

**ADDRESS DELIVERED BY BENJAMIN STRONG  
AT THE AMERICAN BANKERS' ASSOCIATION  
ATLANTIC CITY, SEPTEMBER 28, 1917.**

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The invitation which your officers were good enough to extend to me to address this Convention was accompanied by the suggestion that I should say something about the relations of the Federal Reserve System to government financing. But those who have sent sons to France, find it difficult to discuss the war in terms of dollars. Some of us have just said good-bye to boys who are leaving their homes to make the supreme sacrifice for their country. They are our real investment in the war. Our return on that investment will not be valued in rates of interest, but in the consciousness that it has again been shown that our form of government and our institutions develop in our citizens that generous altruism which is our proudest national tradition.

We look to these armies of the best the nation has to offer for the victories which can only be won by individual heroism. They look to us for the support which must be accorded through personal self-denial.

The great military organization now being created is only one part of the fighting machine with which we must equip ourselves if the sacrifice of sons and husbands is not to be in vain. The first army to be mobilized is the army which must shape and control the economic activities of the American people, so as to produce material for conducting warfare. Our battles can be won only by turning over to our government as rapidly as needed billions of dollars of credit, which must be drawn from the earnings and economic

of the people of the country.

The general character of the financial organization needed for the work had been determined by statutes already enacted before our entrance into the war. Congress had for many years provided by law that government bonds should be sold by popular subscription without deduction of bankers commissions, and in December 1913, when the Federal Reserve Act became law the Secretary of the Treasury was authorized to appoint the Federal Reserve Banks to act as the Government's Fiscal Agents. These two brief paragraphs in our statutes, supplemented by the patriotism and energy of American bankers and their aids, are all that was required to lay the foundation for an organization which I believe can be relied upon to furnish credit at a minimum cost just as rapidly as the government can raise armies and the country can produce supplies.

Secretary McAdoo foresaw that upon this foundation he could build up a machine for war finance which would bring into co-operation in one great army, the bankers, the press and a multitude of other organizations not ordinarily related to the financial operations of the government, but so co-ordinated that their services would supplement those of the Treasury Department and of its fiscal agencies.

Each reserve bank was advised of its appointment as fiscal agent and directed to proceed with the development of the machinery needed to place the first Liberty Loan on May 3rd. 1917. While the organizations were different in each district, the main characteristics were the same. Committees were appointed to co-operate with

the reserve banks and upon these committees - largely composed of bankers - there developed the duty of sub-dividing each Federal reserve district into sub-districts and even smaller divisions so that ultimately in the Federal Reserve District of New York (and I believe practically all the others), we had committees or representatives actively at work in every city and town within a few weeks of the day we were told to start. In conjunction with the committees appointed to actually sell bonds, publicity organizations were created in all parts of the country, which had particular charge of news, publicity, advertising, public speaking, distributing posters and managing a great variety of other activities aimed to educate the people of the country to the importance of saving and of buying the bonds of the government.

Most of you are familiar with the way in which this matter was handled. Notice was necessarily so short that it was an almost superhuman task to cover the ground adequately between the first of May and the middle of June. Plans made so hastily cannot be expected always to work smoothly, nor did they when the first loan was placed. But much of the difficulty was due to a general lack of appreciation on all hands of the magnitude of the task. Many bankers expected the bonds to be delivered immediately upon payment; others failed to realize what a magnificent response would result from this offering and were inadequately equipped with clerks to handle the subscriptions; still others failed to take into account that the placing of a loan for the government must be handled by most precise methods requiring accurate reports which

must be filed on time. We have learned how to do it better hereafter. Whatever friction nothing can really mar the magnificence of the response. During the last few days before the subscriptions closed, when we were handling in the Federal Reserve Bank of New York alone some thousands of telegrams and telephone calls each day, we could feel the impending rush of subscriptions as one would sense the approach of a storm. Nor need we be ashamed to admit that at the close, the flood of subscriptions was completely beyond the handling capacity of even some of the largest and best organized banking institutions in the district.

It is stated that there were four million subscribers to the loan. I believe this underestimates the actual number of subscribers by at least 25%. In the Second Federal Reserve District, we have delivered 1,931,666 full paid interim certificates which in number equals about 14% of the population of the district. If less than one-half of this proportion prevails throughout the country, it would indicate at least five million subscribers, - a response which makes this first war loan an achievement of the first rank in government finance. The record in the City of Rochester indicates what is possible in the whole country. I am told that with their population of about 250,000 people they had no less than 61,000 subscribers. Such a response by the whole country would produce 25,000,000 subscribers for a government loan.

