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PAPER CURRENCY THEORY OF WANG LIU

By Fumio HOZUMI*

I

1. The issuing of paper currency became popular in the Sung (宋) Dynasty and it continued to be used in the Chin (金) Dynasty. In the Yüan (元) Dynasty it was intended to be the only currency, though in reality it was not so. It was used in the Ming (明) Dynasty also. But, in the Ch'ing (清) Dynasty, at first, it was discontinued and was replaced by hard currency.

When the currency economy develops to a certain extent, however, the use of paper currency is unavoidable. Especially when paper currency is already in circulation, it is quite natural that there are advocates of the use of paper currency and arguments go around among scholars on the pros and cons of the paper currency system. We found such arguments in a booklet under the title of *Ch'ien Pi Ch'u Yen* (錢幣芻言) or *Some Remarks on Currency* by Wang Liu (王澐).

According to his own statement, this booklet is the product of 30 and more years of study¹⁾. He had been studying paper currency system ever since he heard his father's criticism of Chi Chih Ting (蔡之定), who resigned his office when his recommendation for the use of paper currency was not adopted by the authorities²⁾. His father's criticism was as

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follows: Chi Chih Ting had done wrong in not knowing of the precedence of Ch'ing Dynasty, reported in *The Huang Ch'ao San T'ung* (皇朝三通) or *Three Books of Dynasty*, that in 8th year of Shun Chih (順治)³⁾, paper currency was issued for a yearly amount of over 120,000, but the issue was discontinued as the government budget came to be well financed. Chi Chih Ting blindly introduced the system of the Ming Dynasty and his argument was poorly developed. One old philosopher said that one may read thousands of books but if he does not know the theory of the law of government he can not contribute to the development of society. The precedence of the Ch'ing Dynasty is just like the law.

His father said that it is advisable to issue paper currency without the drawbacks of a paper currency system.

Hearing this criticism by his father, Wang Liu started to compile his data and in 1828 he wrote his book under the title of *Ch'ao Pi Ch'u Yen* (鈔幣芻言) or *Some Remarks on Paper Currency*⁴⁾.

He showed the book to his senior students and friends, to exchange views and arguments with them and then printed it. He brought it back to his father, who dejected however that the book is not accurate enough, so it would receive considerable criticism from others. Wang Liu broke the wooden printing block, and for several years thereafter he continued the development of his theory availing himself of his predecessors' theories, employing the hard currency theory; and finally presented to his father the revised book under the name of *Some Remarks on Currency*. His father spoke highly of his book this time and so he published it⁵⁾.

Some Remarks on Currency consists of 4 chapters, namely, 1. Arguments on Hard and Paper Currencies (10 Sections), 2. Trial System of Hard and Paper Currency System, 3. Earlier Outstanding Theories, 4. Friends' Comments. The contents of the former two chapters are self-evident from the titles. We will discuss these two chapters later, as the thesis here is primarily concerned with the topics which are treated in these chapters. The chapter on the "Earlier Outstanding Theories" deals with the outstanding currency theories—mainly paper currency theories—current from the Sung Dynasty until the Ch'ing Dynasty adding his short criticism to each of these theories. The chapter of "Friends' Comments" is the collection of letters from various scholars commenting on his previous work *Some Remarks on Paper Currency* and his own letters in answer to them.

Later he published *The Ch'ien Pi Tsai Hsü* (錢幣再續) or *The Theory of Currency Revised and Continued* and *The Ch'ien Pi Hsu K'o* (錢幣續刻) or *The Theory of Currency—Continued*. The former is, as in the case of "Earlier Outstanding Theories", the collection of his predecessors' theories and

his criticisms of them, while the latter comprises his own theories and the letters exchanged between his senior students and friends.

It seems that Wang Liu never became tired of discussing the currency system and one can not help admitting his energetic effort and enthusiasm for the currency theory.

Some Remarks on Currency is carried in the Chapter of Arts and Literature of *The History of Ch'ing*⁶. "The Administration of the Ch'ing Dynasty", which is the compilation of various theories of political economy of the Ch'ing Dynasty, also introduces Wang Liu's theory⁷. Hsü Mei analysed and criticised *Some Remarks on Currency* line by line⁸. It is a good proof of the outstanding character of the theory of Wang Liu.

2. As stated above, it was Wang Liu's long wish that the paper currency system should be adopted. He waged a tireless campaign for vindication of the paper currency system. Then why did he insist that the paper currency should be issued? What sort of merit did he see in a paper currency system? He cites a few advantages of paper currency, which once, and indeed before him, the officials of the Ming Dynasty, presented as "10 advantages of paper currency" when an official by name of I Yüan Lu (倪元路) tried to issue paper currency. Those 10 advantages are, 1) the cost of manufacturing currency is low, 2) the scope of circulation is wide, 3) it is easy to carry about, 4) it is easy to store, 5) there is no variation in appearance, 6) there is no difference in weight depending upon denomination, 7) no counterfeit of currency by silver mint people occurs, 8) it stops thieves looking for chance, 9) if no hard currency is used, the copper can all be used for military purpose, 10) if no silver is used for currency it can all be used for other government uses. However, he did not admit the last two points saying that the relative legislation is not sufficient to justify these. Because, as it is to be explained later, according to him, the paper currency should be used, but copper should not be completely withdrawn. The silver currency may be disused but such silver should be distributed among the public so that it is used for dishes and ornaments, and it should not be stored away uselessly. Apart from these two points, he says, the other points are all correct and excellent, and there is no argument about it. Are these the only merits of paper currency that he thought existed? The answer is no, as he added the following advantages to them.

1. When currency is built up from material units, they will all someday be exhausted. However, paper currency will never be exhausted, because when it is printed one million, there is one million and when it is printed one thousand million, one thousand million is created there. It means unlimited financial resources. This is one of the

- major advantages of paper currency.
2. By using paper currency one can concentrate all rights so as to belong to the government and the government then only sublicense rights to the public. It will increase the authority of the country. This is the second big advantage.
 3. The paper currency is convenient for the people, so they do not use foreign currency, even when no strict prohibition is exercised. This saves the country from invasion by foreign capital. This is the 3rd major advantage.
 4. Ships bring from abroad opium every year and trade it for considerable amounts of Chinese silver. If paper currency is used, the traders find no profit in the exchange for Chinese currency, so we can stop the inflow of opium. This is the 4th major advantage.
 5. There are often private notes or guild notes, issued by the private banks and these banks sometimes go bankrupt and their notes become valueless. If government notes are issued, these fraudulent private banks are put out of business. This is the 5th major advantage.
 6. People are inconvenienced by carrying heavy silver currency. If silver is replaced by paper, it suits the convenience of the public. This is the 6th major advantage.
 7. Once adopt the paper currency system and then prohibit the manufacture of copper ware and buy the copper so that the copper is used for currency. Then there is sufficient amount of copper available. When you have sufficient copper, mint it into the denominations of 100, 10 and 1, then the coins become fine and accurate. This is the 7th major advantage.
 8. If the government uses only the paper currency, there is no need to consider the possibility of loss which is to be occasioned by minting. This is the 8th major advantage.
 9. The denominations of paper currency are clearly defined on the paper, so one can not degrade it or upgrade it. It will eliminate fraud by the mint officials. This is the 9th major advantage.
 10. The denomination of paper currency is fixed and merchants can not increase or decrease it. This will eliminate the chance of fraud among the public. This is the 10th major advantage.
 11. Treacherous people, who advocate wrong religion and contemplate treason, always win the people's loyalty by money. If the government's need is satisfied, and it is well prepared for emergency as well as for ordinary need, it can suppress attempts toward treason. This is the 11th major advantage.
 12. War at the borders always occurs for the acquisition of silver. If

- silver coin is replaced by paper money, neither side will look for the chance of invasion and there will be no war at the border. This is the 12th major advantage.
13. When people have silver they bring it to be changed into paper currency. So such silver can be used for manufacturing dishes and ornaments. This is the 13th major advantage.
 14. Silver currency is circulating in many forms, such as Pai Wên (白紋), Yüan Ssü (元絲), and Yang Yin (洋銀), or foreign currency. But paper currency is uniform and therefore it will standardize the custom of monetary transactions. This is the 14th major advantage.
 15. The wealthy people often stock silver in warehouses and never use it for a long time. If they hear that the law has been changed and only paper currency is circulated, they will bring out all silver and exchange it for paper money. It will eliminate the bad custom of unproductive hoarding. This is the 15th major advantage.
 16. If the paper currency is issued in several denominations, and an old proverb is printed on each such note, people will learn to read letters. It will help to educate the public. This is the 16th major advantage.
 17. When currency material such as silver is unproductively hoarded and is in shortage in the market, issue the paper currency. Then commodity prices will go down and be stabilized. This will facilitate the circulation of goods in the market. This is the 17th major advantage.
 18. The mint produces paper currency and the government controls the issue of currency. Then various government projects can be satisfactorily financed. It may expand the irrigation system and cultivate new land. Such projects will give the public additional sources of income. This is the 18th major advantage.
 19. It becomes unnecessary to ask for the contributions of the wealthy people for the government's social enterprises or new construction. It will stop the bribery of government officials. This is the 19th major advantage.
 20. The national finance is greatly eased, so no contribution from the wealthy people is necessary and it will be helpful to make promotion and employment of officials fair. This is the 20th major advantage.
 21. The government enterprises such as shipping, water utilization, and salt production are all facing difficulties due to shortage of funds. Nobody attempts to discuss them, because they know that the government has no sufficient financial resources. When paper currency is issued, such worry is eliminated and the accumulated spending

projects of the government will all be realized. This is the 21st major advantage.

