The Credit Extension and the Collateral System: Historical Development of Business Loans by American Commercial Banks : (I)

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https://doi.org/10.15017/4492927

出版情報：經濟學研究. 56 (3), pp.73-97, 1990-12-10. 九州大学経済学会

THE CREDIT EXTENSION AND THE COLLATERAL SYSTEM : Historical Development of Business Loans by American Commercial Banks (1)

Yoichi Kawanami

Introduction —— Purpose, Theoretical Framework, Analytical Viewpoint ——

Purpose

In the capitalist economy, the monetary economy has a peculiar relationship to the real economy. We can give a brief description of the relationship by saying that the monetary economy tends to deviate from the real economy. I broadly define the monetary economy and the real economy in this article as follows ; the former includes all at the monetary phenomena such as the behavior of banks, movements of financial markets, and so on which have arisen on the monetary system, and the latter means the trends of reproduction, namely, the production and distribution of commodities by business enterprises. In the historical development of the capitalist economy, monetary phenomena have now and then arisen independently of the development of the real economy. Note the following examples. In mid-nineteenth century England, the volume of accommodation papers which did not reflect real transactions expanded greatly during prosperous times[1]. The growth of the fictitious bill was sustained by the credit-supply in the London money market[2], and at that time such a monetary phenomenon was independent of the trends of reproduction. The fluctuaton of interest rates in the financial markets was independent of the profit rate of industrial businesses. There has been a huge amount of dealings securities in the capital markets, and the aggregate amount of those securities surpassed the scale of reproduction.

In the United States of America, a stock market boom occurred in the 1920's. The boom was followed by the Great Depression, and it indicated that the expansion of stock dealing did not reflect the prosperity of the real economy, just the appearance of prosperity. Turning our eyes to contemporary monetary phenomena, one can point to speculative mergers and acquisitions in the capital market. These great corporate mergers, achieved by the issuance of junk bonds and LBO (Leveraged Buyout) financing, are arising for the sake of financial profit, though this speculation may not lead to a rise in the productivity of American corporations[3]. The one shared characteristic of these phenomena is the independence of the monetary economy from the real economy.

Now we are confronted with the very important and interesting questions: how does the monetary economy deviate from the real economy in the capitalist society? And why does it do so? We can not understand the true nature of the capitalist economy without answering these questions. Thus, it is the ultimate purpose of this article to understand the true relationship between the monetary economy and the real economy by examining the mechanism of the deviation.

Analytical viewpoint

The question on the relationship between the monetary economy and the real economy which I mentioned above has been raised and considered by several economists in the past. Here I can point out two economists — Karl Marx (1818-1883) and Thorstein Veblen (1857-1929) — as representative of these who have analysed deviated monetary phenomena. I owe much of what I examined and obtained in this reseach to their works. I have based my study of this topic on their theoretical results. That is why I will not be able to begin my work without refering to the characteristics and perspectives of their research.

Marx examined the topic of deviated monetary phenomena in his main work — *Capital*[4] —. The key feature of his economics is that his theory is based on a critical assimilation of classical economics. Concerning the topic which I am picking up here, it is particularly important and useful before examining on the Marx's theory to refer to the basic views of classical economics, especially the theoretical view of the currency school and the banking school.

Marx's theory on "the Money-Capital and Real-Capital" in which he examined the deviation of the monetary economy was developed on the basis of the credit theory of the 18th through mid-19th century. The currency controversy between the currency school and the banking school[5] over currency and credit control provided plentiful subject matters for examination by Marx. The currency controversy was a debate over the ideal method of controlling the monetary situation under the gold atandard system as well as over several theoretical problems, such as the concept of money and capital, the quantity theory of money, money market panic and so on.

From another viewpoint, the currency controversy raged on how to deal with the crises which periodically occurred in the first half of the 19th century. Economists of the currency school attributed the cause of economic fluctuation, price fluctuation and credit crunch to the failure of currency control. In another words, they advocated appropriate controlling of the quantity of a country's currency in such a way to deal adequately with economic crisis. Their idea and insistence resulted in their triumph in the debate, chiefly in the enactment of the Peel's Act in

1844. The currency school drew the conclusion I mentioned above on the basis of Ricardo's theory of specie-flow mechanism. According to Ricardo, there is a close relationship among such economic indicators as the quantity of currency, price of commodities, balance of trade, the foreign exchange rate and the import and export of bullion. Ricardo explains the causal relationship among the above-mentioned five indicators as follows ; in the pure metallic currency circulation, the import of bullion increases the quantity of currency in the country, which leads to the rise of prices. And then the rise of prices leads to the increase of imports and the decrease of exports, which results in the increase of trade deficit and the falling of the foreign exchange rate. Eventually, however, the adverse foreign exchange rate causes a drain of bullion. Reduced bullion means a decrease in the quantity of currency, which leads to a fall in prices. Fall of prices promotes exports and imports will decrease. Then the balance of trade and the foreign exchange rate improve. These economic conditions can not help increasing an import of bullion. And thus the same action as described above continues automatically and circularly[6]. The currency school asserted that the mixed currency — coin and note — must correspond exactly with this mechanism of pure metallic currency. They advocated the adoption of such a system that the Bank of England could issue an amount of bank notes equal to £14,000,000 — guaranteed reserve — plus gold reserves in the vault of the Bank. They said that the issuance of bank notes must fluctuate in accordance with the inflow and outflow of gold, and then the self-adjustment mechanism — just like the specie-flow mechanism in the pure metallic currency circulation — would be attained. In the Currency-Principle, the amount of money — currency — occupies the most important position. Concerning on the views of the currency school, it is very important to understand that their theoretical framework consisted of money and economic fundamentals such as prices, real transaction, rate of interest, balance of trade and so on.

Economists of the banking school criticized the above-mentioned currency control theory by distinguishing between money — currency — and capital. They made clear the difference along several dimensions. First, they clearly distinguished between bullion as stock from bullion as currency. For instance, Thomas Tooke pointed out that there is a certain amount of bullion in the country which performs not as currency but as capital. In his definition, capital consists of several kinds of commodities. In other words, Tooke recognized the existence of hoarded money which has retired from circulation. If that is the case, inflow and outflow of bullion do not necessarily mean the reduction and increase of currency because inflow and outflow of bullion may lead to the reduction and increase of the hoarded money[7]. Second, the banking school distinguished money from capital on the basis of the difference between wholesale circulation and retail circulation. Tooke says, money which performs as a medium of exchange in retail circulation is currency, while money for the sake of capital-goods transactions in wholesale circulation is capital. Usually, money in wholesale circulation is replaced by credit instruments such as bills of exchange and checks. Then the money being absorbed from circulation increases the volume of credit instruments and does not necessarily lead to a reduction in the quantity of currency[8]. Tooke examined the difference between money and capital in banking. According to him, the money which flow in and out of banks in the process of retail banking is money, while the money circulating in the process of wholesale banking is capital[9]. Tooke and Fullarton distinguish advance of money from advance of capital in accordance with the above stated clear distinction between money and capital. According to Fullarton, the quantity of money in circulation is determined by necessity in the market. Then if there is surplus of money in circulation, it will reflux in the bank through deposit, repayment and conversion into gold. In addition, if banks are going to lend money over the quantity demanded in the circulation, they have to advance it in exchange of banking capital —— bank assets, stocks and bonds ——. This is what is meant by advance of capital. If someone demands convertibility of a bank note, a certain amount of gold will outflow from the Bank. Thus with respect to advance of capital as well as advance of money, the banking school refused to control the quantity of money in circulation[10]. Compared with the currency principle, the banking school was correct on the difference between the two types of circulation and the function of credit money. Marx made the theories of the currency and banking schools a steppig-stone towards a clearer understanding of the relationship between monetary economy and real economy. On the currency controversy, Marx came down in favor of the banking school. However, Marx considered the matter of the adequacy of their theories for the analysis of factual monetary phenomena rather than did the matter of the currency controversy. From this viewpoint, Marx examined on their theories critically.

