<table>
<thead>
<tr>
<th>Title</th>
<th>CREDIT MONEY AND ITS CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Nakatani, Minoru</td>
</tr>
<tr>
<td>Citation</td>
<td>Kyoto University Economic Review (1954), 24(2): 1-17</td>
</tr>
<tr>
<td>Issue Date</td>
<td>1954-10</td>
</tr>
<tr>
<td>URL</td>
<td><a href="https://doi.org/10.11179/ker1926.24.2_1">https://doi.org/10.11179/ker1926.24.2_1</a></td>
</tr>
<tr>
<td>Type</td>
<td>Departmental Bulletin Paper</td>
</tr>
<tr>
<td>Publisher</td>
<td>Kyoto University</td>
</tr>
</tbody>
</table>
Credit Money and its Control.......................... Minoru Nakatani (1)

The Characteristics of the History of Chinese Money
........................................................................ Fumio Hozumi (18)

The Inflation in the Early Meiji Era............... Motokazu Shindo (39)

OCTOBER 1954

PUBLISHED BY
THE FACULTY OF ECONOMICS
KYOTO UNIVERSITY
KYOTO, JAPAN
The bank credit, that is, the credit given to banks, or the credit banks receive, is often called credit money, as it functions as money in the form of banknotes or deposits. According to the popular view, such credit money is understood to have got its specific nature as money, when the commercial credit grown up in the course of commercial transactions was substituted by the bank credit under the modern banking system. Its functions as money, as is generally accepted, consist, of course, of functions as a means of exchange. While it is emphasized that such credit money is never money in its intrinsic sense, it is called "money", because of its functions as a means of exchange possible on the basis of the credit. In similar implications, the commercial bills, symbol of commercial credit, are known under the name of commercial money, while the bank notes and the demand deposits are called by the name of bank money, both being included in the category of credit money, in an enlarged sense of the term. However, in a strict classification, the commercial money and bank money are claimed to be divided as of entirely different properties, for, while the former is

* The author is a professor of Economics at Kyoto University.
recognized as equipped with only a specific property of substituting for money, as a claim to it, the latter is accepted as the one with the capability of increasing the value, or, in the other words, with a property as capital too. It is on this account that the latter only should be called the intrinsic or typical credit money. From this it is insisted that credit money, differs from the national money, the compulsory circulation of which is authorized, or from an intrinsic money, and therefore, circulates according to a specific law of circulation which is quite different from those of paper money or gold money. Thus, it is concluded that, from the fact that the credit money originally grew out of commercial bills, it naturally submits to the law of circulation of such bills. And, the amount of its circulation is said to be affected by the expansion or shrinkage of commercial credit, while it is subject to various constraints resulting from the re-production process of capital. 1)

It is needless to reiterate here that the interpretation that credit money circulates according to the law of the circulation of commercial bills marked a notable progress in the 19th century theory of credit. Back in the 17th and 18th centuries, money was invariably meant to consist of metal money, where there was no clear-cut difference recognized among metal money, paper money and banknotes. For the first time in the 19th century, banknotes and deposit currency came to be important means of payment, when their peculiar properties were duly recognized. Even though, in this way, the nature of banknotes and other means of credit was clarified, they, in the actual economic society, did not necessarily function exactly according to their respective peculiar nature. As the nature and organization of the economic society differed and as the extent of its development differed, paper money, banknotes and deposit currency had various extents of actual use, while a slight difference may also be detected in the way each of them would function as well as in the force with which such functions work. Especially in case the premise of a political theory is sought out from actual social phenomena, it may be possible that the subjective appreciation in connection with the cognition of reality differs slightly. The divergence of views between two opposing standpoints of the Currency Principle and the Banking Principle, may likewise be considered to arise from such circumstance. As is well known, the followers of the Currency Principle interpret a national currency only in terms of gold, coined money and banknotes, taking deposit currency and other private means of credit as simply a super structure built upon the foundation of

---

1) This vein of thinking is now dominant in Japan with regard to credit money.
CREDIT MONEY AND ITS CONTROL

such a national currency. On the other hand, those following the Banking Principle assert that so far as banknotes, besides gold, are to be considered as currency, deposit currency and other private means of credit with similar functions, should also be included in the entire range of currency. While the former group is in favor of enforcing control on banknotes, irrespective of whether they be equipped with convertibility or not, the latter group discards the necessity, or even the possibility of ever enforcing such control so long as the banknotes in question are convertible notes.