22. The government will take less from the public and can give more to the public. It can conduct a mild administration which will be remembered by the people for years. This is the 22nd major advantage.

As above, Wang Liu cited as many as 22 advantages of a paper currency system. He seems to have presented all the possible advantages of a paper currency system but he says that these are only the major advantages, setting aside innumerable minor advantages.

These are the merits of paper currency that he thought of. His praise goes so far that it looks as if there is no disadvantage in a paper currency system. Among these advantages, what appears to us interesting is the advantage of paper money in protection against thieves. He says as follows: When silver is compared to copper coins, the latter is more inconvenient because it is heavier to carry. But when paper money is compared to silver, the former is more inconvenient for thieves because it is "lighter". His reason is as follows. When thieves try to steal silver, they detect the presence of silver by the deep tracks of the cart-wheels on the road or the deep draught of the boat on account of the heavy cargo. But if it is paper money, it produces no deep wheel-track nor any deep draught, so they can not detect the presence of valuables. Besides, paper money can be carried in the pocket or inserted between pages of books, so thieves can not find it.

There are people who plunder silver from others by crafty guiles, but they can not plunder paper money by their tricks. No marking can be made on the silver coin, but paper money can be numbered or sealed. Therefore if thieves steal banknotes and use them in the market, it can be discovered immediately. The venerable Mr. Ku Yen Wu (顧炎武) once discussed the disadvantages of using silver money and he said that it would lead to an increase in the number of thieves in the Ho Pei (河北) or the North of the River districts⁹.

If the people use only paper money and copper coins, the number of thieves will decrease. If the paper currency system is enforced, the country will have surplus funds and the government can give more rewards to those who catch thieves and it can provide more effective means to protect against thieves. Beside many government projects will give additional sources of income to the public, which will eventually stop all stealing. When people are afflicted by a sudden fire or flood, people can carry banknotes in the pocket and get rid of the misfortune. He concludes his advocacy saying that advantages of employing paper

currency system is beyond any description.

What he says may be right. But here we can recollect the words which are supposed to be the words of Ch'ao Ts'ao (龔錯) of the former Han Dynasty. He criticised jewels, gold and silver as currency media and said, "these materials are light and small for value, so they are easy to store and to be brought around the country, without any possibility of damage due to hunger or coldness". "However", he continued, "because they are easy to carry and can stand against the environment, subjects betray the lords, people leave their native land and encourage thieves and help the thieves to escape¹⁰⁾. Then the paper money which is even lighter than silver and gold, will further encourage the thieves to steal and help them run away. But according to Wang Liu, it stops thieves because it is light. As Sokken Yasui (安井息軒), one of the famous scholars of the Confucian school in Japan, rightly said, "they are equally syrups, but when Yao (堯) or an ancient saint looks at it he may think of giving it to the old folks, while if Tao Chih (盜跖) or a great robber looks at it, he may think of using it to lubricate the sliding door to suppress the noise. Therefore, when their intention is different, their evaluation comes to be different"¹¹⁾. We can also recollect one passage in Goethe's *Faust*, where Mephistopheles talks about the merit of paper money by citing a few examples. He says, "man can easily carry it in his pocket if it is only a sheet of paper. He may put it into the purse together with the love letter. The priest may insert it between pages of the scroll and carry it with him respectfully"¹²⁾. No one can suppose that Goethe and Wang Liu read each other's work, but it is interesting to note that both made exactly the same comment. It is not surprising, however, because when we were students, (may be even now) we utilized the books on the shelf as the safest place for hiding bank notes. The young students of those days did not learn the trick from Wang Liu but it was simply a coincidence. However, if we ask these students about the advantage of paper currency, would they make the same comment as our Prof. Wang Liu did?

Setting aside this question, according to Wang Liu, there are 3 criteria by which one who governs the country can discern whether his administration policy is in conformity with justice. They are reasoning, humanity and the circumstances. According to him the paper currency system is in accord with all of these 3 criteria. When paper currency is issued, the right of issue is in the hand of the government as is explained later. When the state monopolizes the right of issuing paper money and all the practical advantages of such system are enjoyed by the public, it is a complete justice, so it is in accordance with reason. When the public

exchanges silver for paper money, the silver is not lost nor damaged as it might have been if circulated. On the contrary the supply of silver may be increased, as the result of righteous custody by the government. The government has always good will and a merciful policy, so it is in agreement with principles of humanity. When people carry silver they suffer the heaviness of silver or the degradation of the quality of the coins. So they use private notes or bank notes as expedients. If the silver is replaced by paper money, people will enjoy its convenience, and this is in agreement with the circumstances. Thus in the light of all these 3 criteria, the paper currency system has the advantage and it should be employed by the government.

We can see here how firm was his belief in and how fervent was his enthusiasm for the paper currency system.

3. The advantages of a paper currency system and the necessity for its enforcement as held by Wang Liu was stated above. However, the disadvantages or harmful aspects of paper currency had often been discussed by people since long before and it was for these reasons that in the Ch'ing Dynasty the paper currency system was abolished and Chi Chih Ting, who recommended the revival of paper currency, was fired.

Now had Wang Liu ever thought of such disadvantages in paper money?

The most obvious danger of paper currency is after all devaluation. In *The Shih Huo Chih* (食貨志) or *The Records of Economy and Finance of Every Dynasty*, it is often mentioned that when paper money was issued, the value of money drastically decreased and commodity prices went up and finally the currency stopped its circulation and the economy was considerably disturbed, which caused not only the public but also the government to suffer. Ch'iu Chün (丘濬) of the Ming Dynasty rightly expressed it in a short sentence, saying "the harm of paper currency is in its abundance"¹⁸. He meant vicious inflation, the inherent drawback of a paper money system.

However Wang Liu argued against it saying, "in the reign of Chang Tsung (章宗) of Chin Dynasty, it is said that people exchanged tens of thousands of pounds of old paper money for only one piece of rice cake. They say if the paper currency is issued it will cause such harm and it will boost up the commodity prices. However, if new paper currency is issued and old ones are not recovered it is quite natural that the old ones are devalued to almost nothing. The increase of commodity prices is fundamentally unrelated to the paper money system. The literature on commodity prices published in the Chin (晉) Dynasty says that in the civil war of Tung Cho (董卓), half a million copper coins were good for

one tan (石) of rice. *The Biography of Shih Chi Lung* (石季龍傳) also has a description to the effect that people exchanged one chin (斤) of gold for 8 tou (斗) of rice. This was all because there was a great scarcity of rice. It was not because they used copper and gold for currency". According to his statement above, it is not because of a paper currency system that the value of paper money decreases, but it is because the value of old paper money drastically drops or because there is scarcity of commodities. When the commodities are scarce, the money value goes down whether such money is gold, silver or paper money. Therefore the paper money does not result by itself in devaluation or commodity price increases.

The next disadvantage of paper money is the uttering of forged paper money. For example, on *Ta Ming T'ung Hsing Pao Ch'ao* (大明通行寶鈔) or on *The Face of the very Paper Money issued by the Ming Dynasty*, it is written that "the one who forged will be beheaded. The one who notified such forgery or captured the forger will be given a reward of 250 liangs (兩) of silver together with all the assets owned by the criminal". In Ch'ing Dynasty when Chi Chih Ting recommended the adoption of a paper currency system, he met such objections as that paper currency, in comparison to other types of currency, is easiest to forge, and thus fraud would be rampant, the jails would be full and many of the public would be arrested for crime¹⁴). From these sayings we can easily see how a paper currency easily leads to forgery. However, Ch'iu Chun of the Ming Dynasty said "the harm of hard currencies is in forgery, the harm of paper currency is in its abundance". So forgery was usually with a hard currency. However paper currency was also susceptible to forgery and as long as there is possibility of forgery of hard currency, there is the same possibility with paper money as well.