Marx points out an absence of theoretical tools to analyze factual monetary phenomena. For instance, Marx criticizes Overstone's interest rate fluctuation theory as follows : Overstone attributes the fluctuation of interest-rates to the quantity of money. According to him, the profit rate rises in a prosperous economy, which increases the demand for money. Eventually, interest rates rise. It means that the rise of the profit rate, representing the value of capital —— commodities, —— cause the increase of interest rates, representing the value of money. In Overstone's theory, a monetary phenomenon of rising interest rates ties closely with a situation of reproduction, that is, rising profit-rate. In other words there is no theoretical apparatus which can explain independently a monetary phenomenon. Marx suggests by this critical review that we need new theoretical tools to analyze monetary phenomena[11]. Secondly, Marx criticized the banking school for drawing the same conclusion. Certainly, Marx evaluates highly the banking school's theoretical advances, such as distinguishing between two types of circulations and their recognition of credit money. Marx says, however, there are still major defects in banking theory. For instance, Marx stresses the banking school's vagueness in distinguishing between capital in the industrial production process and capital used in banking transactions. This vagueness means confusion of two concepts — capital in the industrial production process and capital used in banking transactions —. In other words, the banking school does not recognize the specific capital which exists in the credit system and moves in financial markets. Thus Marx suggests that we can not analyze monetary phenomena properly without a specific concept of capital in financial markets[12)].

Marx felt keenly how important it is to build a theoretical framework to analyze independent monetary phenomena. He particularly stressed the necessity to introduce new specific analytical apparatus, which was called loanable capital. Marx acquired this notion, which no economist before him had recognized, by critical examination of James Wilson's money market pressure analysis. Wilson was himself a economist belonging to the banking school. However, Wilson wrote not only on currency principle but also on money market pressure in 1847. Wilson attributed the money market pressure in 1847 to the active demand and reduced supply for loanable capital, which was called "floating capital" by Wilson[13)]. To be sure, loanable capital is the necessary tool to clarify the cause and process of money market prssure. Marx highly evaluates the utility of loanable capital and incorporates it into his credit theory. Meanwhile, there are still several defects in Wilson's theory. One of the most critical defects is that Wilson could not recognize the independency of monetary phenomena. In other words, he thought that monetary phenomena were just a reflection of the real economy. He regarded money, credit and monetary phenomena as a veil which covers the real economy. In reality, however, monetary phenomena, such as the fluctuation of interest-rates, independent growth of credit creation, the volume of securities and so on, do not necessarily reflect a movement of the real economy. However, it is impossible to make clear an independent mechanism of deviation of monetary phenomena based on Wilson's theory. Marx tries to overcome Wilson's defect, namely, his money-veil view by examining the accumulation of loanable capital.

Marx raised following two questions for the first time.

First : to what extent does the accumulation of loanable capital represent the accumulation of real capital ?

Second : to what extent does the accumulation of loanable capital represent a change in the quantity of money[14)] ?

The answers which Marx gave are as follows : loanable capital is originally hoarded money which was deposited from many sources, such as saving-funds, depreciation-funds, unspent income of laborer and capitalist, idle money, money of retired capitalist and money reserve idled by the suspension of business. Of these sources, only saving-funds reflect the expansion of real capital accumulation ; the others do not. Marx then concluded that the accumulation of loanable capital tends to exceed the accumulation of real capital. In addition, much more loanable capital in the form of credit will be provided through the credit creation of banks. This process promotes further and further the deviation of the volume of loanable capital from the accumulation of real capital. This causal relationship between the accumulation of loanable capital, credit creation and independent monetary phenomena is the most important part of Marx's theory. According to Marx, this mechanism of money capital accumulation is a basic cause which brings about independent monetary phenomena under the credit system. He gives a few examples of these monetary phenomena such as independent fluctuation of interest-rates, expansion of accommodation paper and accumulation of real capital.

Needless to say, Marx examined the credit system of the capitalist economy from the standpoint of economization of capital. That is he studied why and how the credit system was built. Next, he tried to examine how money capital moved in the well-built credit system and what the relationship was between the accumulation of money capital and the movement of the real economy. Ultimately, he made clear that the monetary economy had a tendency towards deviation from the real economy and that this situation had been brought about by the independent accumulation of loanable capital or the credit creation of banks. These views on the relationship between the monetary economy and the real economy are totally different from those of any economist before Marx. This theoretical advance resulted from a critical assimilation of classical economics including currency and banking principle as well as an intimate observation on the actual movement of the monetary economy.

Thorstein Veblen (1857-1929) picked up the same question as Marx raised. Veblen analyzed independent monetary phenomena at the turn of the century in the United States. Although Veblen examined the same problem of deviated monetary phemonena, he added a new viewpoint in clarification of the deviation mechanism. That is why we should now turn to a description of his theory.

The subject of Veblen's study was the expansion of 'business capital' which had been caused by credit extension. In particular, he paid attention to the cumulative expansion of 'business capital' in the process of mergers and acquisitions at the turn of the century. He explains the use of loan credit and the expansion of business capital as follows.

To the extent to which the competitive recourse to credit is of the character here indicated — to the extent to which it is a competitive bidding for funds between competent managers

— it may be said that, taken in the aggregate, the funds so added to business capital represent no material capital or "production goods[15]."

… such a use of credit does not add to the aggregate of industrially productive equipment nor increase its material output of product[16] …

These two questions say that capital which was raised by credit does not add to "the aggregate material apparatus of industry" and so does not the size of the real-capital accumulation. Evidently Veblen drew the same conclusion as Marx did. Now we should examine the inferences which lead to his conclusion. According to Veblen, the use of credit under "the régime of competitive business[17] is inevitable". He examines particularly on the relationship between the "material apparatus of industry" and borrowed funds obtained by the use of credit. He considers loans not to represent "the material apparatus of industry". He gives two reasons. First, a loan is covered just in part by reserve. In other words, a large part of a loan is a fictitious deposit liability. The second reason relates to collateral. It is usual for a lender to give a loan on the basis of a loan, in the form of collateral. This collateral represents "future income", industrial securities, or intangible wealth for industrial use, real estate, "property which is already engaged in the industrial process", industrial plant, etc. Then, as long as loans are obtained on such collateral, they represent "nothing more substantial than a fictitious duplication of material items that can not be drawn into the industrial process". According to Veblen, therefore, "since an advance of credit rests on the collateral as expressed in terms of value, an enhanced value of the property affords a basis for a further extension of credit, and so on[18]." In other words, the extent of the deviation depends on the nature of the collateral.