With respect to other means of credit than bank notes, the former group is of the opinion that so far as banknotes are subject to control, these will be controlled correspondingly, eliminating the necessity of resorting to any specific measure of control. The latter group, on the other hand, declares that, as these never correspond to the increase or decrease of bank notes, and further as these may be considered to constitute capital funds loaned, these may not be exempted from such control, as are bank notes. Arguments on these two schools of theory, are too numerous to be mentioned here. Question, however, should be posed to discover, once and for all, whatever reasons lying behind this opposite stand taken by these schools, respectively. For one thing, this may be because various currencies and means of credit, in the actual workings of economy, may fail to evince their specific functions, and on the contrary, operate in such way that the observer is liable to be led to different conclusions. On the other hand, the circumstance should be noted that most of the followers of the former theory hailed from scholars or statesmen, who held such positions, where they could pass cool criticisms of credit transactions, while those who upheld the latter category of thinking were mostly represented by bankers and others who were directly responsible for such transactions on credit. It should also be noted that the phenomena of money and credit in the early nineteenth century, likewise, particularly the series of financial panics that have occurred from time to time, are liable to be viewed from different subjective viewpoints.

Whatever that may be, it should be concluded: that the Banking School found a different nature in banknotes und other credit money from those in gold and paper money, a kind of compulsory currency, was a significant achievement realized during the nineteenth century. It is problematical, however, if the law of circulation of the banknotes or the "law of

their reversion," which constitutes a central theoretical foundation of this school, and the assertion of the homogeneity among banknotes, deposit currency and such private means of credit as commercial bills, will indefinitely hold good.

(II)

As stated above, it is generally maintained that, while a more intrinsic credit money should be found in banknotes and deposit currency, such bank money growing out of the commercial money\(^1\) has apparently replaced the latter, and for this very reason, bank money also is found subject to the law of circulation of commercial billes for which no control is to be given.\(^2\) However, this theory should be evidently open to question: will it hold good, as it is, without ever presenting contradictions?

First, the reasons why banknotes and deposit currency, rather than commercial notes, is accepted as a more typical credit money, should be examined. In this connection, the substitution of bank money for commercial money will be taken up for examination. That the bills are called commercial money is understood to be due to the fact that, so long as claim and debt are offset against each other by them, they are allowed to function as money. However, the extent to which such settlement by offset may be carried out perfectly is unavoidably affected by both personal and regional conditions. And this extent of offset being compelled to expand in keeping with the growth of the capitalistic production, it is inevitable that cases of dishonored bills should increase. Especially, the financial panics which have occurred periodically have served to substantiate this fact, which, in turn, tended to add to the reliability of bank credit which by nature is invested with a greater degree of liquidity. That such substitution has taken place explains the circumstance in which men had to choose as a means of credit, something more similar to money in nature, and this may be found sufficient to explain the fact that bank money is really a typical credit money. It will be difficult however, to reason out from this interpretation that private commercial bill has developed into the bank money, and that therefore inasmuch as the bank money has grown out of the commercial bill, the former should be subject to the law of circulation of the latter. It does not mean, however, that in this case, the bank money does never follow the law of circulation of the commercial bill.

---

1) This has been recognized even by Prof. A. H. Hansen (A. H. Hansen: Monetary Theory and Fiscal Policy, 1949, p. 17)
2) The monetary theory of the Banking School and Marxism is fundamentally based upon such interpretation.
While it cannot be denied that the banknote, when compared with the inconvertible note issued by the Government, is invested with such nature as has been described in the preceding lines, this is simply due to the fact that the bank money is often brought into existence by the discount of the bill, and does not mean that it is always subject to the law of circulation of the bill. Further, another reason of limiting an intrinsically typical credit money to the bank money, is often sought in the fact that the bank forms a pseudo-loan capital. This formation of loan capital by the bank, however, may well be construed to be due to the fact that bank credit is more general and dependable than private credit. If this is true, though it may amply show that bank credit is invested with higher monetary property as compared with a commercial bill, that much should be considered to be insufficient to make it justifiable to distinguish bank money from commercial money as a more typical credit money, both intrinsically based upon credit. If the concept of credit, as reasons of distinguishing them, should be based only on the notion of loan capital, it may be illogical to seek a foundation of the existence of commercial money in credit relations.