Now how did Wang Liu argue on this point? Wang Liu admits that there is the possibility of forgery with paper money, but such possibility equally exists with silver or copper coins. It is not after all too serious a problem. To forge paper money is a hundred times more difficult than to forge silver coin or copper coin, therefore, it is not so difficult to prevent forgery of paper money. The old philosopher says that to prevent cheating, there are three ways, namely, to make it unbearable to cheat, to make it impossible to cheat, to make people dare not to cheat. If a paper currency system is adopted and enforced rightly, there is one cause which makes the people uninclined to commit forgery and 4 causes which make the people unable to commit forgery and two causes which make the people dare not commit forgery. Then what are those causes? He says that they are as follows. 1. Let the government issue paper

money and give the people one percent margin when they exchange silver for it. Then give them another percent of margin when they pay their taxes and duties with paper money. Thus let the people earn 2 percent of profit. If the government, in addition, administers the people with benevolence, the general public will be deeply grateful to the government and will be encouraged to work, and they will never think of forgery which may subject them to punishment. This is why they would feel it inconceivable to cheat. 2. Make a special quality paper and classify the type of paper and prohibit the public use of such paper. This is how to make it impossible to cheat. 3. Use elaborate printing designs and methods of printing, so that it becomes extremely hard for the public to copy it. This is how to make forgery impossible. 4. As for the notes of high denomination, one can verify the holograph, if he is well versed in hand writing. For other denominations, the ministers in charge will sign by themselves. Then one person can not copy all different hands. This is a third cause which makes it impossible to forge. 5. Appoint officials to verify the authenticity of paper currency in circulation and pay them a salary. This is the 4th method which makes it impossible to forge. 6. Apply severe punishment to convicted forgers and behead them and gibbet them. This is how to make them dare not forge. 7. Give large rewards to the people who report counterfeits. When government officials detect counterfeit, promote them immediately. This is another disincentive to forgers.

He further continues that when people counterfeit paper money, it is because there is negligence on the part of the government. If the government really attempts to prevent counterfeiting, there is no reason why it can not be prevented. If a person commits counterfeit, punish him severely, then there will be no second criminal. Since even private notes are being used without counterfeit, why should it be impossible to prevent counterfeit of the national currency. They contend that since even the paintings of Wên Shên (文沈) and Ch'iu T'ang (仇唐) are being copied, it is quite natural that the paper money is counterfeited. However, those who copy famous paintings are trying to cheat one or two people to swindle money, and besides they are not subject to severe punishment. So it can not be discussed on the same basis with counterfeit of paper money. Therefore, he concludes, it is quite easy to prevent forgery of paper money.

Thus Wang Liu refuted the scholars who criticised paper currency. Ku Yen Wu, the famous scholar of early Ch'ing Dynasty who is called the authority of the history of Ch'ing Dynasty, emphatically stressed the drawbacks of paper currency in the "Record of Daily Findings",¹⁵⁾ point-

ing out that it causes stagnation of currency circulation and finally the discontinuation of use and that it is easily worn out and consequently it has to be exchanged often. Wang Liu refuted Ku Yen Wu by stating as follows:

According to Wang Liu, the reason why paper currency did not circulate smoothly is because the people of the Ming Dynasty did not use the system rightly and not because the system itself was wrong. The reason why the system became a failure is because they used silver currency too extensively. In the reign of T'ai Tsu (太祖) or the founder of the Ming Dynasty, they once prohibited the use of gold and silver but in the 9th year of his administration, he revived the use of silver, and the government started to collect tax in silver. In the reign of Hsüan Tsung (宣宗) they abolished the ordinance prohibiting the use of silver and they allowed the local states to pay tax in silver to the central government. Thus the paper currency once issued never came back to the central government. At last in the reign of Ying Tsung (英宗), they issued the ordinance that the tax should be paid in rice, wheat and silver. Thus the recovery of paper money by the central government further decreased and rice and silver coins were used as currency by the government as well as by the public, and consequently the circulation of paper money stopped. The reason why paper money is easily worn out is, according to Wang Liu, due to the poor technology of manufacturing paper money. Since the circulation of paper money is very extensive, if it is poorly made, it wears out and has to be exchanged quite frequently. If it is exchanged, the government officials may modify the letters (thus embezzling the difference) and it produces harmful effects. Therefore if the government enforces the use of paper money for the payment of all taxes and duties, then there will be no stagnation of circulation. And if the denominations of paper currency are made more than 1 kuan (貫) or a string which consists of one thousand ordinary ch'ien (錢) or copper coins, and elaborate design and sizing techniques are used, then the paper money will not wear out so easily. Of course when it is used for long time, it does wear out. But in such cases, collect all the worn out paper money and burn it. This will attain the same objective as exchange for fresh notes, and it does no harm. The high denomination notes should have a size as large as a paper scroll and should be kept in cases, then they will not wear out even after long use. The people of the Ming Dynasty did not pay attention to these points and consequently the use of paper currency was discontinued. History shows how defective is the silver currency system, and it showed up the advantage of paper currency system all the more. If maladminis-

tration is avoided, there is no reason why the paper currency system should be replaced by silver currency even after 100 generations, and therefore the people who save much paper money should not be worried about losing all of their assets in one night on account of the sudden abolition of the paper currency system. In the last place, Wang Liu advocates with strong confidence that if Ku Yen Wu were living now and listened to this opinion, even he would acknowledge the advisability of enforcing a paper money system.

Thus he argues against all the demerits of paper money. As he sees it, paper currency has no defects. However, if, as he says, there is no drawbacks in a paper currency system then we have to inquire why in the preceding period, the paper currency system failed in achieving its objective and had to be discontinued. He answers this question as follows:

Wang Liu is not advocating the enforcement of a paper currency system exactly as it was practised in the Sung, Chin, Yüan and Ming Dynasties.

According to him, the legislation of Sung, Chin, Yüan and Ming Dynasties were incomplete and when they caused trouble, the government often changed the laws and people suffered from such frequent revision of laws. This does not mean however that the thought of those who devised the system in the earlier period was inferior to the thought of their successors. It is always difficult to attain an objective in the initial period. When the pioneers institute the system and provide the laws, they can not foresee the situation a hundred years later and take necessary steps to prevent all evils. But now we can learn from 4—500 years of history and scrutinize the system, considering its origin, its advantages and short-comings and examine the evils which the silver currency system produced since the era of Chia Ching (嘉靖) of the Ming Dynasty; and compare it with the public custom of using paper notes or guild notes. If we then devise a system in the light of all these precedences, then we can work out a perfect system and there is no chance that we shall commit the same mistake as our predecessors did. He further continues that even the incomplete old paper currency system had some big advantages, as is evident from history. For example, Kao Tsung (高宗) of the Sung Dynasty became a great general of the army and he recruited volunteer royal soldiers from all the states. Then he adopted the recommendation of Chang Chien (張建) and manufactured, at the general head quarters, paper currency with which he made a contribution to the commerce. Thus, within less than 10 days, he obtained 500,000 strings of copper coins with which he supported the army. This is how the

paper money system can meet military needs. An official by the name of Fan Hsiang (苑祥) of the Sung Dynasty also used a paper currency system and collected, even in the remotest regions, all hard currency, in exchange for paper money, which salt dealer got salt from government with. Thus they brought back hard currencies to satisfy governmental need and saved the expenditure of the people in remote areas on the transportation of heavy coins. This is how the paper money system brings advantage to the salt administration. According to *The Record of Flood Control in the Reign of Chih Chêng* (至正) Era Chia Lu (賈魯) used much paper money, worth 1,845,636 strings of copper coins, to accomplish the project of flood control. Thus it helps river control. In the 13th era of Chih Chêng, T'ò T'ò (脫脫) carried out a project of water irrigation by disbursing paper money which was worth 5 million strings of copper coins. This is how the paper currency system helps the cultivation of land. As stated above even the old incomplete paper currency system can bring such big advantages, to say nothing of the considerable advantages of a system which is rid of all possible shortcomings, such as he has devised.

Thus the paper money system which he advocates is different from those practised in the Sung, Chin, Yüan and Ming Dynasties, but it possesses many superior features. Now the question arises, how does the system which Wang Liu devised look like. We will review it in the following section.

4. Wang Liu advocated the enforcement of a paper currency system. But the system which he had in mind was not just the stereotyped system employed in preceding periods but it is an improved flawless system which is rid of all shortcomings. Then what system did he advocate? It is easier to examine the paper currency system from two sides, the phase of currency manufacture, and the phase of use or circulation.

The manufacture of paper money, can be further divided into three factors, one, who manufactures the money, i. e., to whom does the right of manufacture of currency belong, and two, what sort of currency is manufactured i. e., the kinds and denominations of paper money, and thirdly, how the paper money is manufactured i. e., the manufacturing method.

How did Wang Liu interpret the first question, that is, to whom the right of minting belongs. Wang Liu's opinion is very clear-cut here. According to him, the right of mint should belong to the administrator of the country. This opinion is reflected in his recommendation of the prohibition of private notes or guild notes, and his attempt to stress the necessity of the means to prevent the issue of private currency. In fact,

the main reason why he advocated the employment of a paper currency system is to return the right of minting to the Emperor. He says that to enrich the people's livelihood, it is best to encourage agriculture and industry while in order to enrich the Emperor, it is best to let him hold the right of mint and issuing of currency. Because, if the Emperor can not control the right of mint, he can not meet the government's demands and can not decrease taxes even if he wishes to do so, and even if he attempts to reclaim the land he can not finance it. If he can not decrease tax and duty nor carry out land reclamation projects, he can not encourage agriculture and industry. Then how can the Emperor secure the right of mint? Wang Liu says it can be best attained by employment of a paper currency system. Here his opinion is thus clear.