Veblen advances ever further his theory on the expansion of business capital by means of loan credit. Namely, he analyzes the process of expanding capital through the help of capitalization and credit financing. He draws the conclusion that business capital — money capital — deviates from the material apparatus of industry to a large extent. A typical case involving expanding capital could be seen in the merger movement at the turn of the century. In the process of merger, the promoter asserted that the earning power of the new company after the merger should have been capitalized. Then, it was usual that preferred stock equal to physical assets and also a certain amount of common stock was issued. The amount of common stock represented goodwill or future earning power of the new company. According to Veblen, "goodwill taken in its wider meaning comprises such things as established customary business relations, reputation for upright dealing, franchises and privileges, trademarks, brands, patent rights, copyrights, exclusive use of special processes guarded by law or by secrecy, exclusive control of particular sources of material[19]." In a merger, a differential profit which is expected to result from the merger has been added to the basis of capitalization, namely the issuance of common stock. This amount of common stock constitutes fictitious assets which have been capitalized by regarding the differential advantages as interest. Needless to say, this fictitious capital (i. e., capitalized earning-power) does not represent physical assets. In addition, the capitalization includes "the bonus of the promoter and the financial agent[20]." The profit which accrues to them has already been made at this stage. The process of capitalization of earning power does not end. Proprietor, promoter and financial agent who were involved in the merger "commonly come out of the transaction with large holdings of preferred stock or similar debentures at the same time that they hold the common stock[21]." They dispose of those securities in the market and eventually can get large amounts of profit. "The effective capitalization in the capital market is indicated by the market quotations of the securities issued rather than by their face value[22]." This effective capitalization is just the most advanced form of fictitiousness of intangible assets. It is also obvious that effective capitalization represents neither nominal capital as indicated by face value nor the value of the physical assets of the business enterprise.

To accomplish the theoretical purposes of this article, it is necessary and useful to analyze monetary phenomena through that application of Marx's and Veblen's theories of "Money-Capital and Real-Capital." As I observed above, Marx made clear that the basic cause of deviated monetary phenomena has been the movement of loanable capital accumulation and the behavior of banks. In particular, the credit creation of commercial banks became more and more important for the developing credit system. The development of the credit system involves the following two points : One, that the financial institutions became able to collect as much idle money as possible ; and two, that the efficiency of credit creation has been enhanced enormously. Thus we can say that the core of Marx's theory consists of his idea on the accumulation of loanable capital and credit-creation. On the other hand, Veblen described the expansion of business capital and stressed the close relationship between the use of loan credit and the fictitiousness of collateral. The problem of collateral was first discussed by Veblen, and collateral occupies the most important part of Veblen's theory. Therefore, I will analyze monetary phenomena from the standpoint of theories on both credit creation and collateral.

Generally speaking, it is very important when building an economic theory to constantly compare it with factual movements of the economic situation. That is to say, it is necessary to verify the correctness of the theory in the light of economic facts. Moreover, the economic facts must not be described superficially but must be analyzed by consulting correct theory. In short, our analytical thinking must goes back and forth between economic theory and economic facts.

Concerning the subject of this study, I will analyze the historical development of business loan by American commercial banks from the early 1800's through the 1920's. The volume and extent of business loans are determined by the behavior of industrial financial institutions. In other words, the business loan is an expression of credit creation by financial institutions. Usually financial institutions gives loans on some collateral. Accordingly, the development of business loans relate closely to the collateral system. I will pay special attention to the mutual relationship between the extension of bank credit and the changing nature of the collateral system, focusing on how the collateral system sustained the extension of bank credit. Rather than present a strict historical narrative, I intend to illustrate the historical and theoretical relationship between bank credit and the collateral system. For the purposes of this study, I will refer to institutional formation, changes in the legal situation, and the historical development of monetary theory. This choice of subject is based on my hypothesis that the relationship between credit and the collateral system in business loans is the most basic element of deviated monetary phenomena.

Notes

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2) Tooke, T.,*An Inquiry into the Currency Principle : the connection of the currency with prices, and the expediency of a separation of issue from banking,* 2nd ed., London, 1844, p. 327.
3) U. S. Congress, *A Report, The Role of High-Yield Bonds* 〔Junk Bonds〕 *in Capital Markets and Corporate Takeovers : Public Policy Implications,* Dec. 1985, pp. 29-30.
4) Marx, K., *Marx-Engels Werke,* Bd. 25b, Berlin, 1964 Abschn. 30-32.
5) The currency school is reprsented by Lord Overstone (Samuel Jones Loyd), Robert Torrens, Robert Peel and G. W. Norman. The banking school is represented by Thomas Tooke, John Fullarton and James Wilson.
6) Concerning the specie flow mechanism, see Ricardo, D., *On the Principles of Political Economy and Taxation* in *The Works and Correspondence of David Ricardo* edited by Piero Sraffa, vol. I,. The Royal Economic Society, Cambridge University Press, 1951.
7) Tooke, T., *op. cit.,* chap. 2.
8) Tooke, T., *op. cit.,* p. 36.
9) Tooke, T., *op. cit.,* chaps. 8, 9.
10) Fullarton, John, *On the Regulation of Currencies ; being an examination of the principles, on which it is proposed to restrict, within certain fixed limits, the future issues on credit of the Bank of England, and of the other banking establishments throughout the country.* 2nd ed., with corr. and add., London, 1845.
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12) Marx, K., *MEW*, 25b, Abschn. 28.
13) Marx, K., *MEW*, 25b, Abschn. 30. Wilson, James, *Capital, Currency, and Banking ; Being a Collection of a Series of Articles Published in the "Economist" in 1845, on the Principles of the Bank Act of 1844, and in 1847, on the Recent Monetarial and Commercial Crisis ; Concluding with a Plan for a Secure and Economic Currency*, London, 1847, 2nd ed., 1859. chap. 13.
14) Marx, K., *MEW*, 25b. Abschn. 30.
15) Veblen, Thors'tein, *The Theory of Business Enterprise,* Ist ed., 1904. Transaction Books, New Brunswich, NJ. 1978. p. 99.
16) Veblen, T., *op. cit.,* p. 112.

17) Veblen, T., *op. cit.,* pp. 96-97.
18) Veblen, T., *op. cit.,* p. 105.
19) Veblen, T., *op. cit.,* p. 139.
20) Veblen, T., *op. cit.,* p. 121.
21) Veblen, T., *op. cit.,* p. 130.
22) Veblen, T., *op. cit.,* p. 130.

I. THE CREDIT SYSTEM AND BANKING IN EARLY AMERICA

I-1. The Short and Long-Term Loans of Commercial Banks

a) The role and function of banks

Many economists admit that banks in the capitalist economy perform basically two roles ; the first is to economize the introduction of specie by replacing it with paper money, and the second is to provide capital needed by manufacturers or merchants for their productive and commercial uses[1]. The banks which perform these roles also tend to cause monetary instability, independent monetary phenomena that accompany development of the capitalist economy. As was mentioned in the introduction it is the purpose of this article to examine how such instability or independent monetary phenomena are brought about.