Next, the credit theory, which is here an object of criticism, does not necessarily tell that credit money is always subject to the law of circulation of the bill only. Here the theory of the heterogeneous development of credit money is employed, when it is usual that the heterogeneity is explained as a result of the internal growth of credit money. For example, when the banknotes are issued by a central bank and are vested with the privilege to be forced currency, they will come to circulate in place of gold money and Government-issued paper money. Even in case banknotes are issued on security in the form of public bonds and other marketable securities, a similar phenomenon will be expected to arise. In case of deposit currency also, cash currency, as is deposited at a bank, will change into deposit currency, and further, the loan and the discount of the commercial or accommodation bill, will serve to bring deposit currency into being. And, in all these cases, it is held, a heterogeneity of deposit currency will be seen. It is needless to say that the common practice of monetary means changes in keeping with the growth of an economic society and, hence, the foregoing statement permits of no doubt whatsoever. However, it is hard to interpret such heterogeneity, as a result of an inherent necessity of credit money, and, in this sense it would seem contradictory to assert, as some of those theorists do, that such is a result

3) This explanation is often used by Marxist monetary theorists in Japan.
of an internal growth of credit money. Further, according to the theory reviewed here, it is held that credit money, by its intrinsic nature, is neutral in the economic society, and, therefore, even after it has acquired such heterogeneity this neutrality continues to be there. In this case, it is considered that the creation of bank credit can not possibly be continued indefinitely but will sooner or later be deflated. Even though credit money, before acquiring such heterogeneity, may be found invested with more elements of neutrality as compared with the supply of metal money, it would be just a little against reason to insist that such neutrality still exists in credit money after heterogeneity has been acquired. Of course, such theory may be accepted, if it is proved that credit money prior to heterogeneity is inherently imbued with such elements as will make such change inevitable. The fact, however, is not so. In short, a close scrutiny of the original nature, as they should be, of banknotes and deposits is significant in that it precludes the danger of overlooking their original nature which remains yet in credit money, which is liable to be committed when they are to be scrutinized after heterogeneity has been acquired. Such danger includes, for instance, that of overlooking the difference between an inflation of metal money and that of bank credit. However, it should be considered to be dangerous, to the same extent, to give too much emphasis to such original nature when we illustrate the function of credit money already heterogeneous. If it should be asserted that the original function should dictate the subsequent function, the function of such as is now called credit money may have to remain the same with those of deposits or deposit receipts. It is, thus, considered proper to interpret such heterogeneity of banknotes and deposit currency, not as a result of their internal growth, but of such external factors as the growth and changes seen in the economic society, including the change of the common practice of monetary means. Money or monetary means is a product of an economic society, and as the inner organization of the latter grows and changes, the composition of the former and the carriers of its function may be construed to change, too. If such a stand is taken, the phenomenon relative to the heterogeneity of credit money may be amply explained away on the basis of a coherent theorization.

On the other hand, if, as has already been mentioned earlier, credit money intrinsically is required to follow the law of circulation of the bill and is neutral in the economic society, and, if this principle of neutrality is to hold good even with credit money after acquiring heterogenous property, it will follow that the question of control will never come up with credit money. In spite of this, however, as has been mentioned earlier, those who
CREDIT MONEY AND ITS CONTROL