Then what kinds of paper money should be issued? Wang Liu thought of three kinds of denominations, big, medium and small. The big ones worth 1,000 and 500 strings, the medium worth 100 and 50 strings and the small worth 10, 3 and one string. As to big money, he has one opinion. Liu Ting Chih (劉定之) said "the unit of paper money should be 1,000 copper coins. There had been very small units like one and three copper coins or a big unit which appeared in the reign of Chih Chêng (至元) and which is one string of large copper coins each of which is worth five times as much as an ordinary copper coin, but both of them are undesirable". Wang Liu said "he is right to deny the use of units of one or three coins but he is seriously wrong in denying the use of big units like 1,000 or 500. The time when a paper money system should be employed is in a peaceful prosperous period and not during a turbulent period like the late Chin Dynasty". Of course units like 1,000 or 1,500 appear too big. But Wang Liu says that in Chin Dynasty, the unit of 1,000 was only a nominal value and it was not evaluated as 1,000 in the market. According to *The History of the Chin Dynasty*, there had been too many issues of high value paper money and people evaluated them less and less. This is not the fault of the paper currency system, but is due to the social circumstances of those days. When the country is in a condition of peace and prosperity and the central government is well united with local areas and commodities circulate smoothly, people will find it much more convenient to use money in big units. Now the private banks issue even notes of 1,000 and there is no harm in it. The reason why he made the smallest denomination worth one string, is to copy foreign currency systems and for the denominations less than one string, he recommended using coins as he was the advocate of a bilateral system of paper currency and coins as is stated later.

Next is the question of minting method. As K'ung K'ai (孔穎) of Nan

Ch'i (南齊) said about the minting of coins, "do not spare copper and elaborate technique"¹⁶, Wang Liu suggested using good quality paper and most elaborate designs as was mentioned in the preceding article, introducing Wang Liu's reply to the criticism about paper money especially that of forgery. Wang Liu recommended selecting 10 master calligraphers from the country and letting them write the proverbs of old philosophers on the high value notes in 4 styles of penmanship, i. e., Chên (真), Ts'ao (草), Li (隸), Chuan (篆). For the denominations of 10 and less, use copper blocks and engrave the words such as four sermons of Ch'êng Tsū (程子) or family precepts of Chu Tsū (朱子) in simple but correct style. The high value notes may be made in 20-30 feet scrolls while even the smallest unit should be at least one foot in length. The cost of manufacture of units of 1,000 paper may well be 500 and that of one unit of paper may be 100 copper coins, thus making the surplus value different according to the denomination. According to his statement, the big unit paper will look like a scroll of painting and this was in fact what he tried to do. He says that if the paper money carries the writings of famous calligraphers like Chao Tsung (趙董) or Wên Chu (文祝), people will cherish it as treasure, therefore the paper money itself will be treated as treasure and be kept from generation to generation even thousands of years later. The calligraphers will naturally try hard to leave works of art to the later period and thus they will refine their art. Five seals to be put on the paper, with gold, jewels, quartz, silver and copper seals. The big notes will use large seals, medium notes will use medium size seals and the small will use small seals. The man who supervised the minting operation and the calligraphers who wrote the letters should also put their seals on the paper.

Next is the method of circulation. Here the main questions are conversion, monetary standard and the amounts to be issued.

As for conversion, Wang Liu discussed very little. So it is not clear whether he tried to make the paper convertible or not. We will state in the next section on his recommendation to use a bilateral system of soft and hard currencies, but the reason why he uses a bilateral system is to use large unit of paper money for large transactions and coins for small transactions; however he did not touch on the conversion of paper money. When he talks about the recovery of paper currency it is mostly for the payment of duty. Wang Liu spoke highly of the opinion of P'i Kung Pi (皮公弼) of the Sung Dynasty that the paper money should be based upon the reserve of coins. But he also states that the times are not like the Sung Dynasty. The people have millions in silver at home and if the government issue paper currency and exchange it for silver then all

this silver accumulated among the public will constitute the government reserve, so it is not necessary to accumulate the silver in the government separately. From such statements we can surmise that the soft currency system as he thought of it might not have been convertible paper currency but what we call now inconvertible paper currency. However, he also says that unless the manufacture of copper wares is prohibited, people may privately mint coins or melt down coins, and this will make the amount of paper currency in circulation too much or too little. From such statements it appears that the system he thought of may have been convertible paper currency.

As regards the monetary standard, what he suggests is the dual system of coins and paper money. He places a special emphasis on this point. In the preface of his *Some Remarks on Currency* he says that there are three things that he wishes to urge; that is, the employment of a paper currency system, the prohibition of manufacture of copper wares and the minting of big coins. In the main text of his book he always strongly advocated this system. For example, he says, "to enforce a paper currency system, to prohibit manufacture of copper wares and to mint large coins, these three things were already suggested by my predecessors. But these theorists always placed special emphasis on one of the three points, whereas I recommend the employment of all of these three points. If you separate these three and take up one out of them, you can not take full advantage of that one point nor can you suppress the shortcomings of that particular system. Only when you enforce all three, can you supplement the shortcomings of respective elements with each other, and exploit the full benefit of the system and prevent the possible harm which may otherwise be present. Unless the paper currency system is employed, there is no sufficient supply of copper and if the government prohibit the use of copper to get enough in spite of this, people will suffer. If coins are not minted, there is no means to supplement the paper currency and if so discharge of small transactions becomes difficult. If the manufacture of copper wares were not prohibited, people would privately mint the coins or melt down the coins and it may result in too much or too little circulation of paper money". Thus, what he maintains is evidently the dual system of hard currency and soft currency.

Commenting on the statement of Ma Tuan Lin (馬端臨), who lived from late Sung to early Yüan, that if a paper money system is enforced, there will be no case of violation of the prohibition of the use of copper, Wang Liu said that the copper coins should not be abolished even when paper currency is used. Liu Lei Chung (劉耒忠) of Yüan, answering to the question of Shih Tsu (世祖), said coins are used in "the sun" and

paper money is used in "the shade". "The Great China is in "the sun", while the desert is "in the shade". Now Your Majesty came from the desert to become the Emperor of the Great China. Therefore it is not proper to use coins but paper money should be used"¹⁷). Wang Liu criticised this statement, saying that it is advantageous to use paper money but coins should not be totally abolished. Lü Ssü Chêng (呂思誠) had harshly denounced the Ch'í Chê Tu's (楔哲篤) recommendation for dual system of coin and paper money saying "which is the mother and which is the child? You don't know the past precedences and the current practices and try to flatter the Minister with mere lip service!"¹⁸). Wang Liu criticised his comment saying that paper money should be regarded as the mother and the coins the child. If a large amount of paper money and a small amount of coins are issued, then the paper money will be convenient for large dealings and small coins handy for petty transactions. Thus this dual system can never be wrong. He added that although Ch'í Chê Tu was not well versed in the currency system Lü Ssü Chêng's opinion was not hitting the truth.

Thus Wang Liu advocated the dual system of coin and paper currency but how did he evaluate the dual system of silver and paper money? He rejects such a system as is evident from his comment introduced in the foregoing that if silver is used together with paper currency, the paper currency system can not be fully enforced, while the latter must be rigidly enforced.

As regards the amount of paper currency to be issued, it appears that Wang Liu did not mind having a large amount of currency in circulation, as may be surmised from his theory about notes of high value.

He praised highly the words of K'ao Tsung (考宗) of the Sung Dynasty who said that when there is less paper currency then the value of currency is high, while if there is too much paper, its value is small. But on the other hand he said that what is important is not the amount of currency but to ensure that the issued currency will flow back smoothly to the government and be recovered. If the amount to be recovered is small, then we have cause for worry. But if it is recovered smoothly, the money will circulate endlessly, never becoming too much, and the right value is always maintained.

Commenting on the statement of Yeh Lū Ch'ü Ts'ai (耶律楚材) who said that the amount of paper currency should not be over 10,000¹⁹), Wang Liu said that this applies only to his own times, and that now the size of the country is much larger and if the yearly issue of paper is less than 10,000, it will never satisfy the need. Commenting on the words of Liu Ting Chih that when amount is small, the value of paper money

is high; that if it is too small it may not satisfy all needs while if too much is minted, the value will be mean, and that therefore too much paper money can never hold up the system, Wang Liu said "his word is very true but the right amount of currency is in between two extremes and what is the optimum amount is dependent upon the circumstances of the time. There is no fixed amount". Thus implicitly, he justified the increase of the volume of currency in circulation.

Wang Liu, unlike other advocates of paper currency system, did not seem to oppose the large issues of currency, but of course he did not justify the issue of unreasonably large amounts. This is evident from the fact that he has highly praised Liu Ting Chih's statement that too much amount of money will reduce the utility of the system itself.

Then how may we tell whether the amount is too large or too small? According to Wang Liu, this is judged by the actual need of the times. Therefore, when the paper currency is issued and when it comes to satisfy the need of the country then new issues of paper money should be stopped and the mint should be reopened only 20-30 years later.