Every detail of the last loan has been completed in the Second District with the exception of deliveries of the permanent bonds. I think the same will be true in all Districts. Naturally,

those who may decide to convert bonds of the first issue into bonds of the second issue will prefer not to require of us the expense and labor of two deliveries. The permanent bonds are rapidly being prepared and I know that I am only expressing the wish of the Secretary of the Treasury, as well as the officers of all the reserve banks in asking that the bankers through whom these subscriptions were originally made, cooperate with us in conducting this complicated operation of making deliveries.

Such complaint as has arisen regarding deliveries of bonds fails to take into account the enormous physical labor involved. The requisitions for bonds by the reserve banks called for a total of 8,782,000 pieces, which would require 20,000,000 sheets of paper weighing 237½ tons. In the Second District we have handled 4,005,657 pieces in issuing interim certificates alone.

To indicate the amount of labor involved in placing these government bonds, the clerical force of our bank has increased from 100 to about 600 people in a few months. The Publicity Division of the Liberty Loan Committee employs about 100 people in addition and the Committee Organization of the Second Federal Reserve District now embraces about 15,000 individuals and will greatly exceed that number when all appointments are made.

The actual machinery for selling the government's bonds, keeping proper records of their issue and making deliveries is not, however, the most important part of the government's financial operations. Of much greater importance, is the problem of so arranging this huge financial operation that it may be conducted

without disturbance to money markets, and consequently, causing a dis-organization of business. Of this, I should like to speak particularly from the standpoint of the Federal Reserve Bank of New York and of the New York money market.

New York is the country's central money market. From it radiate the principal currents of credit, so that an accurate view of the New York position is illuminating as to the whole country.

Were I asked to state in the fewest words the functions of the Reserve System in relation to government financing, I would say that the reserve banks keep the books of bank reserves and of government credits for the entire country. In a banking sense they run the general ledger. Present conditions afford the first opportunity for you to judge whether they do it well or not, and it is desirable that you should have the facts so that you may judge in this matter, because the confidence that is based upon understanding of, and belief in, our banking system at this time is essential to success - without it we shall fail - with it, we must succeed.

The amount of banking accomodation required in any well-organized country may be said roughly to correspond to the volume of the country's business. As business increases, bank loans and deposits increase in somewhat like proportion. As business declines, liquidation takes place. bank loans and deposits go down and the proportion of reserve to deposits increases. As an illustration of this formula, take our own experience in the past few years. When the war broke out, after a short period of disturbed business, we

were flooded with war orders, and at the same time flooded with gold. Business became increasingly active. Bank deposits and loans increased along with a rapid increase in our gold reserves. The production of our mills had to be speeded up to meet these increasing demands, so at the same time, the circulation of credit had to be speeded up to finance and increased trade. Now our government has entered the war, and is making further demands upon our productive capacity. The volume of these demands may be gauged - roughly, it is true but still with a fundamental accuracy - by the amount of the borrowings and increased tax collections of the government, and we must again speed up the machine of credit to keep pace with the machinery of production. The reserve banks form the center of hub of this credit machine, and I will briefly describe how the conduct of their operations is actually accelerated when the pressure is applied.

When the government makes an offering of securities, whether of long term bonds or short term notes, the banks of the country immediately realize that their customers or clients will subscribe to the offering, and that they, (the banks), will be called upon to make the payment on the subscriptions in their respective localities. Banks located outside of New York City, practically all of which have money on deposit there, prepare for this by drawing on their New York balance or calling in their New York loans, and withdrawing these credit balances to the interior. As a rule they do not take cash but take credit on the books of the reserve bank of their district or of their local reserve agent. This is

the first spin of the wheel. The Federal Reserve Bank of New York receives from the other eleven reserve banks a vast sum of New York exchange for collection and remittance in advance of each loan being placed. It must settle with the other reserve banks every Thursday through the Gold Settlement Fund maintained in Washington. This results in a pull on the reserves of all the banks in New York City. The checks we collect from them reduce their reserve balance at the Federal Reserve Bank of New York and cause the wide fluctuation in excess reserves shown by the New York Clearing House statement. To meet this drain the member banks in New York come to the Federal Reserve Bank and borrow money in one form or another. Sometimes other means can also be employed re-coup their reserves. For example, at the time of the last loan, the Federal Reserve Bank of New York purchased from the British Government \$120,000,000 of gold in a period of two weeks, and in addition received payment in gold of certain international obligations amounting to over \$50,000,000 which matured on June 20th. All of this gold came to the Federal Reserve Bank of New York but was for the credit of a large number of New York banking institutions. Their reserves were immediately built up and, to that extent, the drain was offset.

