WAR FINANCE

In days of antiquity, the common method of financing a war was by means of the treasure chest. Monarchs accumulated large sums of money in peace to be expended in war. The historian McCulloch tells us that the Athenians amassed upward of 10,000 talents, or about $11,000,000, in the interval between the Persian and Peloponnesian Wars, and the Spartans imitated their example. The riches which fell into the hands of Alexander the Great came largely from the war chests of the East stored since the age of Cyrus, and Alexander's successors, the Ptolemies, are supposed to have collected the equivalent of nearly $200,000,000.

The Romans accumulated war treasure, both under the commonwealth and under the empire. It was a frequent practice during the Middle Ages, and persisted in even more modern times. Frederick II of Prussia received 8,700,000 thalers, the equivalent of $6,000,000, from his father when he came to the throne, and, despite his constant warring, left his successor a fund of 70,000,000 thalers.*

This method of treasure chest financing was possible in times when warfare was comparatively inexpensive. Armies, to a large extent, were sustained and paid by plunder of the conquered. Arms and other equipage cost little compared with the complicated machinery of modern times, and frequently were furnished by the soldiers themselves or the nobility who commanded them. People still largely agricultural could go to war between seed time and harvest without serious loss of income or decrease in the productive power of the country.

The invention of gunpowder and other vastly improved weapons worked a great change. So rapidly did the cost of war grow that Adam Smith was led to write in 1776 that it was "commonly computed that not more than one-hundredth

* Adams - Public Debts.

part of the inhabitants of any country can be employed as soldiers without ruin to the country that pays the expenses of the service." Mr. Francis W. Hirst, in his "Political Economy of War," remarks that "it is striking proof of the growth of wealth and of scientific organization for war that in spite of an enormous addition to the cost of munitions and arms since 1776 both France and Germany in 1914 were able so long to maintain at the front or in reserve over one-tenth of their population."

War has become a contest of workshops as well as of armies, and of methods of conserving and directing the whole energies of a people in the pursuit of victory. Expenses have mounted to the point where any anticipatory hoards of money now would look ridiculously small. The total world stock of monetary gold is estimated at about $8,000,000,000, and the expenditures of the United States in the World War, including $10,000,000,000 of loans to the Allied Nations, were more than three times this amount. The United Kingdom's expenditures during the six fiscal years ended March 31, 1920, were over £11,000,000,000, or larger than the total expenditures for the two and a quarter centuries preceding 1914. *

The true war reserve of the present day is a high, well balanced productive capacity, and a peoples' willingness to consume less than is produced. The country possessing such a reserve, if its methods of war finance are sound, may draw upon it in much the same way as the ancient kings drew upon their treasure chambers.

I said, "If its methods of war finance are sound." Unfortunately, history is far more replete with glaring examples of unsound war financing and their disastrous results than with examples of sound financing. The most constantly recurring error into which finance ministers of all ages have fallen has been that of debasement of currency. In ancient and mediaeval times it took the form of clipping coins or otherwise reducing their bullion value, and in modern times the still more dangerous form

* Bankers' Trust Company - English Public Finance.

of irredeemable paper money.

With the example before us of the disordered conditions resulting from paper money inflation in Russia and elsewhere in Central Europe, few persons would advocate a deliberate course of currency debasement. It is not that which we have to guard against. But paper issues have an insidious way of beginning on a comparatively small and apparently harmless scale, and of growing irresistibly until they envelope and overwhelm.

The first issue of the famous - or one might say infamous - French assignats was four hundred million livres, a large sum for those days, but small compared with the flood of succeeding issues. Andrew D. White tells us in his interesting history of the assignats that within five months the first four hundred millions had been spent, the Government was again in distress, and people throughout the country were clamoring for another issue. With each succeeding issue, prices, in terms of the depreciating currency, rose higher, thus creating a demand for more issues. The vicious circle continued until it ended in the ultimate worthlessness of the assignats, and the complete economic and financial prostration of France.