We have reviewed the opinion of Wang Liu regarding the important points of paper currency systems, but there are of course other aspects which are as significant. For example, the principle of continuation of the laws regarding paper currency system, recovery and burning of worn-out paper money, exchange of silver for paper money, the appointment of officials who inspect the paper currency. He also recommended doubling the salary of all government officials at the initiation of a paper currency system. He thought that the basic salary should be paid in silver for the time being and all additional payments in paper currency, and when the circulation is well along, salaries should be increased several times and paid wholly in paper currency. What attracts our particular attention is his recommendation on the use of paper money in foreign trade. He states that when merchants trade with foreigners, the payment should be made all in commodities, and that they should never be allowed to pay in silver. If foreigners bring silver, he says, tell them to exchange it for paper money and then let them buy goods with such paper currency.

This thesis is intended to be completed with chapters of criticism of Wang Liu's paper currency theory, which comprise the second part of this article.

II

1. I have studied above the paper currency theory of Wang Liu, but I just observed his opinions there and did not make any evaluation.

My study should be completed with such evaluation, which I must now deal with.

However, there have been already several criticisms on Wang Liu's paper currency theory. In particular, that of Hsü Mei (許楣) is most detailed, and it seems that his criticism evaluated almost completely the details of Wang Liu's paper currency theory. Here, I will first look at Hsü Mei's criticism and then conclude this article by a comparative study between Wang Liu's and Hsü Mei's.

If for the time being we depend on *The Huang Ch'ao Ching Shih Wên Hsü Pien* (皇朝經世文續編) or *The Collection of Essays on Politics in the Reign of the Ch'ing Dynasty* compiled by Wu Chin Ch'êng K'ang Hsü Jên (武進盛康旭人), criticism of Hsü Mei on Wang Liu's paper currency theory consists of *Ch'ien Ch'ao T'ung Lun*, *Ch'ao Li T'iao Lun*, *Chin T'ung T'iao Lun*, *Chu Ta Ch'ien T'iao Lun*, *Ch'ao Pi Tsa Lun* (錢鈔通論, 鈔利條論, 禁銅條論, 鑄大錢條論, 鈔幣雜論) or *Outline of Money, On the Benefits of Paper Currency, On Prohibition of the Use of Copper, On the Manufacturing of Large Coin, and Miscellaneous Writings on Currency* and from the beginning to the end, he refuted Wang Liu's theory, while referring from time to time his brother Hsü Lien's (許榘) criticism. However, in Part I, in order to observe Wang Liu's theory, I dismantled it and reassembled it into a system from my own view point. Therefore, now that I am going to analyse Hsü Mei's theory which criticises Wang Liu, I will also dismantle it and develop my argument corresponding to the system formed in Part I, without being necessarily restricted by the order and scope of Hsü Mei's description.

2. Now, Wang Liu first explained the advantages of Ch'ao (鈔) or paper money and cites "Shih Pien" (十便) or "the Ten Advantages" prepared by I Yüan Lu of Ming Dynasty. Then he further mentioned 22 items of what he considered to be the biggest advantages. Hsü Mei refuted these item by item as follows:

1. Wang Liu said, "when coins are made of other materials, there is always the time when such materials are exhausted. However there is no limit for paper money, and if you wish to make 1 million, you can make it and the same is true with 10 millions. In other words, this is an endless source of wealth. This is the first advantage".

However what is unlimited is valueless. Nothing is more unlimited than the soil, but it is certain that coins baked from soil would never circulate. The disadvantage of a paper money system is not that there is a limit but that paper money is inexhaustible whereas the money has a limit. It is the same now as in the past that paper money is limitless. But in the past paper money always ended in failure.

2. Wang Liu said, "all the treasure and value should be absorbed by the government and then distributed to the people; this is the respect of national order. This is the second big advantage".

However, what national order could there be by absorbing all the silver in the nation, prohibiting private notes and monopolizing all the wealth in the world in the hands of the government?

3. "Since it is convenient for the people to use paper money, the foreign money will automatically go out of use without prohibiting it. In other words, we can avoid encroachments from abroad. This is the third big advantage", said Wang Liu. However, encroachment from abroad is not the inflow of foreign currency but the outflow of our silver. As long as foreign money is in silver, its inflow never constitutes an encroachment. The problem is the outflow of silver. (By this he criticised Wang Liu's idea that the stoppage of foreign currency circulation is one big advantage, and he further continues:)

However, even if it is desirable to stop the circulation of foreign money, the opium trade will bring about the outflow of our silver, and then that of foreign silver, and eventually the silver in China will be exhausted. Therefore there is no particular reason why paper money should be used for such a purpose. (Besides, to the assertion that "it is more convenient for the people to use paper money", Hsü Lien adds the following: It is right to propose that the circulation of foreign currency should be prohibited as it is foreign money. However, it is wrong to assert that paper money is more convenient than foreign currency, because it is possible to put 10 pieces of foreign currency in 2 inch sack as foreign currency is less than one inch in size whereas paper money is 1 foot long and 5-6 inch wide, and is of thick paper. Even if it is folded, it is inevitably bulky. It is true that there are private notes which are only 4 inch long and 3 inches wide and of thin paper, but in the southern region where foreign currency circulates very much, private notes are not used.)

4. "The outflow of Chinese silver for the opium brought every year by foreign ships amounts to 10 million. However, if paper money is used, this will be automatically stopped as there will be no private profit therefrom. In other words, this will eliminate the evil of opium. This is the fourth advantage". So insists Wang Liu.

However, if silver is abolished by the use of paper money, the evil of opium will become all the more grave. This is because when paper money is used in the place of silver, silver becomes a useless thing in China. There would be no Chinese who would not exchange

this useless thing for opium. The real reason why the evil of opium comes into China is because Chinese people wish to have opium. Unless this desire can be suppressed, there would be no end of the opium evil.

5. Wang Liu says, "there are many private notes and money orders but whenever a bankruptcy of a money changer takes place, they all become void. When paper money is issued now, it will eliminate fraud by money changers. This is the fifth big advantage". If a money changer who receives millions of silver and changes it into paper (not intentionally), is criticised as a fraud, why is it not a fraud that the government takes billions of silver from people and changes it into paper from the beginning (intentionally)?

Moreover, naturally not all the money changers are fraudulent. However, when paper money is issued, there will be many money changers who will become insolvent. Therefore when the people know that a paper money system will be enforced, they will be afraid that notes convertible to Ch'ien or copper coins may become valueless paper and rush to money changers to change them into cash. Thus in 10 days people both from nearby and from a distance rush to money changers; big money changers may survive, but smaller ones will be obliged to go into bankruptcy. Then it should be said that paper money itself is the one which makes the money changers unreliable. Hsü Lien here adds that it is more terrible that the poor hold valueless papers in vain and women and children lament of that rather than the bankruptcy of money changers.

6. Wang Liu says, "people suffer from the weight of silver and wish to use paper. Therefore, when paper money is issued in the place of silver it realizes what the people wish. This is the sixth big advantage".

However, the current Hui P'iao (會票) used to be Chiao Ch'ao (交鈔) or convertible paper currency. At the beginning the rich were in charge of Chiao Ch'ao. Then, when the rich became unable to convert it, it was changed into government paper money. When the government became unable to convert the notes, they became Ku Ch'ao (孤鈔) or "orphan notes", that is to say, inconvertible notes. Thus after the stoppage of paper money appeared the P'iao (票) or convertible paper currency. The reason why the people wish to use P'iao is because there is the advantage of Chiao Ch'ao for P'iao and that there is no danger of inconvertibility. Therefore if paper money without endorsement of silver, Ku Chiao (inconvertible notes), replaced P'iao with endorsement of silver (convertible notes), people's will

goes against it. What is inconvenient for the people should be altered in politics. Now that the people think it convenient to use P'iao, there is no reason why it should be changed.

7. "When the system of paper money is already established and then manufacture of copper ware is prohibited to absorb copper at a high price, copper becomes abundantly available. Then by minting three classes of coins: Tang Pai (當百), Tang Shih (當十) and Tang I (當一), or respectively coins worth 100, 10, and one ordinary copper coin, it is possible to have a very precise monetary system. This is the seventh big advantage", says Wang Liu. However, from what he said, "at the beginning of T'iao Mu (條目)²⁰ or Items, paper money and Ta Ch'ien (大錢) or large copper coins should be first issued to be given to money changers", Ta Ch'ien should be required from the beginning when paper money is issued. Therefore, it is self-contradictory for him to recommend here the minting of the coins after the issuance of monetary system.

8. "When paper money is used for all the payment of national taxes, there would be no additional due to destruction. This is the eighth advantage", says he. However if paper money is used as coin, not only additional due to destruction but also all the national taxes can be abolished. This cannot be impossible. Is it not so?

9. "As figures are clearly written on paper money, it is impossible to change them, thus eliminating illegal acts of tax officials. This is the ninth advantage", says he. However, if the tax officials are unselfish, they would not take even gold given on a dark night. If they are greedy, they dare to make illegal acts even if there is a description on paper money that "those who counterfeit this will be executed". It is impossible to guard against counterfeiting by just adding a few words.