A further means of relieving the loss is to offset it by transfers of government deposits from these sections of the country which have drawn so heavily on New York that their own reserves have been increased to an amount unnecessarily large. These transfers are accomplished by telegraph through the Gold Settlement Fund, and start currents flowing in the opposite direction, so that the move-

ments between New York and each of the other Federal reserve districts largely offset each other, leaving only net amounts to be transferred.

Still another method has been provided for achieving the desired result with a minimum of delay: Every Federal Reserve Bank has adopted a resolution authorizing its officers to rediscount its portfolio with any other Federal reserve bank. This procedure is authorized by Section 11 of the Reserve Act which gives the Federal Reserve Board, upon the affirmative vote of five members, the power to require such rediscounts, and authorizes the Reserve Board to fix the rates. At first this appears to be in the nature of a borrowing operation, but in point of fact it is really not so at all. The Federal reserve bank, in this case, New York, which loses its reserves through the Gold Settlement Fund, is usually simply paying out to the other reserve banks the reserve money which has been deposited with it by its own member banks whose accounts are depleted by these drafts from the interior. The reserve accounts of the members in New York are restored by the New York bank rediscounting their paper. If any considerable amount of reserves is moved to the other reserve banks and the amount of these discounts becomes sufficient to impair the reserve position of the Federal Reserve Bank of New York, then it can simply turn over its portfolio in part to those reserve banks which are correspondingly strengthened. Expressed differently instead of settling balances through the Gold Settlement Fund with gold, we would in that case settle our debit balances by the use of paper out of our portfolio, apportioning it with due

regard to the reserve position of each of the other reserve banks. This plan for speedy and almost automatic transfers of credit has not yet been put into operation, though in the future it may become a resource of vast strength.

This explanation seems necessary to make clear that the normal function of the Reserve System expressly authorized by the statute and very wisely provided with regard to just such a situation is simply being exercised for the benefit of the member banks as a whole. The statute provides for the cooperative use of reserves and credit facilities of the twelve reserve banks in time of emergency so that their combined strength may be as effective as though they were one bank instead of twelve.

To return to our chronology; the next step in these financial operations, after the subscriptions are closed is their actual payment into the reserve banks by the banking institutions of the country. The preliminary readjustment of credit to enable them to do so, you will observe, has already taken place. The payments as made are credited to the government on the books of the reserve banks, in some cases actually, in other cases only constructively. Where actual payments are made, the reserve banks, acting as fiscal agents of the government, at once redeposit these payments with the national and state banks where they originate. Where the payment is constructive, it simply means that the bank originally subscribing (either for itself or its customers) for the government securities, instead of making a remittance to its reserve bank, merely credits the government on its books with the

amount to be remitted, having previously furnished the government with collateral. At this stage the government has hundreds, and possibly thousands, of accounts on the books or banks throughout the country. It is now in position to make disbursements either from its own purchases or for loans to the allied nations. But as these payments must principally be made in New York at the present time, it becomes necessary for the reserve banks gradually to withdraw these deposits and shift them through the Gold Settlement Fund to New York. Then a new set of entries must be made in what we may call the general ledger. The deposits in other districts are drawn down and remitted to New York through the Gold Settlement Fund. As this may reduce the reserves of the banks that held the government deposits throughout the country, the reserve banks of those districts must stand prepared to discount the paper for them to the extent necessary to make good the reduced reserves. This was done in a small way when the last loan was placed, and is being done to some extent, although very moderately, to-day as a result of withdrawals of deposits now arising from sales of certificates of indebtedness. As these funds are withdrawn to New York from the interior reserve banks they are immediately disbursed by the government in New York and increase the deposits and reserves of the New York banks generally. The New York banks can then repay the advances which they have received from the Federal Reserve Bank of New York which builds up its reserve. It can then in turn repay to other reserve banks any paper which it previously might have delivered to them if rediscount transactions had taken place between Reserve

Banks. Gradually the whole set of entries arising from the preliminary withdrawals from New York will have been reversed and cancelled as a result of the ultimate disbursements of the Government. The reserve banks have stepped into the breach simply to make some temporary advances. They have provided the machinery to move a great mass of credits rapidly from one part of the country to another and back again. In a sense the placing of these huge government loans is like moving a crop. When we have a large crop, the credit machinery must move faster. These large government borrowings make it necessary to speed up the credit machine, and that is exactly what the Reserve System is doing.