hold the Currency Principle, while recognizing the so-called automatic regulation in gold money, assert the necessity of subjecting banknotes to control, as they do not carry such automatic function. The follower of the Banking Principle on the contrary, oppose to placing control on banknotes on the ground that they are naturally equipped with a propensity to adapt themselves to the requirements of economy. With regard to other means of credit, however, these two groups are seen to take a reciprocally reverse stand, respectively. The former group refuses to recognize the necessity of controlling these means of credit as those have their amount modified as that of banknotes changes, while the latter group points out the necessity of such control because, while their natural adaptability to economy is recognized, they are liable to drastically inflate or deflate in a short period of time, due to speculative activity. A detailed theoretical criticism of these various stands is dispensed with here. It should be noted, however, that the Banking Theory, while recognizing the element of reflux or adaptability retained in banknotes, strongly demands the condition of securing their convertibility, and at the same time that it emphasizes the elasticity and positivity of other means of credit. This was the reason why the preceding chapter tended to appreciate this particular theory somewhat highly.

The error committed by this stand of failing to distinguish between the banknotes and other means of credit was already criticized in my other paper.4

III

In the preceding two chapters, the theory of credit currently widely accepted in Japan, especially the view which fails to give due importance to the difference between banknotes and deposit currency on the one hand, and other private means of credit on the other, and emphasizes that credit money, unlike metal money and inconvertible paper notes, is neutral, has been reviewed in an effort to prove that credit money must of necessity be accompanied by control. Moreover, the fact now is that a national economy is being largely met by the supply of credit money, the regulation of such demand and supply being carried out by a control operation. First, the relation between the demand for credit money and its control will be examined here.

Credit money is demanded for the same reason as money in general is demanded. It is demanded as a means of exchange (of purchase)

4) M. Nakatani: "Deposit currency, its liquidity and interest", Keizai Ronso, Vol. 6, No. 17.
or of payment, and also, for a storage of value or of purchasing power. The demand for money has hitherto been fully analysed in the studies of the value of money and of interest. One of the most characteristic reasons for the demand for money will be found in the accompanying element of time inevitably required in human actions.\footnote{J. C. Gilbert: “The Demand for Money; the Development of an Economic Concept”. The Journal of Political Economy, Apr. 1953, pp. 144-159.}

Supposing a static economy, with the element of time disregarded, it is evident that no means of exchange is needed, and, hence, in such economy, as claims and debts are instantly settled by offset, no means of payment, likewise, is needed. Another characteristic reasons for the demand for money may be found in the fact that the capital value, in future, of the claim with definite interest is uncertain.\footnote{Ibid.}

And further, the uncertainty in future, in general, has often been considered as an important factor of the demand for money. However, the uncertainty in future of the price level, for example, will not necessarily constitute a reason for the desire for money holding. Supposing the price level is predicted to drop sharply in future, people may well be justified, if they desire, to get hold of some interest bearing claims e. g. public bonds in place of money. That money is desired, in spite of this, is considered to be due to the fact that the investment in such public bonds and the recollection of such investment require expenses, and, also, that the price of these public bonds (i.e. their capital value) in future is uncertain. These points have already been fully analysed in the past,\footnote{E. Modigliani: “ Liquidity Preference and the Theory of Interest and Money” Econometrica, Jan. 1944.} and, as these points do not directly concern us here, further mention of them will be dispensed with, survey here being confined to how credit money is actually meeting such demand for money arising from various motives and what it is being affected by.