It is unexceptional that the banks in the United States were born as paper money machines. In colonial times, there were several kinds of banks, for example ; private and public, and either land banks, merchandise banks or specie banks. There was a deficiency in capital while the colonists needed it to develop their colonies. Especially they needed a larger amount of medium of exchange to facilitate commercial transactions. As in Great Britain, in the early settlement of America, metalic currency was costly and new settlers sought for cheaper money. Needless to say, the colonists resorted to paper money in order to facilitate commercial intercourse. It is natural that the issue of paper money include the risk of overissue and then depreciation of currency unless it has a means of returning to the issuer. The overissue was condemned strongly by writers on financial problems[2] in those days. In any case, the banks performed as mere paper money machines. They did not receive deposits which consisted of idle money in the society, and did not put them to other productive uses. Therefore, so long as the issuing of paper money does not exceed the demand of society, banks just perform as passive agents.

The role of supplying a medium of exchange did not lose its importance in the American economy. After the colonial period, however, the form of medium of exchange diversified. In other words, the banks supplied medium of exchange in the form of both bank notes and bank deposits[3]. In antebellum America, both kinds of money were supplied only by commercial banks.

Actually, however, the currency from the Revolution through the Civil War consisted of coin, bank-note or post-note. Banks could issue post notes which were made payable at a future date. They were used for the purpose of transmitting money safely to distant places. The United States Mint did not coin smaller denominations between \$1.00 and \$2.50. Foreign coin, particularly, Spanish coins were introduced and used. Bank notes were also issued by both the First Bank of the United States and the Second Bank of the United States. The minimum denomination of bank notes was \$10.00 in case of bank notes issued by the First Bank of the U. S. and \$5.00 in case of bank notes issued by the Second Bank of the U. S. Of these several kinds of currencies, the bank note was the most important. There was an especially big demand for small notes. Although many state banks were forbidden to issue denominated note, illegal notes circulated widely throughout many states.

During the first half of 19th century, bank deposits, especially in large cities, became one of the most important liabilities, while note issues remained most important to banks outside the large cities. As deposits grew at faster rate[4], checks came to be used for payment in large cities[5]. This situation tells us that the currency in the country consisted of bank deposits as well as bank notes. Several economists recognize such a diversification of currency components[6]. The increase in deposits was due to the expansion of business and capital accumulation. More money resulting from increased economic activity had been deposited into the banks. Banks in larger cities expanded their loan and investment efforts by creating demand deposits. In this period, however, demand deposits has been created to meet the demand for currency. We should keep it mind that at this stage banks were not able to cause independent monetary expansion by creating demand deposits.

b) Safety of banking —— conventional banking theory

The economization of money by issuing bank notes is a role of banks observed from the viewpoint of the entire society. Meanwhile, the role of banks can be observed from another viewpoint, that of individual interests. The early banks in America advanced capital for manufacturers or merchants as the need arose. This so-called business loan is classified by several criteria. In this article, however, I adopt a classification into short and long-term loans by maturity because this classification of business loans will be very useful in describing the extension of bank credit, particularly long-term credit.

The question whether banks should give their loans only to short-term and self-liquidating loans or can extend them to long-term loans was discussed enthusiastically in America especially around the beginning of the 20th century. As I will examine later, the self-liquidating loan theory originated from Adam Smith's real bill doctrine, and in America it lived for a long time as the most influential banking theory. That question itself was first brought up around the beginning of the 19th century in America. It would always apprear whenever some important problem … for instance, the establishment of the Federal Reserve System or the enactment of Glass-Steagal Act … was discussed. Therefore it is an old but new question.

The early banks in America specialized in commercial loans for short period. Their original purpose was accommodate commercial interests. The borrowers consisted mainly of manufactuers, merchants and farmers. Banks supplied short-term credit by discounting short-term paper, for example, commercial bills and domestic bills of exchange. A commercial bill was the promissory note which was issued by a buyer in a commercial transaction. The maturity of a commercial bill was one, two or three months. According to Raguet, commercial bill discounting was regarded as very legitimate operations by commercial banks[7)]. Bills of exchange were used primarily in foreign trade, and in the United States they were used extensively in the South in connection with cotton transactions. Bills of exchange were also a good object for investment because they were recoverable with 20 percent damage from the drawer if they were dishonored, while promissory notes were recoverable only with interest[8)].

c) The form of long-term loan

While the earliset banks in America engaged especially in short-term loans, they faced a rising demand for long-term credit. In some areas where there was increasing population, expanding economy and advancing urbanization, there was great demand pressure for long-term credit. Therefore, where these factors were present, the specialization on short-term credit was bound to be abandoned. However, these developments were gradual, and the extension of long-term credit did not come about easily.

Actually the first bank of the United States, the Bank of North America specialized in short-term loans. Robert Morris, who was the founder of the bank, had the opinion that the bank should devote its business not to long-term credit but to short-term credit. It discounted only short-term (45 days) business papers which were based on real transactions. It was natural that the bank was unsuccesful to meet the demand for long-term credit. The bank had a particularly close connection with the state which was a stockholder as well as debtor. The state had no money to buy stocks and had to borrow from the bank. The bank extended credit to the state, though it did not deviate from its rule of offering only short-term credit. Two years later the Bank of North America was established. In 1784 two other banks, the Bank of Massachusetts and the Bank of New York were founded. The Bank of New York was furnished its funds by its stockholders just like the Bank of North America. However, the Bank of New York's attitude towards the state was different from that of the Bank of North America. That is to say, the Bank of New York purchased government securities in open market to sustain their price. Eventually, the Bank of New York came to have a close relationship to the City of New York and the Federal government. This lending deserves our attention because it was actually long-term credit which was supplied in the form of renewed short-term credit[9]. The loans to the government were renewed frequently and then given at a long or indefinite maturity. In short, these loans were actually permanent loans to supply capital. At the same time, however, we should keep it in mind that these long term loans to government were different from normal banking business because they were represented investment in the form of paid-up capital. It was not until the 1830's that commercial banks. began to supply long term credit to individual business enterprises.

As I mentioned earlier, the earliest banks had their own business loan. For instance, the Bank of Massachusetts discounted business paper limited within 30 days on two name paper and to 60 days on paper secured by merchandise. No renewals were to be given at any time. At the beginning of the 19th century, the maturity of loans became longer and longer. However banks tried to limit their loans to 60 to 90 days and, exceptionally, 120 days. In any case, the maturity did not extend over one year. And in the 1830's, the practice of renewals was established and long-term loans were granted through that means. Some renewals continued for several years. It was particularly after the 1837 crisis that many banks broke into the long-term loan business, with the eventual result that actual banking practice diverged from conventional banking theory. It is true that banks in commercial centers made short-term lending their practice. However the Smithian principle on discounting was not dominant in America as it was in Great Britain. In the United States as early as the 1830's, typical banks simultaneuosly extended both short and long-term credit. Renewable accommodation paper secured on promissory notes was common. In this practice, the borrower, who discounted accommodation paper at a bank, could expect it to be renewed. Accommodation paper was popular in country banks while banks in commercial centers moved away from it. In brief, long-term credit banks existed originally in the early stages of the capitalist economy in the United States.

d) Conflicts between commercial banking practice and long-term credit

Although the practice of long-term credit already existed in early American banking, it did not necessarily mean that commercial banking practice resting on the real bill doctrine had been wholly abandoned. We can quote a few examples. In a report from a committee of the Kentucky legislature it was said[10]:

Bank paper is not capital, but credit ··· Bank paper being credit, the purity of which depends upon which its always being met down demand, is from its nature designed to circulate and exchange the annual and marketable products of industry ; and is therefore an unfit subject for long loans and permanent investments.