The other classic example of history was our own Continental currency. It began with the issue of $3,000,000, authorized on June 22, 1775, - a beginning, says one historian, "as humble and insignificant, at the outset, as the Genie of Arabian tales, whom a small bottle at first sufficed to hold, but who, freed from his imprisonment, swelled into proportions so vast as to enfold both land and sea." * As the necessities of Congress continued, further issues were made, accompanied always by a growing unwillingness on the part of the people to accept them on a parity with coin. All efforts to maintain their value by resolutions or severe penalties were useless. Shopkeepers took down their signs and closed their places

* Poor - Money, Its Laws and History

rather than take the money at its face value. By the close of 1779, the original modest $3,000,000 had grown to nearly $242,000,000, and its value had fallen to 40 to 1. It later fell to below 500 to 1, and was funded by Hamilton at a rate of 100 to 1.

War financing by paper money is like an attack on the army from behind. The Continental currency nearly beat us in the Revolution. The British regarded it as one of their strongest allies. The American General McDougal, writing from Peekskill to General Reed, said, "The enemy is confident our currency will fail us, . . . and that, whenever the supplies for the army fail, the people will return to their allegiance. He is now counterfeiting another emission, which will soon be out." * The use of irredeemable "greenbacks" during the Civil War is estimated to have increased the cost by nearly $600,000,000,** due to the fact that the Government had to accept pay for its bonds in the depreciated money, but pay interest and principal in gold.

History furnishes one notable example of a country fighting a long and exhausting war on sound money, and one all the more interesting for purposes of contrast in that its opponents resorted to paper. For nineteen years,- or nearly five times as long as Germany held out in the late war, - Napoleon fought practically the civilized world, and never once weakened from the determination expressed in a letter to one of his ministers, that "while I live I will never resort to irredeemable paper money." Under this policy, and notwithstanding the length and severity of the struggle, France commanded all the gold she needed, and supported her armies in the field. The tribute levied on conquered nations was an important factor in making it possible to maintain gold payments, but is far from being a complete explanation. Other conquering nations have all too frequently been unable to resist the lure of paper issues. The policy laid down by Napoleon must receive major credit.

* Poor - Money, Its Laws and History
** Ely - Outlines of Economics

Even after invasion and defeat at Waterloo, there was no acute financial distress, and complete recovery was rapid.

In contrast with this comparative financial tranquillity, England, on an irredeemable paper basis, was severely shaken. The immediate effect of the suspension of cash payments in 1797 was not unfavorable. But without the automatic check provided by redemption requirements, the fatal facility to over issue began to get in its work. The exchanges turned against England. Paper depreciated until the premium on gold in 1813 touched nearly 30 per cent. The country endured all the hardships of a fluctuating currency, culminating in 1814, 1815, and 1816 in serious economic distress and unprecedented bankruptcy. Not until 1821, or 24 years after the first suspension, was the country prepared to resume specie payments.

These examples serve to illustrate the vast possibilities for help or harm which revolve about the financial plan upon which a war is conducted. These possibilities grow in magnitude as the expense of war increases. They make it emphatic that a well thought out plan for mobilizing and organizing the financial resources of the country must be an essential part of any military program.

In order to get a clear idea of the task before the modern finance ministry, let us reduce the problem of war finance to its simplest terms. Let us suppose that we are chiefs of some communistic society wherein all deposit their surplus production in a common warehouse for the benefit of all, and that we are charged with the duty of marshalling the wealth of that society for defense against a threatened attack. There immediately becomes necessary an entire reorganization of the economic life of the group. All men of military age who can be spared are withdrawn for service in the army. This means more intensive effort on the part of those who remain at home. The same, - and probably a larger, - production of food and clothing will be required, plus munitions and other equipage, and there will be fewer to do it. To meet these requirements, we probably will first speed up our productive machinery by patriotic appeals to those already at work. Next, we will recruit as additional workers old men and large numbers of women. Lastly, as people learn to do without luxuries and many things previously considered necessities, we begin the abandonment of non-essential industries and diversion of energy thus released to the prosecution of the war. In such a community, there is no question of taxes or of loans. Each individual contributes freely his labor and skill in the best interests of all, and receives his return in the accruing common security and prosperity.