Credit money, alluded to here, of course, means banknotes and demand deposits, not including private means of credit (bills). It is hardly necessary to explain here that banknotes and demand deposits are now generally used as a means of exchange and payment in most countries. Of course, with regard to the monetary character of demand deposits, questions may still be raised: however, at least, in those countries with a banking system soundly established, there is no consciousness that demand deposits serve as the means of exchange, because they can be instantly converted into cash, but social consciousness is going to be brought up to the effect that demand deposits are, as such, the means of exchange. This is, partly, because of
the fact that lately the commercial banks are well protected from their bankruptcy, while, on the other hand, it is probably due to the social habit that the payment by demand deposits is still considered effective even when the bank become insolvent and the demand deposits inconvertible into cash hereafter. Next, the time required in the process of payment by banknotes and deposit currency can be short, which is always kept in holding for a certain period of time under the anticipation of a second payment. This indicates that banknotes and demand deposits are actually carrying out an important monetary function as a means of storage of purchasing power or of liquidity. A problem is, here: the function as a means of storage of purchasing power can be carried out by an asset, which, in itself, is not eligible for being a means of exchange or payment, provided that there is a guarantee that such may be converted into banknotes or demand deposits without any unduly big loss or delay. For example, though time deposits may not necessarily be considered to be a means of payment and, hence, credit money, they are capable of executing such storing functions. And, to the extent that such assets are chosen for storing the purchasing power, the demand for credit money will be affected. Now, what is the mutual relation between the choice of the holding of credit money rather than public bonds as early mentioned and the decrease of the demand for credit money due to the existence of time deposits now being examined here? In case the expenses involved in the investment in public bonds and their re-collection are small and their future value is definitely dependable, and, in case the contract of time deposits is rigidly enforced, no payment prior to the expiration of the period being permitted and, further, no easy borrowing may be expected by offering them as a security in this case, the effect on the demand for credit money will be diametrically different from what is described above. All these circumstances are influenced by the system of the money and security market and measures of control enforced in various countries. Apart from the policy of loan and interest and many other means of control on the side of supply, credit money, as far as the aspect of its demand is concerned, may be considered to be already under a power of control.

On the other hand, the characteristic of credit money as a controlled currency is especially manifest where its supply is concerned. Whether it be banknotes or deposit currency, as credit money can exist as such by being loaned, its supply should originally be highly elastic. Now, provided that the bank solvency is always guaranteed, it may be supplied without limit according to its demand which is tended to be accompanied by its
higher velocity of circulation and a marked rise of the commodity price and production level. On the contrary, when it is in the process of being deflated, it is inclined to make a cumulative progress in a reverse direction. When the market situation is on an upward trend, enterprise demand for loans, and even demand by general consumers, will rise as the commodity price level rises. And, in such case, the bank will be induced to make loans to even those whom it has hitherto found ineligible for such loans. This is, so to speak, a lowering of the standard for the appraisal of the eligibility for being credited by the bank or an expansion of the limitation placed on such eligibility. Moreover, if the level of the effective demand caused by such expansion of credit rises above the increase of supply in goods and services due to the increase of employment, it will stimulate a further rise of the commodity price, with the consequence that it leads to another increase of supply through an increase of the demand for credit and an expansion of the marginal recipients of credit. On the contrary, however, as soon as a reduction of demand for commodities and of employment begins to set in, the marginal recipients of credit, considered eligible up to that time, will be shifted to the domain of risk, while the standard for the appraisal of eligibility will become more rigid and the effective demand for loans will be reduced. As a result, the supply of credit money will decrease, accompanied by a further reduction of effectual demand, employment and income, which will eventually lead to a reduction of the supply of credit.\footnote{Schumpeter's theory of business cycles, while not necessarily based on monetary viewpoint, still recognizes such fluctuation of credit money. cf. C. Warburton; “Money and Business Fluctuations in the Schumpeterian System.” The Journal of Political Economy, Dec. 1953.} Thus, it is seen that the supply of credit money is elastic and tends to enlarge the amplitude between expansion and contraction, and this fact in itself may be held to bespeak the necessity of control for the purposes of the economic stability and the maintenance of the bank liquidity. If no control is exercised on the supply of the bank credit and bankruptcies or repudiations of bank debts are repeatedly brought about, bank credit will hardly be distinguishable from private credit. Only when bank credit is subjected to an autonomous or heteronomous control, thus securing the bank liquidity, the bank credit begins to be capable of carrying out monetary functions. In this sense, it may even be said that what makes bank credit function as credit money is the control placed on its supply. Especially for a means to carry out satisfactorily monetary functions, it should be required to possess a stable value, and, naturally, a stable purchasing power. When seen from such angle, too, it will be seen that, only when its purchasing power is stabil-
CREDIT MONEY AND ITS CONTROL

