of Chu and Hsin and the musical instruments of Lichuan... all these have been made from money. Only a negligible amount of money escapes destruction, turning it into ware. Brass and copper ware are openly sold in metropolises and cities. But if laws prohibit their sale first in the Capital and then in distant parts of the Empire, the evil of melting money for the purpose of making ware will be stopped in the end. ... If thrift is shown clearly by those holding the reins of administration and the custom of plain living is followed from the above to the lower strata of society, the evil outflowing of money will be checked to some extent. This is like purifying river water at its source."

Unlike Liu Chin-chih, Chen Chiu-lu refuses to regard the hoarding of money as a cause of the scarcity of copper money. He rather considers the private melting of copper money and its outflow to overseas as the real causes of its scarcity. He agrees with Chang Fang-pei in the opinion that, in order to eliminate the evil of private melting of copper, laws should be strictly enforced. As regard the outflow of copper money he evinces no mean statesmanship when he urges that the importation of strange and useless things from overseas should be prohibited and that for this purpose what is essential is to show the example of thrift and stop the luxury of the people of the upper classes.

But there is a part of his above quoted extract that should be held as a question. He says: "At present, both money and goods are alike dear". This statement is certainly unintelligible since the high price of goods means the low value of money and if money is dear goods are bound to be low in value. Both may be likened to the two ends of the seesaw, and both cannot be either dear alike or
low alike. Thus, logically it is impossible that both money and goods are alike dear. But why is it that while he recognizes that "if money is dear, commodities will be low in prices", he makes such a statement? We cannot take his statement either as a misunderstanding or an illusion. There must be some reason that made him to make such a seemingly self-contradictory statement. Moreover, the fact that, referring to that "both money and goods are alike dear", he says "This is the cause of anxiety for the entire nation", makes us to believe in the existence of such a reason. But the fact remains that the statement cannot be logically true. What then is its logical explanation? I find the solution in his definition of the word "money" he employs in his statement. By "money" he means copper money or rather the copper money of good metallic quality. At that time there were beside such good copper money other moneys such as iron money and debased copper moneys of private coinage as well as the chia hsi or coin containing a large portion of tin. The value of all of these moneys had been depreciated greatly. If, therefore, the value of copper money of good quality is evaluated in terms of these bad moneys, it can be said to be dear just as goods are dear. I am inclined to believe that Chen Chiu-Lu tried to show this point.

Now let us go back little and consider the question of how to check the outflow of copper money to overseas. There are two ideas that challenge our attention. The first idea admits the futility of preventing the outflow of money by legal means and urges that copper money should be replaced by iron money in the outlying districts. In the ninth year of the Chia Ting era (1216 A.D.), after the opinion of San Sheng 'in all frontier regions iron money is used'. This tells us of something of the situation. The second idea centers around the system of pien huan. It originated during the reign of the Emperor Tai Tsu and is really a system of exchange. It was extensively utilized in sending money to the frontier regions as might
be expected from its very nature. Therein we may find the
intention of preventing the outflow of money to the frontier
regions. Also we may find therein the intention of checking
the outflow of money from the frontier regions to foreign
countries.

The question of monetary quantity differs in two cases;
in the case of iron money and in that of copper money.
This question in the case of iron money, unlike that in the
case of copper money, unfolds itself around the fact of its
excessive amount. This can be easily understood from
what has been already set forth regarding the monetary
circumstances of the period under investigation. As a notable
example of ideas regarding this matter, we shall give the
following account by one Ma Ching-i who lived under
the reign of Hui Tsung.

"Copper money has been in circulation throughout the
entire nation for the upward of more than one thousand
years but there has never been any trouble arising from the
variation of its value. But iron money is circulated in a single
locality for trade purposes. It is only too natural that it is
faced by a deadlock. Moreover mints in that region continue
to make coins so that the amount of iron money has greatly
increased. Coins made in unlimited amounts are used for
limited circulation. If within the next score of years their
amount should increase and be piled up in one open lot like
a mountain, its injurious effects on both public and private
would be doubled. The limit to its circulation should be
expanded and its circulation in the neighbouring provinces
should be permitted. . . . If this be done, its circulation
would be continued forever and there would be no trouble
arising from the variation of its value."

According to Ma Ching-i, the fall in the value of iron
money and the consequent deadlock in its circulation are
due to its abundance which, in turn, is due to its extensive
coining as well as to the limitation placed on the sphere of
its circulation. Therefore, he believed that the only way to
save iron money from its violent depreciation was to eliminate these two causes, namely, to restrict the coining output and to expand the sphere of its circulation. His ascription of the violent fall of the value of iron money to its abundance may be taken as the manifestation of an idea of the quantity theory of money.