Our modern methods of war finance are more complex, but they rest finally upon the same basis, - namely, a mobilization of productive power in the advantage of the state. We do not require that farmers and manufacturers shall turn a certain proportion of their output into a vast common storehouse from which the Government may withdraw wheat, corn, automobiles, munitions, clothing, etc., but we do require that they shall turn over a certain part of their income. By this acquisition of purchasing power, the Government obtains that control over labor and commodities that it enjoyed more directly under the communistic plan referred to.

It is the problem, then, of the finance minister to tap and divert to the uses of the state, by taxation or borrowing, as large a part of the national income as possible without impairing the processes of production. In an ideal state, it is conceivable that the citizens might turn over to their government, through taxes or loan subscriptions, enough surplus capital to meet fully the war expenses. Staggering as these expenditures are, they are, after all, no more than the value of the current production which they are intended to control. For the population of the modern state to turn over to the government the needed portion of its income would be doing in effect the same thing that the members of a communistic society did when they contributed more directly their labor and the products of their labor to the common defense.

If government war receipts could be so closely adjusted to expenses, the task of the finance minister would be comparatively simple. He would be little more than an exalted bookkeeper, charged with collecting funds from the profits of industry and paying them back to industry as the government made its purchases. Under such a system, war could be carried on indefinitely, so far as the problem of finance alone would be concerned, with immeasurably less of the disturbance to wages, prices, and general living costs that is now so vivid in our minds.

As a matter of fact, however, there are limits to the extent to which the civil population may be expected to deny itself effectively and devote its savings to the support of a war. Patriotism will permit a very material increase in taxation and stimulate a large investment of savings in government securities, but if the war is long and exhausting there comes a time when the receipts from these sources fall below expenditures. Meantime, the requirements of the war continue imperative, and the army and navy must be supplied at all costs. Under pressure of this necessity, the government recognizes that its problem is no longer the maintenance of strictly sound financial methods, but has become in the nature of a choice of the least of evils. It is at this juncture that the temptation to issue irredeemable paper money is likely to prove most alluring. While this is the worst of all possible steps, the consequences of which we have already considered, it is well to bear in mind always that all methods of balancing a deficit other than by the savings of the people are evil, and justified only by the supreme necessity for victory. It is departure from this principal that causes most of the economic hardship wrought by the war.

During our own war with Germany, the flow of Government securities came too rapidly to be absorbed entirely by current savings. This was notwithstanding the fact that our people presented an inspiring example of a nation whole-heartedly united in support of the common effort. I need not remind you of the cheerfulness with which, on the whole, Americans submitted to commodity rationing, price fixing, and other regulatory measures, as well as voluntarily limiting themselves, in order that our energies and resources might be devoted more completely to the prosecution of the war. From the greatest manufacturing establishments down to the humblest homes the response was most gratifying. The truth of the matter is, however, that under our complex social system it is extraordinarily difficult for a people to save currently and place at the disposal of their government the capital needed for the prosecution of a great war. Standards of living are more or less fixed, and are less susceptible to change than in more primitive societies. Our economic relationships are intricate, and under a system where concerns must show a profit to exist, the problem of the extent and manner of contribution to the state is a difficult one. Finally, mobilization of a people for war is to an important extent a matter of publicity. In a vast country like the United States, the importance of sacrifices and the extent of sacrifices required are not borne upon all sections immediately with the same force.

Consequently, our Government had to make up the deficit in receipts from savings by resort to bank credit. You will recall that the Government after requesting the maximum investment of current savings in Liberty bonds, also asked investors to anticipate their future savings and buy bonds on the partial payment plan. Every effort was made to encourage people to save and complete these payments as soon as possible, but many did not or could not pay rapidly, and the result was a continuously increasing amount of Liberty bonds being carried on bank credit. In addition to this, the Treasury also borrowed large amounts on its short term notes, as much as 80 per cent. of which at times were lodged in the banks. Thus, we see that what purchasing power the Government was unable to obtain by tapping the savings of the people, it manufactured through the creation of bank credit. At first sight, this looks a good deal like manufacturing paper "Continentals" or assignats, but the vast difference was that the credits and currency we created were always, for any legitimate purpose, immediately convertible into gold. This convertibility could be maintained by reason of the fact that for the first time the country's gold reserve was mobilized in a single reservoir, - the Federal Reserve System, - instead of being scattered, as it was formerly, among thousands of individual banks all over the country. Such a centralization of reserves permitted them to become the basis for a much larger creation of credit and currency than would have been possible under the old system.