10. "The value of paper money is fixed and no merchant can increase or decrease it. Thus it is possible to eliminate a distrust of the people. This is the tenth advantage", says Wang Liu. However the situation was the same even in the preceding period in so far as the price of paper money is constant. There is no change on merchant today as the previous period. However, the description that "commodity price goes up while value of paper money decreases" is always found in the history of each epoch. This means the ups and downs of the value of paper money and nothing else. He may say that system of paper money of the previous period was inadequate. However in "T'iao Mu"²¹ he mentioned that when paper money of one "string" is purchased from the government, there

will be a reduction of as many as one hundred ordinary copper coins and when it is delivered to the government, there will be a further deduction of one hundred copper coins. This means that without waiting for the sale, the government itself causes the increase and decrease of the price of paper currency.

11. "Those malicious groups who promulgate illegal religion or cherish illegal wishes all try to attract people's attention by wealth. When the government is rich enough to prepare for the emergency case, it is possible to prevent the malicious intention of gangsters. This is the eleventh advantage", says he. However, the malicious advocates of paganism are all those who have no money and do nothing. They do not have bad intention from the beginning, but whenever they see wealth, they come to have a bad intention. When they have already bad intentions, how can they alter their bad intentions by a judgement on whether or not the government has sufficient wealth.

12. He says, "whenever there is a turbulence in a remote province, it is always because of theft of silver. However, when paper money is used in the place of silver, there will be no theft of silver and there will no longer be turbulence in the remote provinces. This is the twelfth advantage". However, there have been many instances of turbulence in the remote provincial areas since the Han Dynasty, such as pillage of livestock, kidnapping of women, etc. Recently, theft of horses in the meadows often takes place. Silver is not the objective in each case. Therefore, turbulence in the remote provinces is not necessarily because of silver. (It should be considered groundless to say that there will be no longer turbulence in the remote provincial areas when silver is replaced by paper money.)

13. "If there is any silver in the nation, it will all be brought to be exchanged for paper money. It is therefore possible to use such silver for the production of silver ware. This is the thirteenth big advantage", says he. Hung Wu Ti (洪武帝) of Ming Dynasty prohibited the use of gold and silver in order to keep the value of paper money high. Nevertheless the people treasured gold and silver and despised paper money. Now when paper money is going to be issued, if silver is not yet prohibited, there is no possibility that people would change silver for paper money. Besides, there is no reason why it is necessary to confiscate millions of silver in order to produce silver ware.

14. "For silver, there are many varieties of Pai Wên, Yüan Ssü, Yang Yin or foreign silver coin whereas paper money is uniform. In other

words, it makes the customs of monetary transaction in the nation uniform. This is the fourteenth big advantage", says he. However, from the view point of national customs of monetary transaction, it is not questionable whether there is a difference among Pai Wên, Yüan Ssü and Yang Yin or foreign silver coin. Besides, the difference among Pai Wên, Yüan Ssü and Yang Yin or foreign silver coin is, indeed, certainly a difference, but they are all in fact nothing but silver, therefore the difference does not cause any harm.

15. "The rich often store silver in their caves and do not use it for a long time. However, once they hear of the revision of regulations, they will exchange all their silver for paper money. In other words, it eliminates the bad habit of hoarding. This is the fifteenth big advantage", says he. However, one half of the silver in the nation has already flown out abroad. There may be concealed silver in the North and the West, but there is no such silver in the East and South. Even if there is concealed silver, such silver has been kept stored for a long time and there would not be any rushed exchange for paper money. (Hsü Lien added here that in such case, rather than exchange silver for paper money, on the contrary those who have done nothing, would start storing up silver in the cave. Because those who deposit their silver with money changers to receive interest will recover such deposited amount to store it in the cave as they are afraid that money changer may pay back with Ch'ien or copper coin in the place of silver.)
16. "By changing the patterns of paper money into several grades, proverbs will be printed on all notes of high and low denomination, so that the people learn to read. Then the modest wish to educate people will be met. This is the sixteenth big advantage", says he. However, when I made a trip to the capital, I found famous proverbs and family disciplines printed on Ch'ien P'iao (錢票) or paper currency. I asked, as a test, to the waggoners if they knew what it meant, but all of them were just astonished and did not know at all. In the extreme case, there were those who even did not know the name of the money changer who issued the note. In this connection, we do not understand what his proposal should be. In any event, such printing should not be called usefull.
17. "When the actual goods are not circulated well, the use of paper money will certainly brings about the stabilization of market price. In other words, it facilitates the circulation and distribution of goods. This is the seventeenth big advantage", he says. However, studying the record of issues of paper money in the past, the value of goods

was always higher than the value of notes and sometimes, there was stagnation in the circulation of paper money. But there is no record of stagnation in the circulation of goods. (Therefore what Wang Liu says should be called plain nonsense.)

18. Wang Liu says, "there should be a bureau to make paper money, there should be personnel to issue paper money, (thus paper money circulates) and when there is sufficient wealth, water operation and land cultivation should be carried and, thus creating many ways to earn a living. This is the eighteenth big advantage".
19. He further says, "since it is no longer necessary to depend upon the levy of the rich for each poor harvest, or each construction project, there will be no bribery of the government officials. This is the nineteenth big advantage".
20. "Since the financial status of the government becomes better and more stabilized, and there is no longer any levy, the expenditure will be made in a proper and legitimate way. This is the 20th big advantage".
21. "Although there are many drawbacks accumulated for a long time which should be corrected in the fields of navigation, river administration, salt manufacture, etc., no body dares to point them out. This is because all are afraid of insufficiency of expenses. When paper money is issued, there will be no such fear and it will be possible to eliminate all such drawbacks. This is the 21st big advantage.
22. "In all cases, what is taken from the people is little whereas what is given to the people is much. In other words, the best administration which ever existed will be developed. This is the 22nd big advantage".

These above assertions are only true after the full enforcement of the system of paper money. But what I am concerned about now is why the system of paper money should be enforced. Therefore these are out of question. (Besides, Hsü Lien also condemns as being out of question "the Ten Advantages" which Wang Liu cited and which he almost agreed with. The reason: the notes which are always converted with silver always bring about advantages, but otherwise always disadvantages.)

Moreover, when Wang Liu insists that paper money has the advantage of preventing theft, he says, "since paper money has the running number and identification seal, when a robber takes it and uses it in the market, he can be easily identified". Hsü Mei says that when a thief takes paper money in one city and uses it in another, the paper money is already circulated in the market and the thief has already gone by

the time when the police is informed of the theft and starts an investigation. Therefore, only innocent men will be arrested by the police as thieves.

3. Wang Liu who explained the advantages of paper money then discussed what is to be considered as so-called malicious inflation and forgery of paper money and concluded that these were not necessarily the inevitable disadvantages. Hsü Mei further denies all Wang Liu's assertions one by one.

First, Wang Liu says, "there are some critics who argue that it is reported that in the reign of Chan Tsung (章宗) of Chin Dynasty, that ten thousand *kuans* of old paper money could only buy a piece of rice cake, and this is a good evidence that if paper money is issued carelessly, the price of goods goes up and it brings about such evils. However, it is without doubt that old paper money becomes totally valueless when new paper money is issued and yet old paper money is not recuperated". "The cause of price increases has nothing to do with paper money. In *The Shih Huo Chih* or *The Records of Economy and Finance of the Chin Shu* (晉書) or *The History of Chin Dynasty*, it is stated that during the time of the rebellion by Tung Cho, 500,000 *ch'ien* could only purchase one *tan* of rice". In *The Biography of Shih Chi Lung*, it is stated that one *ch'in* of gold can purchase 2 *tou* of rice. This was only because rice was very scarce. How can the commodity price go up simply by manipulation of money and gold". Against this assertion, he argues, "the reason why 10,000 *kuans* of old paper money could only purchase a piece of rice cake is not because of the high price of rice cake but because of the low value of old paper money. In the case of rebellion of Tsung and Shih, it was really because the price of rice was expensive and it was not because of the low value of money and gold". Thus he insisted that the issue of paper money would result in price increases.

Now concerning the counterfeit paper money, Wang Liu says, "when 1% profit is given to the people who changes silver for paper money and a further 1% profit is given to those who pay tax with paper money, the people will obtain 2% total profit. On top of this, if the administration is benevolent, the poor people will be impressed and grateful for this and will never try to forge paper money to be punished".