It has presumably been made clear in the preceding lines that it is largely due to the control placed on it that credit money, such as banknotes and demand deposits, is deservedly accepted as money. Now, attempt will be here to clarify how control of credit money has developed, and what is the situation of such control being exercised. It has already been stated that such control of credit money was originally intended to secure the liquidity of the bank so that its dependability be guaranteed. Subsequently however, its main purpose was gradually shifted to the necessity of stabilizing economy in terms of currency. While control intended for securing liquidity, was originally exercised autonomously, it is a well known experience that, in case, the liquidity was jeopardized on account of a compulsory borrowing by national authority, the bank credit was endowed with an official nature for the purpose of making up for the deficient liquidity. As outer influences rather than the security of the liquidity of the bank, came to assert itself as the main purpose of exercising such control, and as the elimination of such influence liable to aggravate economic fluctuations came to be considered important among the factors which prompted such control, the tendency would become increasingly evident of the control itself becoming heteronomous rather than autonomous.

At the same time, such heteronomous control would tend to take the form of imparting a restraining framework to the credit activity of the bank, while, on the other hand, a tendency, would be discernible, that a more expanded domain of activity for autonomous control would be allowed to the bank, which has by now come to enjoy a more official nature. The reasons for such universal tendency are selfevident. The accumulation of bank capital, as the banking system develops, makes it possible for it to engage in a highly elastic supply of credit money while retaining a sufficient liquidity. The enterprise spirit, which pursues profit by advancing loans, is usually too powerful to restrain voluntarily itself, from credit expansion leading to aggravate economic fluctuations. With the bank endowed with an official nature, its credit activity, itself, is governed by public-minded motives, and, therefore, to place the credit activity under any form of control from outside, would rather run counter to the purpose of such

---

1) It was largely due to such circumstances that the banks of issue in England and other countries, came in quality to be semi-official organs and their banknotes were endowed with compulsory circulating power.
control.

Here no space is available to substantiate on historical grounds the process of development of such control of credit money. Suffice it to know, here, that banknotes and deposit currency are now under a system of control as we see through such progress of development as has been described in the foregoing lines. How, then is the demand and supply of credit money under a well-developed system of control regulated? An example of America will be taken up for examination. In that country, the Federal Reserve Notes issued by the Federal Reserve Banks, the silver certificates and coined money issued by the Treasury, and demand deposits at banks are used as means of exchange and of payment. Important among them are the Federal Reserve Notes and demand deposits—or credit money. The former is reserved by the gold certificates issued by the Treasury, and the latter consists mainly of the deposits in the member banks which, of course, are controlled in sum by the reserves or the deposits these banks keep at the Federal Reserve Banks. And, this reserves will increase affected by the advance to these banks by the Federal Reserve Banks, and, also, by the latter's buying operations, while, on the contrary, such reserves will decrease as the Federal Reserve Banks take the policy of selling operations.

Further, as people hold more banknotes and other cash currency rather than deposits, such reserves will have to shrink, while, as such cash held by people is less, they will inevitably increase. The legal reserve ratio now required against demand deposits at banks, in countries and in the reserve or central reserve cities, as well known, ranges from 14% to 20-24%, i.e. 20% on an average, while the ratio drops to 6% as against time deposits. In short, it is gathered from this that, against increase or decrease by 1 of the reserves, corresponding increase or decrease by 5 of demand deposits is brought about. The issue of the technique in a credit expansion will not be touched here, description will be confined, instead, to the fact that reserves are not held separately by the member banks as to demand deposits and time deposits, and that, therefore, as the deposits are shifted between these two categories, the possible amount of the supply of credit money is liable to change. Thus, under this system, the Federal Reserve authorities, by dint of the discount policy, open-market operations and the changes in reserve requirement, are in a position to directly influence the reserve condition of every member bank, with which to effect a quantitative control of demand deposits. Actually, however, they go still further; they are able to effect a qualitative control of the supply of deposit currency by means of a so-called policy of select lendings. And, by proper operation of the credit policy, they will influence the expectations of in-
dustrial enterprises, or, by modifying the securities market situation, will influence the liquidities of the assets, other than money, etc. All these constitute indirect measures of control, which the Federal Reserve authorities are supposed to be empowered to exercise. Although it is highly desirable to examine the specific effects by all these measures of control, limited space available here will inevitably confine us to a brief description of a general effect of control policies.