Inability of the civil population to limit its consumption sufficiently to release production fully for war purposes means that both the Government and individuals become bidders for labor and goods in the open market. As long as labor is not fully employed and factories are not running at capacity the effect of this on prices is not marked. When, however, every man has been put to work and every mill wheel is humming, and increased demand can no longer be matched by increased production, the effect of this competitive bidding is simply to run up prices and wages. Each rise in the price and wage level creates a need for additional purchasing power, which, when it is supplied through the medium of bank credit, tends to inflate prices, and wages still further. This very process in itself prevents full utilization of maximum productive capacity. Prices and wages rise unevenly, - more in some lines than in others, - and distortion of the normal relationships causes heavy demand and often speculation, accompanied by shortages, of the commodities the prices of which are rising. It causes shifting about of labor from one position to another, discontent, and strikes. It disrupts the smooth workings of industry and creates waste where the vital need is for economy. If the process is continued, an actual decrease in total production often occurs.

In our own case, when we entered the war in 1917, our factories were already over-driven. The warring European nations had bought heavily from us, and they had sent us in payment a vast amount of gold which became the basis of an even greater domestic buying power. As our production could grow only gradually, the inevitable result of this accumulation of buying power was a rise in prices, which, between July, 1914, and our declaration of war, had amounted to 72 per cent. When, after that, our Government, armed partly by bank credit, became likewise a bidder for men and goods, prices showed a further rise, which up to the Armistice amounted to an additional 20 per cent. Before the rising circle of prices and credits came to a halt in 1920, the level of prices had gone 172 per cent. above the pre-war level. The following table shows the percentage price rise in three periods, - the period before our entrance into the war, the period of our participation, and the post-Armistice period. The index of prices is that of the Department of Labor.

July, 1914	100	April, 1917	172	Nov., 1918	206
April, 1917	172	Nov., 1918	206	May, 1920 (peak)	272
Increase	72 per cent.		19.8 per cent.		32 per cent.

If it had been possible for us as a nation to reduce our private consumption by the amount of the Government's needs, the competitive bidding and consequent price and credit inflation attributable to the war would have been avoided. There is reflection of the highly commendable effort made by our people in this direction in the fact that, notwithstanding the withdrawal of more than four million men from industry for the army and navy, and the huge Government expenditures, the price rise during our period of participation in the war was relatively small.

Bearing, in mind, therefore, the need for balancing expenses out of savings, so far as possible, the finance minister will have a choice as to which of three courses is best calculated to bring about the desired results. These three courses are - taxation, borrowing, or a combination of taxation and borrowing.

Were it a practical possibility to finance a war entirely by taxation, it probably would be advisable to do so. Undoubtedly, a nation able so to do would be in a strong position for rapid recovery at the conclusion of hostilities. Theoretically, it is not impossible, for, as has been pointed out, the income that is taxed is merely symbolic of the goods which must be produced during the period of the war. Under the communistic regime described all expenses were defrayed by taxation in kind.

The objections against such a program for the modern state are purely practical difficulties that would arise in the levying and collection of the vast amounts required. Where billions are needed an inequable apportionment of the burden would be disastrous. It is not necessary for us here to go deeply into problems of taxation, which constitute in themselves a profound science, but it suffices to point out that taxes must be levied in proportion to the ability of each taxpayer as well as all of the people to pay and that there is no certain way of knowing very closely just what this ability is. Under our present economic system founded on the principal of profits, it is inevitable that too heavy a rate of taxation will discourage enterprise, and be the means of killing the goose that lays the golden eggs. As a matter of fact, however, it is seldom necessary to warn a people against the dangers of too heavy a rate of taxation. The example of history indicates that they are usually too ready to magnify its dangers, and find other means of financing, often yielding to the fatal attraction of paper money.