However, according to Hsü brothers, 2% profit is too small to be worth while mentioning and the silver thus obtained turns out to be paper as a matter of fact. Wang Liu asserts that it could be made impossible to forge paper money by "preparing especially good paper, by having complicated tissue, while prohibiting the use of such paper for private use", or by "increasing the printings, making the type more

precise and complicated so that no one can imitate it". Against this, Hsü Mei says, "although it is easy to prepare especially good paper and prohibit its use among the public, it is difficult to prevent the paper manufacturer producing such paper for his own use. Even if the government confines him for life and does not permit him to go out, he is not the only paper manufacturer in the world. There could be others who have the same skill". "It is easier to imitate the type and design. It is possible to copy the letters of Lan T'ing (蘭亭) and yet not to lose any detail. It is all the more easy to copy paper money because in the case of printing, when there is too much red ink it stains paper money, when there is too little it does not produce the design. When too much worried, it becomes rough, when too little worried, it becomes too delicate". Besides, Wang Liu insists on the impossibility of counterfeit by saying, "for big paper money, when he who writes well is used, it is possible to identify handwriting. If each minister in charge signs by himself on it, it is impossible for a single person to imitate the handwriting of several people".

Hsü Mei on the other hand says, "even with the calligraphy of Chao Tsung and Wên Chu, it is possible to take the true one as the false one and the false one as the true one unless judged by a real expert. Those who are good at writing are far from Chao Tsung and Wên Chu. Besides, there are not many real experts who can judge calligraphy. The minister in charge may change once a year, or once a month, or even be appointed in the morning and fired in the evening. There are many examples. When notes with many different handwritings are scattered in the world, how is it possible to judge them one by one?" In particular Hsü Lien says, "even if the minister in charge remains at his post for a long time, it is impossible for him to write his name on all the notes". According to him, "when the minister in charge is from Han, his name consists of 2-3 characters. When he is Manchurian, he has a name of 4-5 characters. In order to issue 10 million notes, if the name consists of 3 characters in average, the total is 30 million characters. When sitting at a desk all day long and writing very quickly, it is possible to write only 3,000 characters a day and a little more than one million characters a year. It is only possible to sign 10 million *kuan* of paper money if 30 people spend one year doing it. However, the issue of paper money is not limited to 10 million strings.

Then, Wang Liu says that it is impossible to forge paper money when there are enough of connoisseurs paid by the government. Against this Hsü Mei argues, "there is a connoisseur of Wên Yin and Yang Yin even in a small city, there are many in a city of a thousand

households, and there are more in a city of tens of thousands of households. Therefore it is possible for the people to have silver judged everywhere and by everybody. However, when official connoisseurs are appointed by the government, it will be only the connoisseurs themselves who can judge paper money. There cannot be many of them like private connoisseurs. Besides, if such official connoisseur is appointed at one place it is only at that place and there are many other places. Therefore the judgement should be made always by such connoisseur at such place. This is something which goes against the natural trends in the world.

When Wang Liu explains the case of prohibiting counterfeit paper money by saying, "there may be those who say that as even the paintings of Wên Shên and Ch'iu T'ang have counterfeits, it is all the more natural that there will be counterfeit paper money; however, those who forge such paintings just aim at the chance to cheat a couple of people". On the other hand, Hsü Mei says, "in that case such a couple of people must be experts even though they are not special experts. Even such experts are cheated; how is it possible to expect that the general public can judge the handwriting and type and design of paper money. It is too much to expect".

4. We observed the system of paper money of Wang Liu by dividing it into two aspects: preparation and circulation. In each of them, Hsü Mei criticises one after another the assertions of Wang Liu. It seems that the former cannot help criticising and refuting completely the latter's argument.

However, as to the problem of who should make paper money, namely to whom the right of mintage should belong, Wang Liu says that it should belong to the governor of the nation and the emperor should have the mintage right, and even Hsü Mei does not raise any objection in this respect. Now, as to the problem of what denomination of paper money there should be, Wang Liu breaks paper money down into 3 categories of Big, Medium and Small, each category having two different denominations, in total 6 denominations, by saying "1,000 and 500 strings as big paper money, 100 and 50 as medium, and 10 and 1 as small". On the other hand, Hsü Mei objects that paper money of 1,000 *kuan* cannot circulate and that it would be possible only after all the silver of rich merchants in the nation have been transferred into the treasury of government as tax and duty. When Wang Liu replies, "there are Hui P'iao whose value is multiplication of 1,000 "strings", Hsü Mei points out that Hui P'iao is not paper money by saying, "it is possible to convert Hui P'iao into gold if so desired whereas paper money of 1,000 "strings" is inconvertible to the money even if the exchange is desired".

Now as to the phase of circulation, Wang Liu first comments that the words of P'i Kung Pi of Sung Dynasty, "the principle of conversion is to deposit coins first" is well said, but then he says, "Now, it is not the age of Sung Dynasty. The people hold in their homes millions in silver. When the government issues paper money and exchanges it for silver, the silver of private possession becomes the foundation of government's paper money, and it is not necessarily a prerequisite to deposit the silver first".

Hsü Mei denies Wang Liu's argument which is considered as the latter's inconvertible notes theory, by saying, "even in the age of Sung Dynasty, it was not true that the people did not hold millions of coins and the government did not issue paper money. Then the coins held by the people should have been the basis of paper money of the government. But why did he say it necessary to deposit coins first before exchanging coins with paper money?"

When the people hold millions in silver at home and the government issues paper money to exchange it with silver, it only makes paper money as the basis of exchange with silver.

How can it make silver as the basis of paper money? Even at the time of the Sung Dynasty, it was impossible to issue notes to change them with coins privately held without endorsement of coins. It is also impossible even today to exchange paper money without endorsement of silver for the privately owned silver. Wang Liu asserts that the time is different now from the Sung Dynasty. But he himself does not understand the difference."

Now, as to the quantity of paper money, in other words, the amount of circulation, Wang Liu seems to depend on whether or not it suffices for the use of the nation by saying, "when paper money is made and its amount becomes sufficient to cover the use of the nation, the manufacture of paper money is suspended and additional minting will be made in 20-30 years". On the other hand, Hsü Mei says, "in each case of paper money of Sung, Chin and Yüan, the attempt was always made to stop issuing paper money when it was sufficient for use. But each time, it was obliged to be issued continuously. Why? It was because it was not sufficient to meet the use of the government although it met the use of the nation. From the earliest times, the emperor who inaugurated a Dynasty used to make investigation of the revenues from land and sea and regulated his expenses accordingly. However, at the time of his successors, who were not necessarily idiots, many unexpected useless expenditures such as drought, flood, warfare, religious and other ceremonies, etc., made it impossible to keep the national finances on a sound

basis and excessive taxes were imposed upon the people. At the time when paper money was circulated, additional paper money was issued on top of the excessive taxation. Unless additional paper money was issued, the government could not defray the expenses, and when paper money was issued additionally, its value went down because of excessive issue of paper money and thus the national expenses again could not be met. This vicious circle was the case at the time of the inflation at the end of Sung, Chin and Yüan Dynasties. If the issue of paper money is suspended when it becomes sufficient to meet with the national use, all the taxes are paid mainly in paper money, there is a constant inflow of paper money to the government after the suspension of issue of paper money. When there is no unexpected government expenditure, it is all right. However, if there is, it is inevitable that paper money should be again issued. Besides, it is not the case that the amount of paper money is insufficient in the nation". In this connection, Hsü Lien further suggests the inadequacy of paper money by saying that when paper money is issued too much, its value goes down whereas the value of gold and silver does not even if their quantity is large.

Wang Liu further says, "on the first issue of paper money, the official salaries, in the exterior as well as in the interior of the capital, should be doubled and for the main salary silver is paid whereas all the increase is paid in paper money. As the circulation of paper money increases, the official salaries should be multiplied by several times and all be paid in paper money". Hsü Mei argues, "in such case, the officials in the capital take the delivery of goods first and then pay in paper money, and this trend will be extended to the local cities, whereas, the officials in the country side will oppress the rich and confiscate goods and money, or those who are really malicious will ask the rich to present their silver and if refused, they will menace the rich by punishment for violation of the system of paper money. The fear of the people of paper money starts from the laws of paper currency systems, and the trouble of the people by paper money starts from this increase of salary".

Lastly, as to the problem of the use of paper money for foreign trade, Wang Liu insists that for the trade between merchants and foreigners it should be done by barter and not by silver. When the foreigners bring in silver, it should be changed for paper money first, and then goods should be purchased with such paper money. On the other hand, Hsü Mei laughs at Wang Liu saying, "all the people in the nation are afraid that foreigners may take out silver (from China) while here is only one exception who is afraid that foreigners may bring silver (into China). I do not understand him".

5. In the above, we observed the criticism of Hsü Mei on Wang Liu's paper money theory, and we found that it consists only of the complete and thorough refutation of Wang Liu's theory. The opinions of the two are completely opposed and the conflict between the two goes to the extreme. The one insists so much on the advantages of paper money and defends so much its disadvantages that sometimes he goes too far. The other attacks the former so much that often he goes to extremes. It cannot be denied that there are not a few cases of fruitless arguments. However, at the same time, just because of the above, when we compare the two, it is easy to find the demerits and faults of each opinion and we can have a right understanding without deviating to either one of them. Therefore, it seems now of little importance to examine which one of the two is right. I would therefore avoid making an overall evaluation and just try to study some points which seem to be important and interesting.