First, what are the effect of tightening of credit through various measures? This, directly, will not only work to restrain the outlay of credit money by borrowing, but also will preclude the rise of the total amount of currency and of the money holdings. On the other hand, indirectly, it will serve to restrain the use of ballances in existence and the outlay of the funds resulting from the selling out of the assets. This will further work to serve warnings to entrepreneurs as well as individuals against overdue optimism regarding their respective future prospects. At the same time, as the capital assets will be valued at a low level as the rate of interest is raised, new investment to capital equipments will be curtailed. Further, both entrepreneurs and individuals, in consideration of the difficulties of borrowing from the bank in future and an increase in revenue from interest as well as the certainty in future planning, will turn to increasing savings. On the other hand, a loosening of the credit conditions will entail a diametrically reverse effect compared with what has just be stated. The outlay not only from borrowed fund, but from funds on hand, current income and the accumulated funds will be induced to increase. The reason for this is that a rise of commodity prices is expected as a result of credit conditions being loosened, while, as the rate of interest is lowered, a reduction of the cost in borrowings and a rise of the capital value will be considered, which will eventually lead to the thinking that savings are not only unnecessary but unprofitable. Now, as the effects of the tightening and loosening of the credit conditions are reviewed from the standpoint of the recipient of credit, those who are subject most strongly to these effects are both marginal and potential recipients. For instance, in case credit conditions are tightened, the marginal recipient will be the first to be eliminated from the object of loaning, or, otherwise, will be often forced to give up investing due to the inevitable rise of the cost needed for borrowings. On the contrary, in case credit conditions are loosened, for instance, in a recession, the potential marginal recipient, whom the bank has hitherto considered not deserving to get loans, will be enabled to ask for such loans. Lastly, generally speaking, if a tightening of credit conditions, although accompanied by a reduction of the supply of credit, is not
accompanied by a reduction of the demand for credit, such tightening will further be stimulated, as in case the demand for credit increases in spite of its supply failing to increase, while credit conditions will be loosened as the supply of credit rises or its demand drops. That a tendency to tighten up credit conditions becomes manifest in a boom due to a still more marked increase of the demand for credit than a corresponding increase of its supply, should be interpreted as being on account of the general principle as described here. It is recommended, in such case, that proper precaution be paid, with an eye to the pace of the upward trend of economy, so that overdue tightening of credit conditions may not be brought about.¹

V

As has been stated in the preceding lines, such credit money as banknotes and deposit currency will be enabled to function as money only under adequate and well-guided control, and, by this very reason, they deserve to be called credit money. Will, then, the control system enforced in America at present be considered to be functioning satisfactorily? That it is not necessarily functioning satisfactorily is shown by the fact that in recent years a series of reports including the Report of the Douglas Subcommittee, etc. and a similar study by the New York Clearing House Association, have successively been submitted, all urging a review of the Federal Reserve System. Besides, various proposals, still unfulfilled, have so far been advanced, of which those considered to be of interest from the viewpoint of control, will briefly be examined in the following lines.

Firstly, in discussing the reserve ratio from the standpoint of control, the relation between the deposits and the primary or cash reserves only has been taken up in the past. However, it should be noted that what guarantees the deposits is not only the primary or cash reserves, but the construction of the bank assets should also be considered important for that purpose. Thus, the Class Reserve Plan is taken up, which, instead of discussing the ratio of the primary reserves against the deposits, tries, by analysing the composition of the working assets, to find what relation the reserves hold among them. Much active discussions have been conducted in America with regard to the propriety of this plan, the general view being that overdue emphasis being placed on the assets only lies at the root of the entire issue. That the composition of the assets, to the