Directly opposed to a policy of financing by taxation is a policy of financing as completely as possible by borrowing. Here, too, it may be said that if the loan program could be carried out ideally, - that is, if the bonds could be taken up entirely out of savings, and without resort to bank credit, - the plan would be sound. Not only that, but it probably would be the best method, though for a different reason than the one commonly advanced. It is fallacious to assume that the flotation of loans and the creation of a public debt enable a generation at war to pass some of the destruction, which we sometimes call the cost of war down to future generations. The "cost" of war is paid to the last cent during the war in the destruction of capital that it entails. Borrowing is simply a device whereby the cost is borne immediately by a comparative few, and is redistributed later over a wider area through the medium of taxation for debt interest and redemption. The advantages of the system would lie both in the fact that larger sums can be obtained by offering an interest return than by taxation, and in the fact that it contains within itself some potentiality of a recouping of the war losses. If the post-war taxes for debt service are levied properly and broadly, they constitute an enforced saving on the part of the great body of the people which eventually will replenish the capital fund.

Unfortunately, a program of financing exclusively by loans apparently cannot be carried out ideally during a trying war, and experience has shown the attempt to be highly dangerous. It is altogether too easy for the bonds to find their way into the banks and become the basis of inflation. Our own history, which has furnished so many excellent examples of how not to finance a war, does not fail to present a classic example of the difficulties resulting from depending too much on loans. Before the outbreak of the War of 1812, Secretary of the Treasury Gallatin had stated it as his opinion that "loans should be relied upon principally in case of war," * and his financial program contemplated the collection of current revenue only for the ordinary expenditures of the government and for debt interest, and borrowing for all the extraordinary expenses of war. Congress was still more reluctant to tax, and declined to raise the rate sufficiently to cover interest on new debt and to offset the reduction in customs revenue caused by the war. As a result, notwithstanding the fact that prior to the war the credit of the Government had been high, the success of

* Bolles - Financial History of the United States.

even the first loan had to be characterized by Gallatin as "more than doubtful." * With each succeeding issue, the terms became more disadvantageous, until by 1814 the public credit had fallen to extraordinarily low levels. Government bonds were quoted at a heavy discount, and the Treasury, in order to get subscriptions to new issues, had to promise in some cases that the amounts subscribed would be used solely in defense of localities furnishing the money. The dire extremity of the national finances was further indicated in the same year when an offering of nearly $13,000,000 six per cent. public stock brought subscriptions for only $746,403, although the specie price ranged as low as 65 to 69.

It is only fair to remark that invasion by the enemy, the unpopularity of the war with a large class of the people, and the failure of Congress to recharter the United States Bank in 1811, greatly intensified the difficulties of the war program. The failure of Gallatin's war policy, however, was still due in large measure to its erroneous principle, and contemporary critics did not hesitate to place the blame there. Both Secretaries Campbell and Dallas who succeeded Gallatin admitted its failure, and recommended increased taxation. In the words of Dallas, the difficulties had not been due to "want of resources or want of integrity in the nation," but "to inadequacy of our system of taxation to form a foundation of public credit, and the absence from our system of the means which are best adapted to anticipate, collect, and distribute the public revenue." **

The German Finance Minister Dr. Helfferich's declaration early in the recent war that additional taxes would be levied only for debt interest sounded singularly like Gallatin's messages. Germany's adoption of this policy was probably due largely to expectations of a short war and indemnities, and when these expectations were not realized the inevitable failure of the plan resulted. Germany ended the war with heavy issues of irredeemable paper, the further multiplication and effects of which

* Adams - Public Debts
** Adams - Public Debts

since the Armistice are familiar to all.

It is thus clear that our finance minister in a serious or critical or lone war can rely neither solely upon taxation not solely upon borrowing. His proper course lies in a combination of the two. What the proportion of dependence upon each should be is impossible to say definitely. It depends upon the circumstances of the war. In general, it may be said that every dollar that can be collected by taxes should be so collected, and for the rest resort may be made to borrowing. In case of a short war, it may be found possible to rely almost wholly upon taxation. Our war with Spain, for instance, was financed largely by taxes, and the debt increase amounted to only $200,000,000.