It may be referred from what has been said in connection with the monetary circumstances of the Sung Dynasty that depreciation of the value of money is all the more violent in the case of paper money. It is only too natural then that discussions regarding this matter are found in the Records of Economics and Finance. An example of such discussions is furnished by one Han Hsiang ###. In his memorial to the Throne in the second year of the Chun Hsi era (1175 A. D.) he said: "There is no way of saving paper money but to reduce the amount of its circulation. . . . Many printing offices have been abolished . . . and the amount of paper money in circulation has greatly been reduced. There is a reason that the value of paper money will rise."

This ought to raise the question as to how paper money can be withdrawn from circulation. Its withdrawal may be made through coins, paper money, the certificates issued for priests called tu t.ieh, gold, silver and other goods. All this may be referred from what has been presented in connection with the monetary circumstances of the time, and therefore I shall not take the trouble of further narration.

The question of increasing or decreasing the amount of paper money will inevitably bring one to the question of increasing or decreasing counterfeit certificates. True, this is not limited to paper money. At any rate ideas concerning this matter are given in the following extract from one official in the third year of the Chun Hsi era (1176 A. D.):

"Although the volume of government paper money has decreased, that of counterfeit certificates has steadily increased. If the hui tzu of the fifteenth and the sixteenth
terms are taken as an example, the incoming amount ought to decrease over the outgoing amount. In converting, it is found that the original volume of issue has been far below the actual volume... This would not be so unless the paper money is counterfeited. For the paper money of the above two terms, the Chuan paper was mostly used as the material. The materials used are in fine state and strictest attention is paid to the process of printing, so that those who tried to counterfeit them had a great difficulty to do so. After the expiration of the seventeenth term, the Tu paper as well as the Chuan paper came to be used. After the eighteenth term, only the Tu paper came to be used. The last named paper now can be made easily by private persons... Thus, counterfeiting in the former periods was very difficult but that in the new terms became comparatively easy. Men's pursuit of economic gain is greater than their fear of punishment. To spur them on, gain-making is easy of accomplishment before punishment thereon is enforced. I am of the opinion that in printing paper money, material should be improved and the process should be refined so as to make counterfeiting impossible. This is the matter of primary importance. In dealing with violations, intense encouragement should be given to those in charge and their prevention should be made very rigorously so that men will be refrained from counterfeiting. All this is the matter of secondary importance."

In the opinion of the official, the counterfeiting of paper money is due to unrefined paper used and crude method of printing, and for this reason, if excellent paper is used and a refined method of printing is employed, the evil of counterfeiting will be stopped. Another important point in his quotation is found in his views of the psychological factor of economic deeds. He recognizes the psychology of self-interest when he says: "Men's pursuit of economic gain is greater than their fear of punishment." He also finds it impossible to check counterfeiting by means of legal prohibition when the circumstances encouraging such a criminal
His ideas are akin to those of Mencius who says: . . . . "When they thus have been involved in crime, to follow them up and punish them;—this is to entrap the people. How can such a thing as entrapping the people be done under the rule of a benevolent man?" Of course, what Mencius has in mind is the thorough-going way of preventing human crimes by securing economic livelihood to men; while what this official says is one of patchwork for preventing people from committing a crime by making crime difficult of commitment. So, there is a vast discrepancy between the two views.

I have so far endeavoured to dwell on the monetary circumstances of the Sung Dynasty and the monetary ideas formed thereon. As phenomena characterizing the monetary circumstances of the period, one may mention the fact that iron money and paper money were circulated in great amounts, that the ta chien were coined in large quantities and that copper money extensively found its way out of the country. Of these, the first two phenomena were due to the scarcity of copper money which fact was due, in turn, to the development of monetary economy and the expansion of finance. The outflow of copper money overseas may be traced to the development of overseas economic activities. All of these reflect the development of the Sung economy. At any rate, the characteristic monetary phenomena of the Sung Dynasty being such as I have explained, the monetary ideas based on these have a grandeur of their own. This is only natural. However, so far as the Records of Economics and Finance is concerned, these ideas are only fragmentary and are not systematized, and greatly differ from those of such writers as Lu Tung-lai and Shê Shui-hsin as given in the Wen Hsien Tung Kao. Those intending

*) The Works of Mencius, I. King Hui of Liang, part I.
to make an investigation into the economic thought of the Sung Dynasty should study their ideas as well as those of other writers. But I must be content here with only the elucidation of the ideas taken from the historical source I have frequently mentioned in the present article, hoping to set forth the result of my further study in the near future.