The figures of the Gold Settlement Fund illustrate what is being done:

Gross Clearings, 3 months, ending June 30, 1916	\$ 832,299,000	
" " 3 " " June 30, 1917	\$5,101,317,000	
Balances Paid:		
	1916	1917.
April	\$ 21,756,000	\$ 75,519,000
May	42,994,000	219,263,000
June	28,723,000	217,648,000
Total	\$ 93,473,000	\$ 512,430,000

But I think I am correct in assuming that you are more interested in a still later stage of this operation. It appears as though at this point the ultimate effect of subscriptions to government loans, the withdrawal of their proceeds to New York and their disbursement in New York by the government, has resulted in a perma-

nent loss of deposits, and consequently of reserves by the banks of the interior. The fears many bankers have expressed to me on this score would in some sections appear superficially to be well grounded but the effect will not be permanent. If it were so, that section of the country which suffered a permanent loss of deposits would suffer permanently a corresponding contraction of savings realized from its productive capacity whether it was in manufactured goods, food stuffs, the products of mines or of forests, or what not. This great credit fund being expended by the government, with the exception of the pay of soldiers abroad and of negligible purchases abroad, is being expended in this country in the purchase of materials of great variety, and the amounts loaned to our allies are almost entirely being spent here as well. It means that in all sections of the country these credits must inevitably move back to their points of origin, directly or indirectly through government purchases. New ships, oil and coal, and products of mills, mines and forests in every part of the country now go to the government and each pulls back a share of this great fund. Even these sections which do not directly receive government contracts indirectly receive the benefit. Purchases of materials of various kinds in one part of the country either develop demands for raw materials or create a vacuum of goods which must be supplied or replaced from other sections. The intricate commerce of the country is so interwoven that it is difficult to exactly trace these movements, but the result is inevitable, and in those sections where this movement does not reach, it means that production and saving have been arrested, since the amount

subscribed in any locality for loans to the government is measured by the amount which that locality saves out of the profits on what it produces.

It must be admitted that our agricultural products, which are one of the chief instrumentalities for bringing about this re-adjustment, are in the main marketed at one short season of the year. In the interval, withdrawals of bank credit from those sections of the country will leave vacuum somewhat longer than in manufacturing sections where production and marketing are continuous the year around. But when crops are moved and paid for this credit will move back inevitably to the agricultural sections so long as profitable crops are produced there.

I refer to this particularly and emphatically because of the fears which some bankers entertain which might induce them to withhold their best efforts from assisting the government in placing the next loan. The last work of assurance on that point, very properly must come from the reserve banks, for during the interval between the marketing of one harvest and the next, when banks in the agricultural sections must both finance the farmers and assist in financing the government, reserves must be bridged by reasonable accomodation at the reserve banks. That is what the reserve banks are for. They expect to be used, and no time like the present will ever arise in our history when this use of our new banking system will be so important to every citizen.

Speaking of these matters from the standpoint of the reserve banks themselves, I fear you may have heard careless dis-

cussion of their possible intention to attempt arbitrary control of these money matters. Only one kind of control is required, and that is self-control. The reserve banks should not be expected to tie up their reserves in permanent financing for the government or anybody else. Their function is to make these temporary loans during periods of strain, whether occasioned by war and government financing, by domestic difficulties, or by any other cause. The exercise of self-control in these matters means that the reserve banks will see to it that the expansion which they afford to our banking system is that temporary expansion which is represented by a portfolio containing self-liquidating bills and loans which mature within a reasonably short time and which Congress has wisely fixed at ninety days and no longer.

I think I may use the experience of the Federal Reserve Bank of New York to illustrate this point. On the first of June, the discounts and loans of that bank, all maturing within ninety days, amounted to \$37,000,000 and its investments, which included \$20,000,000 of short term certificates of the government amounted to \$29,000,000. At about that time the interior drafts which I have mentioned began to come in, and during the month of June we were obliged to settle debit balances to the interior reserve banks aggregating about \$550,000,000. During that short period our discounts rose from \$37,000,000 on June 1st to \$252,000,000 on June 19th. Of this \$252,000,000 of discounts.

\$173,000,000 matured within fifteen days.

\$ 19,000,000 matured within thirty days.

\$ 29,000,000 matured within sixty days and

\$ 31,000,000 matured within ninety days.