Experience of past wars has shown that best results have been accomplished where a vigorous tax policy has been pursued. A good example was the British financing of the Crimean War. When war broke out in 1854, Gladstone, who was Chancellor of the Exchequer, determined to defray the expenses by taxes, and, so far as possible, by direct taxes. At the outset, he secured a doubling of the income tax for six months, and this was later extended to cover the period of the war and a year after peace. Indirect taxation was also increased. While there was borrowing enough to depress public credit somewhat, the range of consols the first year after the war was 93 7/8 - 98 3/4, compared with 90 3/4 - 101 in the year before the war. The close of the war was followed by a very rapid recovery in the country to prosperity.

Pitt's use of the income tax in meeting the cost of the Napoleonic War cost is another illustration of what can be accomplished by a resolute tax policy, even in the face of a bad currency system. Up until 1798, the war was financed largely by loans, and it was during this period that England got started on the road of irredeemable paper. In 1798, Pitt carried an income tax, which, however, due to defects in the law did not become fully operative until 1806. During the following ten years of the severest struggle and exhaustion of the war, when the country was suffering from the effects of earlier bad financing methods, Great Britain, with the aid of this income tax, accomplished the remarkable feat of raising more than enough revenue to meet all civil and military expenditures, exclusive only of those having to do with debt. The step, however, came too late to save England from paying the penalty for delay in instituting a sound policy by a period of severe financial unsettlement. Referring to the results of the tax, Gladstone said in 1853, "Our debt need not at this moment have existed if there had been resolution enough to submit to the income tax at an earlier period." *

Contrasting with Gladstone's handling of the Crimean War finances was our dilatory tax policy in the Civil War. Secretary Chase, like Gallatin, believed in loans, and under his administration taxation was subordinated to borrowing and paper money issues. A year ago, when it was my privilege to discuss this subject before the War College, I quoted some figures from Professor H. C. Adams' book, "Public Debts," which I would like to present again, as they are highly illuminating. They contrasted the receipts of the Federal Government during the Civil War from revenue with receipts from loans as follows:

Year	Revenue	Loans
1861	$ 41,500,000	$ 23,700,000
1862	51,900,000	433,600,000
1863	112,600,000	595,600,000
1864	264,600,000	696,000,000
1865	333,700,000	864,800,000
1866	558,000,000	92,600,000

These figures show clearly with what reluctance the Federal Government resorted to taxation. In the year after the war, revenues from taxes were over thirteen times the amount of revenue from taxes in the first year of the war, and about eleven times the revenue from taxes in the second year of the war. The inevitable result of this weak policy, coupled with paper money issues,

* Hirst - Political Economy of War.

was inflation, suspension of specie payments, and commercial and financial unsettlement from which it took fifteen years to recover.

Our financial program in the war with Germany rested on a different basis. In the first fiscal year of the war we raised $4,175,000,000 by taxation, compared with $10,700,000,000 by borrowing. In the fiscal year ended June 30, 1919, taxes brought in $4,650,000,000, and loans $12,000,000,000. The lessons of other wars were not forgotten and from the outset our policy was to raise every dollar possible by taxation, to print no paper that would not be instantly redeemable in gold, and to distribute the Government securities to the greatest extent possible without resort to bank credit.

It is now pretty conclusively established that a properly conceived financial program should be in accordance with this policy. There still remains, however, one more important problem for the finance minister to settle, and that is whether the Government, in selling its securities, shall permit the rate of interest to be determined wholly by the ordinary forces of an open and unregulated money market, or whether it shall adhere to a low rate policy, and depend for distribution partly upon keeping money rates low and partly upon appeals to patriotism. Our own plan during the recent war inclined to the latter character, and probably no other phase of our financing has called forth more discussion pro and con than this one. The critics of this method have argued that maintenance of cheap money through low discount rates at the Federal Reserve Banks tended to stimulate private enterprise unduly at a time when the full measure of the country's resources was needed by the Government, and that in consequence of this competition what was saved in interest was lost in the higher prices the Government had to pay for supplies. It was further argued that the Government, by not offering its securities at a rate which would make them attractive purely and solely as an investment, hampered its own efforts to secure that maximum distribution outside of the banks which we have seen is so important to the successful financial conduct of a war.

I do not wish to take sides here with regard to our war policy in this respect. Let me simply point out, however, that hindsight is better than foresight, and when the country was facing a war which promised to tax its resources very severely there was much to be said for carrying on borrowing operations as cheaply as possible. It may be recalled, also, that at the time there was a disposition in some quarters to criticize even the rates named as too high. In fact, it is probably true that the great body of public sentiment generally favored a low rate policy.