W. M. Couge asserted that commercial banking practice should be based on its deposits and circulation and should confine its discounting to short-term business paper without renewal[11]. He regarded the commercial bank as a monetary agent which supplied a mere medium of exchange for transferring commodities from manufactures to consumers. After the 1837 crisis especially, conflicts between commercial banking practice and long-term credit became vigorous. Edmond J. Forstall of New Orleans advocated the establishment of short-term credit practice in commercial banking. This was the so-called Forstall System. The 1842 Act established in Louisiana required that demand liabilities should be offset by one-third specie and two-thirds paper payable within 90 days. Because of the clause on offsetting, the bank could not create deposits and therefore could not make any further discounts whenever specie in the bank fell below one-third. The Act also included two clauses on the limitaion of renewal and the segregation of the liquid balance sheet so-called the movement of the banks, from less-liquid balance sheet so-called dead weight. Particularly, the latter clause enhanced the banks' ability to meet their bills because those bills were of course, liquid. The Forstall System continued in operation into the late 1850's, with the exception of the prohibition of renewals. The banks controled by the Forstall System performed very well as monetary agents supplying currency.

On the other hand, banks under the Forstall System could not meet the demand for long-term credits, while there was strong demand for them. New Orleans businessmen were in a disadvantageous position in competition with those in large cities such as New York and Philadelphia. In some areas where there were growing pressures for long-term credit, banking reforms needed to address the situation were carried out. The most important measure among several attempts was the free banking system established in New York by the Act of 1838. The same reasons as caused the enactment of the free banking act led to the establishment of public banks for long-term credit, as was the case in Georgia. Under the free banking system, a bank could established by any person or any association of persons if it met the standard requirements. Then the free banking system stimulated the establishment of banks. The bank's liabilities which were issued under the free banking system performed as a medium of exchange and were secured by the obligations of the state. Such a measure guaranteed the value of a circulating medium. The free banking system gave all people an opportunity to access bank credit. It did not have limitations as to long-term credit. Therefore, the free banking system spread rapidly, particularly in northern states. The number of commercial banks reached nearly two thousand on the eve of the Civil War[12]. In states under the free banking system, it was very profitable to issue their own liabilities which could function as a medium of exchange. The bank could issue notes on the basis of securities which were bought by borrowed funds. The founders of the bank rapaid their initial loan by issued notes. At that time, the assets of the bank consised of interest bearing assets and the dubious assets of stockholder's IOU's[13]. The issued notes occupied a large part of the banks liabilities. In Illinois, of seventy-four chartered banks, fifty-two had no deposit liabilities. Thirteen banks had no specie reserves and twenty-eight more showed purely nominal reserves. Meanwhile some southern states had liberal banking systems as in Virginia or Georgia. In most states, however, there were fewer large enterprises and free entry into banking or free access to bank credit were not needed. Those states which included cotton producing areas preferred a small number of large banks. The southern banking system under the Forstall System was more stable than the system in northern states[14].

In short, in the early history of the United States there have been two kinds of banking, one for long-term loans and the other for short-term loans. Regarding the two banking practices, commercial banking practice so-called real bill doctrine has influenced American banking for a long time. It was not only due to by Adam Smith but was due also to English correspondent banks whose banking practices and requirements effected commercial banking in American export centers[15]. In other words, commercial banking practice was imported from England through international banking. While the commercial banking practice was refined and sophisticated theoretically, however, it became less important in practice. Because the strong demand for long-term loans grew gradually with developing urbanization and increasing population, the banking system was created to meet such demand. The banks which followed the long term credit practice already comprised a majority[16] at an early American banking. The Civil War destroyed the southern banking system which had been based mainly on commercial banking practice. The National Banking System after the Civil War opened the way for the nationwide extension of long-term credit practice as it was carried on in the northern states.

Notes

1) Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations,* ed. Cannon, Edwin, 1776, Vol. 1, p. 287, Trescott, Paul B., *Financing American Enterprise : The Story of Commercial Banking*, Greenwood Press Publishers, Westport, 1963, p. 2.
2) Sumner, William G., *A History of Banking in the United States,* New York, Journal of Commerce and Commercial Bulletin, 1896.
3) U. S., Congress, House, *Executive Document* No. 79, 25th Cong., 2nd. Sess., 1837-38, p. 693, quoted in. Fenstermaker, J. Van, *The Development of American Commercial Banking ;* 1782-1837, Bureau of Economic and Business Research, Printed Series No. 5, Kent State University, Kent, OH, 1965, p. 33.
4) Fenstermaker, J. Van, *op. cit.,* pp. 40-41.
5) According to Klebaner, the rising volume of checks for settlement was impetus for the establishment of the clearing house. The New York Clearing House was founded in Oct. 1853, Boston and Philadelphia followed

New York's example. cf., Klebaner, Benjamin J., *Commercial Banking in the United States : A History,* The Dryden Press, Hinsdale, Illinois, 1974, pp. 26-27.

6) Fenstermaker, *op. cit.,* p. 39.

7) Fenstermaker, *op. cit.,* p. 45-47.

8) *Niles Register,* November 12, 1825, p. 162, quoted in Fenstermaker *op. cit.,* p. 47.

9) Domett, Herry W., *The Bank of New York*, p. 32, p. 44ff, p. 50, Hamilton, Alexander, *Works,* edited by H. C. Lodge, Ⅸ pp. 503-509.

10) House Ex. Doc. Ⅲ, 26th Congress, 2nd Sess., pp. 1122-1123, quoted in Hammond, Bray, "Long and Short Term Credit in Early American Banking", *Quarterly Journal of Economics,* vol. XLIX, No. 1, Nov. 1934, pp. 90-91.

11) Gouge, W. M., "Commercial Banking", *Hunt's Merchant's Magazine,* Ⅷ, April 1843, pp. 313-321.

12) Trescott, Paul B., *op. cit.,* p. 30.

13) Trescott, Paul B., *op. cit.,* p. 32.

14) Trescott, Paul B., *op. cit.,* p. 34.

15) Hammond, Bray., *op. cit.,* p. 92.

16) Hammond, Bray., *op. cit.,* p. 102.

Ⅰ・2. Bank Loans and the Form of Collateral

The core part of the theory which I will develop in this article consists of the relationship between the credit extension and the collateral system. In early American banking before the Civil War, the extension of credit appeared in the form of long-term credit in commercial banking. What is the relationship between long-term credit and real capital accumulation?

In this section, I will examine this topic paying particular attention to the form of collateral.

a) What is collateral?