By August 15th, our discounts had been reduced to \$62,000,000 without any increase in rates being employed to force the reduction. In other words, in two months we liquidated \$190,000,000 of paper taken from member banks with practically no disturbance to the money market. On September 19th, our total discounts amounted to \$87,000,000 of which

\$29,000,000 matured within 15 days.

\$17,000,000 " " 30 "

\$20,000,000 " " 60 "

\$21,000,000 " " 90 "

Our investments totaled \$8,900,000 of which only \$1,300,000 consisted of long time bonds of the government, purchased under statutory provision of the Act and \$2,600,000 short term U. S. Treasury certificates of indebtedness.

With this liquidation automatically accomplished it leaves us on September 19th with \$658,000,000 of reserve, practically all gold, being 89% of our net deposit and note liabilities. The whole Reserve System on September 14th held \$1,415,000,000 of cash, practically all gold, as reserve against the liabilities of the whole system. With this magnificent foundation upon which to rest our government's banking transactions, how can things go wrong? There is no occasion for timidity on the part of our bankers in putting the full weight of their influences, their energies and their resources behind the government in the conduct of the war.

In conclusion, I wish to say a few words in regard to the Administration's financial policy. On this subject history speaks in no uncertain voice. I wish you would read, as I have, the record of the last one hundred and fifty years of financial operations in war time of certain European governments. You will then realize that any finance minister who has the courage to impose taxes at the outbreak of a war heavy enough to pay bond interest, to rapidly amortize bond issues when peace comes, and to pay a share of war expenses, will have a minimum of difficulty in borrowing money. The records of the British Government in the Napoleonic Wars, the Crimean War and even so recently as the Boer War, demonstrate, by the mistakes disclosed, this fundamental principle of war finance. But we do not need to turn to Europe for examples on this subject. The history of the financial operations of our own government in the Civil War is entirely adequate to justify the policy being pursued. Within little more than six months of the outbreak of our Civil War our banks suspended specie payment. Our government was borrowing money from the banks in 1861 at ruinous rates of interest, and only too soon was driven to the disastrous expedient of issuing flat money. In 1862, the government placed its loans at rates, which on a gold basis produced a value of about 96% of par value for bonds bearing high rates of interest. The funds realized from loans placed by the government in 1863 produced on a gold basis as low as 64½% of par value, and in 1864, as low as 41½%.

On the other hand the clear war revenues from taxes in 1862 were but \$52,000,000; in 1863, \$113,000,000, whereas, in 1866,

after the close of the war, the revenue legislation then in force produced the enormous total for those days of \$558,000,000. It is obvious that the failure to support the government's credit early in the war by adequate tax revenues undoubtedly was one reason for the unfortunate later indulgence in every variety of unsound financial expedient, the effects of some of which have dogged our steps for nearly fifty years.

Now, let us compare the present tax program with these past experiences. Their dissimilarity is so striking as to be almost startling; and is one of the most hopeful auguries for the success of our whole financial undertaking. Personally, I rejoice that the officers of our government have the courage to face the criticism on the one hand of those who believe the program of taxation is too heavy; on the other hand of those radicals who think it is not heavy enough. Not enough taxes means declining credit, too much taxes means declining industries. The only danger in exacting heavy taxes on profits and incomes is the danger of not allowing sufficient profit inducement to the industries of the country to stimulate production. I confidently believe that our country can pay all the taxes required to maintain its credit and to support all the borrowings needed for the period of the war, without crippling its vital industries, and that those who now cry calamity simply because they don't want to pay heavy taxes will some day see and acknowledge their error. But our Congress must be careful not to destroy the income sources which produce taxes. Industries which must expand to meet war conditions, need earnings for plants and

inventories which may be useless when war ceases, and yet they must be built. To take all their income will retard new construction.

These of us who have sent our boys to France are beginning to realize what the war is. Our part in it and the motive behind it will be an imperishable glory for this great nation. But we must not lose our boys and lose the war for lack of money, nor must we fail in providing the money simply because our financial army is inadequately equipped. I am convinced that the only important weakness in our financial organization is the lack of State bank membership in the Federal Reserve System. One half of our financial army is equipped with modern machinery by membership in the system. The other half, equally patriotic, is ineffectively armed. You will recall the disastrous results to the Russian Armies in the early days of the war when large numbers were sent to the front without arms and ammunition. Don't let us fail our duty for lack of the strength we can only enjoy if we are united. It may indeed rest with you state bank men to determine what shall happen to our boys and they must come home victorious.