I have spoken thus far only of the general principles of financing war. I might go on to discuss in detail the problems which arise in applying those principles. History is filled with interesting examples of their application and our own recent experience has given us a fund of knowledge which the finance minister of any future war will do well to study. Many of the detailed problems are of a technical nature and concern the finance minister rather than the soldier. Many problems are both military and financial in their implications, as, for example, the basis upon which war contracts should be let to assure a continuous flow of munitions to the points required, at the time required, under conditions of payment conducive to the greatest possible economy. On all of these problems there should be careful study, both on the part of the financial department of the Government and the war making departments. The problems are not ones which can be dealt with adequately by snap judgment on the spur of the moment. Careful advance planning is essential to sound war finance.

I have in mind a certain commission of one of the allied governments which came to this country during the war for the purpose, among others, of buying a large amount of army supplies. I shall use tents to illustrate. Under instructions from their government, they advertised widely for bids, and as a result set in motion inquiries for cloth and other materials from a large number of concerns throughout the country which, in turn, sought to secure options on their needed materials before quoting a price. Suppose there were twelve firms submitting bids and securing such options. It is clear that the effect of the original order was multiplied twelve times. Furthermore, concerns receiving these inquiries and giving options also felt the need of covering their requirements, and became themselves inquirers for supplies. And so the effect of that tent order tended to spread like ripples on the surface of a pond. When this sort of thing goes on in many lines, it can become an important factor in price and wage inflation, and one quite apart from financing methods. In such case, the volume of credit required to make the purchases is the result of the inflated level of prices and not the cause of it. I use this example to illustrate the importance to the financial plan of proper methods of buying. In other words, bad buying, instanced in the case in point in excessive resort to competition, can be in itself an important cause of inflation.

On the other hand, the financial plan, if improperly conceived, will cause inflation regardless of how soundly conducted the buying. The lesson to be learned is the necessity for close understanding and cooperation of all arms in the formulation of a program which will result in the mobilization of resources with the greatest possible efficiency. Our experience during the war showed it to be extraordinarily difficult to inventory plants in a practical way according to their suitability for handling different types of orders, but if a body of knowledge of this character could be created, those charged with purchasing would be in a position to let their contracts directly to concerns best fitted to take them, and it would be more possible to reduce as much as desired that competitive bidding, which, as we have seen, has harmful potentialities.

All data which tend to make more complete a program for the production, transportation, and storage of munitions and supplies, and to recognize the interdependence of this program with the financing, facilites the latter.

The army in years past had made careful studies of the problems involved in training large bodies of men for combat. The results of these studies were shown clearly in the expeditious and efficient manner in which our troops, after only three to six months of intensive training, were able to meet the most highly trained troops of Europe on better than an equal basis. The recent war, involving, as it did, more than any previous war, problems of organization of industry, taught to the world the necessity of preparing with nearly equal care for the industrial aspects of warfare. We found that we needed more dependable knowledge of the quantities of clothing, machine guns, artillery, and ammunition that would be required. In some cases, I am told that we found we had no blue prints of many of the munitions which it was found desirable to manufacture. The entire munitions program I have also been told was held up for several months by delay in the manufacture of those comparatively simple metal parts of shells known as adapters and boosters.

Just as we found we needed more adequate knowledge of the quantities of supplies and munitions required, so it was many months before any reliable estimate could be made concerning the tonnage of shipping required to transport to Europe the army with its supplies. As a result, the provision of ships in the early months was inadequate, and supplies rushed to port were dammed up there. There was no adequate provision for storage of munitions and supplies in the interior, and contracts were drawn in some cases without adequate provisions for adjusting the flow of traffic to the vessel tonnage available.

To the extent that it will be found possible to prepare in advance for these contingencies, the task of the finance minister will be facilitated. While, in the last analysis, he alone must assume responsibility for the financial conduct of war, any provisions that can be made to insure the smooth and expeditious production and distribution of supplies will be of great aid in making his program effective. There are limits, of course, to the extent to which advance estimates are possible. Each war is likely to involve its own problems of tactics and equipment that cannot be foreseen. One of the greatest difficulties in the way of carrying forward an adequate financial plan is the impossibility of knowing even approximately how much money will be required. A part of the uncertainty which exists on this score is unavoidable and arises from the chances of war. A part, however, is susceptible of some reduction as we perfect our machinery for planning the industrial part of the war program.