Generally speaking, commercial banks supply loans to manufacturers, merchants and other financial institutions by creating credit. If a financial institution lent a certain amount of money which was deposited by some person, we could not call it a bank because it would not be creating its own credit. We can regard only a financial institution which can create credit as a bank. The credit which a bank creates represents a liability of the bank itself. Usually, a bank creates credit in two forms: bank notes and deposits. In the early period of U. S. History, bank notes and bank deposits were the representative forms of credit that banks created. Bank notes had to be redeemed on demand in specie or its equivalents. Meanwhile, bank deposits had to be repaid on demand whenever depositors demanded. Therefore, banks always had to be prepared for repayment, otherwise they would fail to meet their obligation to pay liabilities. This is precisely why banks had to follow sound banking practice.

Concerning sound banking, we have to turn our eyes to the English and Scottish banking systems. We can trace the origin of commercial banking practice in the United States to the cash credit system of Scotland. Adam Smith had used it as the basis of his real bill doctrine. Smith considered on what extent of advance a bank could supply or how could a bank give an adequate amount of advance. He answered these questions as follows : a bank should confine its advance to a part of its capital, which a borrower would otherwise be obliged to hold in hand as ready money. A bank can attain this aim only by discounting real bill of exchange drawn by a real creation upon a real transaction because a bank can only issue an amount of paper money equal to the gold and silver which would necessarily circulate in the country if there were no paper money[1]. In other words, Smith developed the real bill doctrine on the idea that the quantity of currency in circulation is determined by the demand of the entire society and if there was over issue of paper money, redundant money would return to the issuer. This principle was formulated as sound banking practice in the United States as well as Great Britain. As I mentioned above, however, Smithian principles are formulated only from the standpoint of the entire society. That is why Smith referred to the legitimate quantity of paper money in the country. The question I raised here is what is the sound banking principle from the standpoint of the individual bank. Next I would like to examine how a bank can pursue sound business in connection with the real bill doctrine.

Sound banking decisively depends on how a bank deals with the liabilities on demand. James Wilson formulated the sound banking principle on the basis of the real bill doctrine. Wilson cosiders this topic as it relates to security in lending. According to him a bank usually gives loans in two ways. The first way is as a loan based upon the security of floating capital, which consists of commodities for immediate consumption. Those commodities are salable to cosumers and replaced from the current income of the country. Then, if a bank gives a loan to a food producer, the loan represents a certainty of repayment because the food producer can sell his products and repay off his debt within short time. Thus, the floating capital offers good security for a banker who want to employ his fund temporarily and collect his loan as soon as possible. In the first way, the bank loan is fulfilled by discounting real bill of exchange because real bill of exchange represents real transactions and are certain to be repaid out of the current income of the country. The second way, on the other hand, is a loan based on a fixed security such as equipments, factories, railroads, machines and so on. Fixed capital is employed in the industrial production process for a long time. The cost included in the fixed capital is replaced from the current income of the country little by little over a long time. Fixed capital is, therefore, the most fitting security for the mortgagee who wants to invest in permanent uses. It is not, however, an adequate security for a banker. If a banker gives a loan upon the security of fixed capital, his fund will be tied into the production process for a long time. A loan upon fixed capital is equivalent to investing in railway stocks or making a loan upon those stocks because railway stocks are securities which represent fixed capital such as rails and engines[2].

Wilson creates a peculiar theory on sound banking by combining his theory on security and classification of capital with the real bill doctrine. Concerning the question which I raised at the beginning of this section, he places the essence of sound banking on the liquidity of production. In other words, the ability to meet liabilities is wholly dependent on this type of liquidity. Originally Wilson's purpose was to examine the true cause of money market panic. He paid special attention to the reduction of liquidity in banking assets at the time of crisis. He obseved the monetary phenomenon from the standpoint of the real economy. He thought that there was true cause for monetary panic at the level of the real economy. As a result, he noted the disequilibrium between floating capital and fixed capital, which led, he felt, to the reduction of the liquidity of production. In short, the reduction of liquidity is only a reflection of the liquidity of the production process[3]. This view means that he regarded money and credit as veil covering the real economy. Thus, he formulated his sound banking principle on the basis of security which reflects the liquidity of production.

I have to make another point regarding the relationship between the extension of bank loans as monetary phenomena and the real economy. In the framework of Wilson's theory, the extension of bank credit was caused by the expansion of real capital accumulation. He thought that monetary phenomena and the movement of the real economy should be in a one-to-one ratio. Thus, in his opinion, monetary phenomena could deviate independently from the real economy.

b) Bank loans and collateral in early American banking

As I mentioned in the previous section, the real bill doctrine was introduced into the United states and further refined and elaborated there. Many economists have, in fact, been influenced by advocates of the doctrine such as Smith, Tooke, Fullarton and Wilson. However, American writers did not follow the doctrine as consistently as English economists. American economists did not have complete faith in the doctrine and asked for government control of bank credit. They felt that the convertibility of bank liabilities should be prompt to avoid monetary instability. This opinion originated from the fact that several banks had never had redemption clauses, and caused this monetary instability in some areas of the United States. In any case, however, it is true that this conventional English banking theory put down deep roots in America. Thomas Cooper, for instance, was one of the most enthusiastic advocates of the real bill doctrine[4].

However, the fact that many American writers advocated the real bill doctrine did not necessarily mean that American commercial banks made business loans in accordance with it. In other words, the situation in theory did not necessarily reflect the actual movement of business loans. We need to examine the actual practice of making business loans before the Civil War. I will pay particular attention to what kind of collateral was pledged to obtain a loan. It is very important and instructive to compare the American collateral system with sound Egnlish banking practice.

As I mentioned earlier, business lending for urbanization or regional development was necessary in those days. Massachusetts state policy compelled lending to agricultural parties. The Union Bank of Boston, for example, made one-fifth of its loans to the agriculture section on the security of real estate. Some other banks chartered in Massachusetts also had to make loans to farmers on the same terms. The Bank of Indiana financed not only the flow of farm products to market but also the increase of cattle and hogs. Banks in southern states made loans to merchants on the security of staples. Bank loan became available to planters by this means. Property banks have existed in America since colonial times. For instance, colonial colonies established public land banks which made loans to agriculturalists, landowners, merchants and other nonagriculturalists. These property banks issued bonds secured by real estate mortgages and attracted foreign capital by the sale of bonds[5]. In the South, for instance, the Union Bank of Louisiana lent on real estate and slaves. These property banks were the original prototype of real estate banks in the antebellum South. Banks in northern states naturally required security because they were generally dubious about the prospect of manufacturing[6]. Thus in the antebellum South as well as in the North, some type of collateral had to be pledged in order to receive bank loans. The problem of collateral was especially critical for banks who made long-term credit by renewal of paper. In general, long-term loans, so-called accommodation loans, which were popular particularly in country banks, were based on promissory notes which were secured by some property. However, accommdation loans were not always related to particular business transactions which assured repayment within a short time, and in general such loans were highly illiquid.