¹ Refer the article in Federal Reserve Bulletins, (February & March 1953.)
CREDIT MONEY AND ITS CONTROL

disregard of the deposits, and, especially, the ratio of the reserves against the loaned amount, is taken up for consideration because eye is kept on the fact that the demand deposits are created by the loans. It is, in other words, to say that this stand attaches due importance to control to be exercised on the creation of credit. And, this stand may be said to have something in common with the plan of a Loan Ratio asserted by Prof. Bronfenbrenner.\(^1\) The professor, as a measure to counter an inflation, thinks that the currency policy should be effective so long as the proceeding of inflation is not more rapid than monetary expansion, and, asserts the necessity of adopting a policy limiting the total amount of currency in circulation, as the ceiling system in case of the banknote issue. In other words, this plan aims at the stabilization of a price level by adjusting the quantity of money so as to offset changes in the real volume of goods produced and in the velocity with which money is being spent. Thus a loan ratio is set up on the basis of the formula.

\[
\begin{array}{c}
\text{Commercial Bank Loans} \\
\text{Commercial Bank Deposits (Other than Interbank)} \\
\text{Minus Commercial Bank Loans}
\end{array}
\]

(Note: The amount of deposit in this formula probably means the demand deposit.)

By such loan ratio, according to the professor, the probable volume of the derivative deposit, a result of creation of credit, will be known. The professor, in making the proposal, had an eye on the inflation subsequent on the Korean war. Suppose the value resulting from the above formula is set at 100 for the month immediately preceding the outbreak of the war, the extent to which American banks expanded credit after the war will be assessed by seeking the index of the subsequent loan ratio. Then, if the Federal Reserve System stipulates that no commercial banks are allowed, as far as the principle is concerned, to have a greater loan ratio than that prevailing for a certain fixed term, an expansion of currency will effectively be prevented, thus curtail the further progress of the inflation. It is needless to say, however, that such policy of control will be effective only in the prevention of a currency expansion and check of an inflationary trend, while it will prove useless in an attempt to recover from a depression or to overcome a deflation. This plan is, further, open to such criticism as follows. If the Government expends on deficit and the funds needed for such is financed by Government bonds bought by the public, the deposit account will be shifted to the hands of the Government from the

public, and, as the Government begins to expend, a primary deposit will be formed accompanied with the creation of credit. Therefore, it is pointed out, this measure may not successfully check the inflationary trends. Technically speaking, further, it would be open to question if the deposit at a commercial bank, as cited in the foregoing formula, should be interpreted as confined to the demand deposit, or taken as implying the total amount of every category of deposits. If it is confined to the demand deposit only, the following situation will inevitably follow: even in case a certain bank finds its loan ratio reaching a limit, it will still be in a position to increase its loans by asking its customers to transfer their time deposits to the demand deposits.1)

While it is true, as has been made clear in the foregoing lines, that the new proposals made on the subject of the control of credit money have some-what superiority and novelty, it cannot be overlooked that these proposals are not without some defects. Especially in Japan, it is highly problematical if these plans, as they are, may be employed with effect. The Class Reserve Plan, mentioned before, will be examined first in this connection. It is noted that the real value of various assets held by banks in Japan today is extremely hard to ascertain. The fact is that many of their apparently liquid assets are not really liquid. It is seen, thus, that to set up a certain fixed ratio of reserves against various assets, while nothing definite is known about these assets, is highly unreasonable. To the plan of loan ratio advanced by Prof. Bronfenbrenner, the present writer cannot help feeling a personal attachment and interest as the professor himself happened to stay in Japan at the time when the issue of over-lending was being actively discussed here and as the former had the lack of personally talking with the latter. It should be conceded that the formula proposed by the professor will afford a clue to know the reality of the over-lending as existed in Japan at that time. The formula, however, will be of no use now, because the issue in Japan has already changed.

To sum up, it should be pointed out that, while it is evident that perfect control is needed for credit money to function satisfactorily, the control system as in force now, leaves much to desire, especially with regard to deposit currency. And, thus, it may be conceded that, in its property, as money, the deposit currency is yet behind the banknote.

It should also be pointed out that in case the amount of money is

introduced in an economic theory, a hasty utilization of the sum of the amount of cash currency and that of deposit currency may have to be guarded against. However, as has already been mentioned at the outset of the present treatise, such theory which disregards the difference between bank credit and private credit, or which is prejudiced by the law of circulation of the bills, will not worth support from both theoretical and realistic point of view.

(April, 1954)