First, Wang Liu pointed out as one of the big advantages of paper money that its material is paper which is limitless, thus constituting an endless source of wealth, whereas Hsü Mei objects that what is limitless is valueless and the notes made of valueless material would not circulate, and the harm of paper money exists in the very fact that it is limitless. What is the big advantage for Wang Liu is the big disadvantage for Hsü Mei.

In this connection, we should admit that Wang Liu is right and Hsü Mei is wrong. When Hsü Mei says, "what is limitless is valueless", he is of course not wrong. These things belong to so-called free goods, and it goes without saying that free goods are naturally valueless. However, to assert that money consisting of valueless material would not circulate, in other words that such valueless material cannot be made into money, should be criticised as the mistake of the so-called material theory of money value. As long as the essential of the money is found in its being the tool of exchange, it should be considered as the process of purification of money that the money deviates from the value of its material. Thus the so-called nominal theory should be approved. We should note that early at the time of Nan Pei Ch'ao (南北朝), when China was divided in two parts, Northern and Southern, K'ung Lin Chih (孔琳之) of the Chin (晉) Dynasty already mentioned, "good emperors should make money out of valueless material so as to have valuable goods circulated"²². Hsü Mei says, as cited above, that coins baked from soil would never circulate, but I can point out examples of coins verily made out of soil. By this I mean not only what is written in *The Shih Huo Chih of the Sung Shih* (宋史) or *The History of Sung Dynasty*, "in the west of Ta

Chiang (大江) or the Great River and between Hu (湖) and Kuang (廣), or the southern region, much money was destroyed and mixed with mud, which mixture was made into money again to be called Sha Wei Ch'ien (沙尾錢), or what is written in *The Shih Huo Chih* of *Ch'ing Shih Kao* (清史稿), or *The Manuscript of the History of Ch'ing Dynasty*, "among the coins of Pao Su (寶蘇), there were some which contained mud, and when they were dropped on the earth, they were broken". It is clear that in these cases, the earth was a part of the materials of the coin but this was rather a private mintage. In such case, the value of the money decreases and its circulation is hampered. This tends to give support to Hsü Mei's theory. What I would like to mention here also is the money which appeared in Germany just after the World War I, and this is what Dr. Kakujiro Yamasaki says "seems to have been made in a famous national ceramics plant at Meissen". "The coins, as soon as issued, went into the hands of curious collectors and never circulated in general; they thus became antiques" as Dr. Inazo Nitobe said. According to Dr. Nitobe it is true that they did not circulate as coins. But it is not because of their valueless material as earth. Therefore, this does not give a support to Hsü Mei's theory²³.

Further Hsü Mei says that the 18th-22nd big advantages of paper money according to Wang Liu are en bloc what would be realized after the full enforcement of the system of paper money and they are out of the question for him as he is going to discuss why the system of paper money should be enforced. But this should be said to be a little unreasonable, because the advantages which are realized after the full enforcement of the system of paper money are nevertheless nothing but advantages of paper money. It is reasonable to insist upon the issuance of paper money in order to achieve such advantages. Hsü Mei says they are out of question for him. But as long as he criticises Wang Liu's theory here, he can by no means be allowed to say such a thing. There is a word of defence against the criticism that his assertion is just objection for the sake of objection and denial for the sake of denial.

Now, while Wang Liu stands for the nominal theory, denies the assertion of P'i Kung Pi of Sung Dynasty on the necessity of conversion reserve and tries to define paper money as inconvertible notes, says that it is not necessary to deposit silver in order to issue paper money, and expresses the opinion that the government should issue paper money in order to absorb the silver of people, Hsü Mei insists on the material theory, denies inconvertible notes while approving convertible notes, and concludes that it is impossible to absorb privately owned silver by paper money without endorsement of silver. Now it is not an exceptional phenomenon

to see inconvertible notes issued in the country. In particular in China, the monetary reform at the 24th year of Chung Hua Min Kuo (中華民國) seems to be interpreted as the realization of Wang Liu's theory, because by this monetary reform, the Chinese Nationalist Government abandoned the silver system and started a bank note system. The issuance of notes was limited to the three banks, Central, Chinese, and Traffic Banks. (In January, the 25th year of Min Kuo, Chinese Agricultural Bank was also authorized to issue notes) and it was decided that all payments, official and private should be made with these notes, Fa Pi (法幣) or so called "legal money". Thus the government succeeded in nationalizing silver by absorbing all silver including silver coins and silver ingots in exchange for these bank notes. Incidentally, when the evaluation of their theories is made thus from a pragmatic view point based on the facts as the basis of argument, Hsü Mei's theory seems to be right in regard with malignant inflation because of inconvertible notes. It is because it cannot be denied that there are many malignant inflations because of inconvertible notes. However, all malignant inflations are not necessarily due to inconvertible notes, but they take place when the handling of inconvertible notes is inadequate. We cannot deny those who say that when there is a possibility of malignant inflation in the mishandling of inconvertible notes. This should be acknowledged as the drawback of inconvertible notes. But they should not also forget that by so asserting they are obliged to admit that the significance of such a drawback is then very small.

In short, it is possible to say that Wang Liu's theory on paper money was on the right track of the money theory in its fundamentals. But we should admit that he was so aggressive in his assertion that from time to time he went out of the right orbit, and it is significant for the criticism of his money theory to point out such excessiveness. And it is there that Hsü Mei's argument has the *raison d'être*. This is the reason why I cited above the opinions of Hsü Mei to criticise Wang Liu's paper money theory for comparative study purposes.

- 1) *Ch'ien Pi Ch'u Yen Tsü Hsü*, "Ch'ien Ch'ao I, I" (錢幣芻言自序, 錢鈔議一), or The Preface written by the author himself to *Some Remarks on Currency*.
- 2) To be found in *The Huang Ch'ao Hsü Wên Hsien T'ung Ka'o*, Chüan 25 (皇朝續文獻通考卷二十五), or *The Second Study of the Classics of Ch'ing Dynasty*, Vol. 25, by Liu Chin Ts'ao (劉錦藻).
- 3) A.D. 1651.
- 4) May be thought to be an article to be found under the title of Ch'ien Ch'ao I" (錢鈔議) by Wang Liu (王壘), in *Huang Ch'ao Ching Shih Wên Hsü Pien* (皇朝經世文續編), or *The Second Readings in Politics of Ch'ing Dynasty*, edited by Ko Shih Chün Tsü Yüan (葛士藩子源) whose native place is Shang Hai (上海).
- 5) See 1).

- 6) *The Ching Shih Kao* (清史稿), or *The Manuscripts of the History of Ch'ing Dynasty*, Vol. 152.
- 7) To be found, for example, in *The Huang Ch'ao Ching Shih Wên Hsü Pien* (皇朝經世文續編), or *The Collection of Essays on Politics in the Reign of the Ch'ing Dynasty*, edited by Wu Chin Ch'êng K'ang Hsü Jên (武進盛康旭人), Vol. 60.
- 8) *Ibid.*
- 9) Ku Yen Wu (顧炎武), *T'ing Lin Wên Chi* (亭林文集), or *The Essays of Ku Yen Wu*, Vol. I.
- 10) *Han Shu, Shih Huo Chih* (漢書, 食貨志), or *The Records of Economy and Finance of the History of Han Dynasty*.
- 11) Kinji Tajima, *Tung Yang Ching Chi Hsüeh Shih* (東洋經濟學史), or *The History of the Chinese Economic Doctrines*, p. 135.
- 12) Man wird sich nicht mit Börs' und Beutel plagen, Ein Blättchen ist im Busen leicht zu tragen, Mit Liebesbrieflein paart's bequem sich hier, Der Priester trägt's andächtig im Brevier. —Goethe, *Faust*, II.
- 13) Ch'iu Chiün (丘潛), *Ta Hsüeh Yen I Pu* (大學衍義補), or *The Commentary to the Explanations of the Great Learning*, Vol. 27.
- 14) Liu Chin Ts'ao, *op. cit.*, Vol. 25.
- 15) Ku Yen Wu (顧炎武), *Jih Chih Lu* (日知錄), or *The Record of Daily Findings*, Vol. 11.
- 16) *Nan Ch'i Shu* (南齊書), or *The History of Nan Ch'i Dynasty*, Vol. 37.
- 17) T'ao Tsung I (陶宗義), *Ch'o Kêng Lu* (輟耕錄), or *The Essays Written by Tilling*, Vol. 2.
- 18) *Yüan Shih, Shih Huo Chih* (元史, 食貨志), or *The Records of Economy and Finance of the History of Yüan Dynasty*, Vol. 5.
- 19) *Hsin Yüan Shih, Shih Huo Chih* (新元史, 食貨志), or *The Records of Economy and Finance of the New History of Yüan Dynasty*, Vol. 7.
- 20) Wang Liu, *Some Remarks on Currency*.
- 21) *Ibid.*
- 22) *Chin Shu, Shi Huo Chih* (晉書, 食貨志), or *The Record of Economy and Finance of the History of Chin Dynasty*.
- 23) Yamazaki Kakujiro, *Huo Pi So T'an* (貨幣鎖談), or *Essays about Money*, pp. 151-152.