In antebellum America, banks insisted on collateral security when they made loans. Banks had to obey sound banking practice. However, the system which assured sound banking in America was totally different from that in Great Britain. In Great Britain, as I explained with reference to James Wilson's theory, certainty of repayment was based on the security which represented the liquidity of production. Meanwhile, in the United States, conventional English banking practice resting on goods moving from producer to consumer was the exception. In other words, the British practice remained alive only in the theoretical world of American banking. In the United States, guaranty of repayment was based on collateral which consisted mainly of physical property such as land, staples and real estate[7]. But the collateral had little significance as a means of assuring repayment, particularly in the case of long-term loans because the collateral in long-term loans consisted of physical property and there was no market in which to liquidate that property. Certainly, stocks and bonds had been issued already in antebellum America and those securities were pledged as collateral. Many banks accepted personal bonds as collateral for loans. Bank stock was often considered good security[8]. However, stocks and bonds could not occupy the predominant place as sources of collateral.

Notes

1) Smith, Adam, *op. cit.,* p. 323.
2) Wilson, James, *op. cit.,* chaps. 11, 12, 13. Wilson assumes here that railway stocks are unsalable because the English stock market was not so big and stocks had a speculative character in this period. Actually it was very difficult to sell railway stocks without a big loss during a crisis.
3) Wilson, James, *op. cit.,* chaps. 11, 12.
4) Mints, Lloyd W., *A History of Banking Theory in Great Britain and the United States,* University of Chicago Press, 1945, p. 131.
5) Klebaner, B., *op. cit.,* p. 30.
6) Klebaner, B., *op. cit.,* p. 31.
7) *Ibid.*
8) Fenstermaker, J. Van, *op. cit.,* p. 49.

I・3. Formation of Money Markets

I made clear in the previous section that business loans by early commercial banks were supplied on the collateral of physical property. In other words, the physical property was the predominant form of collateral in the relationship between commercial banks and business enterprises. However, commercial banks were not always tied only to business corporations which were engaged in producing some kind of commodities. They also began to be tied to other commercial banks as the commercial banking system spread nationwide. Commercial banks came to have connections with other financial institutions … such as commercial paper houses, investment banks and so on … indirectly through investing their funds into commercial paper and securities. Thus, the financial markets were formed by the borrowing and lending or the buying and selling of financial products among several kinds of financial institutions. The formation of financial markets is a very significant subject in analyzing the collateral system or deviated monetary phenomena in the American monetary system. Therefore, it will be very useful to trace financial markets back to their origins. In this section, I will focus on the origin of the call market, the commercial paper market and the securities market.

a) Bankers' balances and the call market

In the early period of the United States, there were a few large commercial centers where large portion of bankers' balances came together. In the beginning of the 19th century, New York gradually collected those balances as the country's commerce and finance tended to concentrate in that city. We can point out several factors which contributed to this concentration of bankers' balance. First of all, New York became a center of foreign trade while the favorable balance was settled by payment in specie. The balances arising in favor of the agricultural communities, for instance cotton producers, remained there to pay for imported goods. The funds for settlements resulting from foreign trade were held as balance in New York[1]. In domestic trade, New York also became the commercial center, and payments were made in the form of drafts on New York banks. Settlements were conducted by the transfer of exiting balances to the credit of the manufacturing centers. For instance, New England bankers had to leave substantial amounts of balances in the New York banks in order to make payments in New York[2]. Thus banks in every section of the country found it desirable to leave deposits in New York banks. In the eastern states, claims on New York arose from the sale of merchandise or securities, and the accumulation and sale of domestic bills of exchange became an important part of the business of commercial banks. The eastern states bought up claims and sent them to New York for collection, leaving the proceeds there on deposits. New York became the financial as well as commercial center of the country. New York became the ideal place for the issuance of securities such as state securities and railway bonds. Agents for the sale of such securities emerged and they also became agents for the payment of interest and dividends[3]. Bankers' balance in New York increased through the transfer of the investment funds to New York[4]. Foreign deposits from Europe also came to New York through the establishment of branches or agents[5]. The difference in legal rates of interest between New York and other areas both in America and Europe was one of the reasons for attracting deposits[6]. By a combination of these factors, deposits in New York banks swelled and eventually the reserves of all banks centralized in New York[7].

Call loans among New York banks expanded gradually as bankers' balances increased. It is evident that expansion of call loans and the growth of bankers' balances were closely related. In other words, bankers' balances became an important source of call loans. By the middle of the 19th century, call loans were regarded as outlets for bankers' balances[8]. Usually call loans were secured by stock collateral. In England, call loans on security were not universal as bank investments in the mid-19th century. Therefore, security loans were a purely American development in the money market. We can point out several reasons why call loans developed in the United States : first, call loans were the most suitable employment of bankers' idle funds ; second, there was no alternative channel of investment for these funds : third, a rising demand for call loans existed[9]. Call loans could perform as secondary reserve and the existence of such callable funds contributed to the development of the call market. The second reason is peculiar to American financial markets. In European countries … in England for instance, … discount markets supplied outlets for highly liquid funds. There was no alternative type of investment in New York. In English discount markets, a considerable volume of first class bills was supplied.

We can point out several kinds of investment objects as alternative types of investment such as bills of exchange, commercial paper, promissory note, bankers' acceptance[10]. However, these did not have the most important qualification for an open market : namely, a uniform commodity which was dealt among many financial institutions. There was another important factor in the absence of an open market : the absence of dealers who contributed to the standardization of instruments, maturities and dealing practices[11]. The third reason relates to speculative transactions in securities. In another words, the rising demand for call money arose from the stock market. Call money was needed to finance stock speculation. And pledging stock as collateral enforced a certainty of repayment and helped to expand the call market. Thus already in mid-19th century America the call market came to have a close relationship with the stock market.

b) The rise of the note brokerage business and commercial paper

Commercial paper is a promise to pay after several months, usually 90 days, and is issued by well-known, sizable firms. As an open market in commercial paper did not exist before the Civil War, and therefore banks in those days were obliged to keep secondary reserve in the form of call loans, commercial paper did not have a predominant place in the American financial markets in the first half of the 19th century. Only the call loan market existed as a short-term money market. Commercial banks did not have a close relationship with the commercial paper market in antebellum America. After the Civil War, however, the bankers practice of placing surplus funds in the commercial paper market spread rapidly, particularly in larger cities. In the 20th century, especially after the 1907 crisis, more banks began to hold commercial paper. Subsequently, commercial paper grew up to become one of two bank assets in which to invest on the open market. Although commercial paper represented promises issued and paid by a lending company, it did not arise from commercial transactions among companies but related to financial institutions from the beginning. Commercial paper, therefore, is quite different from bills of exchange which have arisen from transactions among business enterprises. Thus, it is very important to examine the commercial paper market in order to make clear the substitutional relationship between short-term loans by commercial banks and commercial paper. The examination of the commercial paper market leads to a clarification of the characteristics of American financial markets.

It was not until after the 1857 crisis that independent commercial paper houses were organized both as buyers and sellers of notes on their own account. In early period of American financial markets, the brokerage firm which corresponded to a commercial paper house was only as agent between buyer and seller. They conducted their business as commission men on notes, bills and often bank notes. Therefore, they were also called money shavers and insisted on very high charges, particularly from the end of the 18th through the beginning of the 19th century. The note broker took the customer's paper and had to look for a bank which could discount it. Brokers' commissions began to decline since they came to be obliged to look for banks. Around 1850, it was the exceptional case that banks took the initiative in buying of commercial paper from brokers. New York banks found a way to employ their surplus funds in commercial paper only at time when demand for bank credit was small. After the crisis of 1857, however, the character of the note broker began to change. They began to buy and sell commercial paper on their own account. It was natural that note brokers needed credit to do this and so they became independent commercial paper houses[12]. This change of character of the note broker influenced the relationship between business corporations and banks. Originally banks had been a very important source of credit for corporations. Business corporations were obliged to keep accounts at their banks and also to be monitored by them. With the progress in the evolution of the commercial paper house, however, business corporations did not need maintain such a relationship with banks. In other words, the close connection between corporations and banks had been weakened because business corporations were now able to sell their paper to commercial paper houses and eventually raise the funds which they needed. Therefore, the commercial paper house purchased paper from its drawer, and then banks invested surplus funds in commercial paper. In this process, it became unnecessary for business corporations to raise funds by borrowing from banks. Meanwhile, banks did not need to worry about the quality of commercial paper unless they bought it directly from drawers. In other words, the commercial paper house instead of the bank began to evaluate the quality of note or the credit condition of the firm behind it. It was, therefore, only natural that the close tie between banks and corporations was weakened[13].

In the present section, I can not evaluate the function and significance of commercial paper and the commercial paper house because both of them were to undergo many more changes after the Civil War. However, we can regard the note broker I have mentioned here as the origin of the commercial paper house. The existence of the commercial paper house and the indirect relationship between firms and banks determined the character of the short-term money market after the Civil War.

c) The securities market before the Civil War

We need to examine not only the short-term money market but also the long-term capital market in order to analyze the structural characteristics of monetary phenomena in the American monetary sytem. In the United States especially, long-term capital market was developed in close relation to the short-term money market.

There had been a variety of securities in the early period of the United States … for instance, government stocks, corporate debt, bank stocks, railroad securities, securities of the enterprises for internal developments, state debts, insurance stocks and so on. The growth of these securities did not develop in step with each other. Government debt, bank stocks, and insurance stocks furnished the principal capital relatively earlier than the others. State debts and securities for internal development or railroad construction followed them. From the viewpoint of the volume of securities in existence around the mid-19th century, railroad bonds, railroad stocks, bank stocks, and regional government debts occupied the predominant place[14)]. These securities were incorporated into the national market and also contributed to the formation of the long-term capital market.

A stock market in New York was organized in 1817 for the first fime. This organization consisted of twenty members trading some thirty stocks. As the position of New York as a commercial and financial center become important, the number of members and the volume of funds flowing into the market increased. In 1856, transactions in New York reached nearly one million shares, and in 1857, 71,000 shares changed hands in a single day[15)]. In 1869, the "Old Board," "The Open Board of Stock Brokers" and the Government Board united to form the New York Stock Exchange.

The private bankers who performed mainly investment functions, played a very important role in the development of the New York Stock market. They did a variety of business … for instance, receiving deposits, making loans, underwriting government debts, dealing in securities for their customers, speculating on their own account and selling stocks over the counter[16)]. Of these businesses, underwriting and mobilizing of securities became the most important function of investment banking. For this function it was useful to form syndicates with other firms. This device to mobilize securities spread widely by 1850. Another important factor in this mobilization had to do with the function of commercial banks. In the mid-19th century, railroad contruction expanded and the issuance of railroad securities increased. This tremendous expansion of the railroads could not be accomplished unless a large amount of liquid fund was supplied. Commercial banks were deeply involved in financing railroad construction. They employed their surplus funds in the call market. Meanwhile, private bankers who underwrote railroad securities raised funds in the call money market by pledging those securities as collateral. In this way investment bankers who did not have enough funds could extend their operations. In other words, an indirect credit expansion by commercial banks supported the expansion of railroad construction. There was also another important resource for the development of the stock market. It was the concentration of savings resulting from the current income of individuals and companies. Individuals' savings were especially important for the formation of the American securities market. Private bankers, syndicate members and commercial banks who acquired stocks sold them in stock markets and individuals bought those stocks.

On the New York stock exchange, there were already two types of stock transactions, the immediate transfer and settlement transaction and the time transaction. In the former transaction, all sales were settled on the following day. The latter is the credit transaction of securities. In time transactions, a small down payment was required and stocks could be pledged for loans to meet calls for the balance. Stock was not fully paid-up[17]. However, in this evolutionary stage of the New York stock market, daily settlements were predominant and it had a close relationship with the development of the call loan market. The development of the call loan market was sustained by credit extension and the concentration of short-term funds in the hands of commercial banks. And the surplus funds of commercial banks resulted from individuals' savings. It can be seen here that there was originally a close relationship between the development of the stock market, the behavior of financial institutions — commercial banks or investment banks — and the saving of individuals. This basic relationship will continue to exist and constitute the fundamental structure of deviated monetary phenomena.

Notes To be continued

1) For instance, export of cotton was financed largely in New York. Sterling bills arising from cotton shipment were sent to New York. Banks in New York discounted those bills and credited the proceeds of the bills. The bills were used to pay for imports of merchandise from Europe. The New York credits thus established were drawn against as merchandise moved to the South. cf., *Hunt's Merchants' Magazine,* Apr., 1843, VIII, p. 316.
2) *Bankers' Magazine,* Nov., 1852, VII, p. 338.
3) Lanier, Henry Wysham, *A Century of Banking in New York 1822-1922*, The Gills Press, New York, 1922, p. 210.
4) *Bankers' Magazine,* Aug., 1850, V, p. 178.
5) Clibborn, Edward, *American Prosperity, an Outline of the American Debt or Banking System,* London, 1837, p. 3.
6) *Bankers' Magazine,* Jan., 1850, IV, p. 58, Feb., 1850, IV, p. 582, Aug., 1850, V, p. 178, Feb., 1851, V, p. 694, Jan., 1852, VI, p. 587, Apr., 1852, VI, p. 840.
7) Concerning the estimation of the bankers' balance in New York banks, see *Bankers' Magazine,* Nov., 1860, XV, pp. 390-394, quoted in Hedges, J. E., *Commercial Banking and The Stock Market Before 1863,* The Johns Hopkins Press, Baltimore, 1938, p. 57.
8) *Bankers' Magazine,* Feb., 1851, V, p. 694.
9) Hedges, J. E., *op. cit.,* p. 78.
10) Hedges, J. E., *op. cit.,* pp. 82-88.
11) Hedges, J. E., *op. cit.,* p. 86.
12) Clews, Henry, *Fifty Years in Wall Street,* New York, Irving Publishing Company, 1908, pp. 78-79.
13) Myers, Margaret G., *The New York Money Market, vol.* I, *Origins and Development,* New York, Columbia University Press, 1931, pp. 56-57.
14) Hedges, J. E., *op. cit.,* p. 37.
15) Pratt, Sereno S., *The Work of Wall Street,* revised ed., New York, 1916, p. 17.
16) Medbury, James K., *Men and Mysteries of Wall Street,* New York, 1878, pp. 112-115.
17) *Bankers' Magazine*, Dec., 1850, V, p. 482.