For the soldier and for the financier there is a common lesson in the experiences of the past. It is the need for the careful preparation of the entire war plan as it concerns personnel, material, transportation, and finance. The presence of this body of officers at the War College conducted under the auspices of the War Plans Division of the General Staff is an evidence that the army at least has a full appreciation of the importance of this.

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CONFERENCE OF STATISTICS DEPARTMENT

May 6, 1921.

SUBJECT: The influende of the Discount Rate ...... By Governor Strong.

Mr. Snyder opened the meeting, saying: "I am sure we are very much flattered to have the Governor with us to-day, and I am sure he is going to say some very interesting things. We are very much indebted that he should come."

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(Governor Strong)

"I understand that there are much more important matters relating to the organization of the bank coming up later this afternoon, at this present meeting, and I am going to try and shorten my remarks toa point where they will not interfere with that important business, Mr. Snyder. Furthermore, now that the time has come for any statements I am about to make I should say that I am appearing here in fear and trembling, because Mr. Snyder and his able assistants in his department put such a topic before me as the influence of the bank rate. I am always afraid I am going to match my theory with Mr. Snyder's.

"The original company of thirteen, as I recall the figure, that started the Federal Reserve Bank, are the only ones that can go back to the days of our discussion of what rate was proper and would be satisfactory when this bank was organized. The conditions that existed at that time were those brought on by the outbreak of the war. We had called upon two agencies in the United States to meet the great crisis in credit and currency. The crisis in bank credit was met by issues in clearing house and loan certificates, bearing interest. A vast amount of credit was manufactured through the agency of clearing house issues, and that credit was bearing interest at from 6 to 7 per cent, and I think, in some cases, higher. In addition to that, credit was manufactured through the agency of the Aldrich-Vreeland Association, which was organized under the "Aldrich-Vreeland Act." The existence of that great mass of credit which was bearing various rates of interest throughout the country determined our bank rate. I think that the reserve rates established were from 6 to 6 1/2 per cent, and the rate was high enough so that it kept down heavy borrowing at a low rate, so that the first business conducted by the Federal Reserve Bank of New York at the rate level which was established was trifling, and we were gradually able toreduce our rates over quite a period, until finally, as I recall, we were buying bankers' bills, - that is, acceptances - as low as 2 % in the open market. We had, in fact, a rate for that class of paper in New York that averaged from 2 to 3 per cent at the same time that paper of similar character was selling in the London market at from 2 1/2 to 3 per cent. The rate in the London market was as low as it was because of the American mass of credit which was artificially manufactured there.

"In discussing the influence of the bank rate, you have got to bear in mind that the bank rate has no influence unless you have got an account on both sides. If you have no existing loans, you can't bring about contraction by an advance in rate.

"All that we were interested in doing in the early days of the Federal Reserve Bank was to earn a mere dividend of 6 per cent for the member banks, after paying all our expenses. I might say in these days we had a very distinct contrast in the character of the relations of the Reserve banks to what we have now. This is the great money market of the country where dealings in short time paper especially centered. All of these bankers' acceptances came to this market as a rule and opened up a market where the short-time Municipal borrowings were generally negotiated and consequently we had a peculiarly advantageous position in New York which enabled us to entice our funds. It resulted in an arrangement between the Reserve banks by which we divided up the various banks. I think it is no exaggeration to say that this has worked out to better advantage than we had expected.

"I am not going to attempt to review the period of the war, when we experienced all the difficulties of adjusting rates. It is a big subject, and it is full of controversy. Mr. Snyder gently suggested that that would be an interesting thing to talk about, and I ducked it. In geheral, I think I am safe in saying that we made about as many mistakes - I say "we" for we were simply one body after all, the Treasury and Reserve banks - as could be expected, but, on the whole, I think we made fewer mistakes than our friends on the other side of the water made, and certainly very fewer mistakes than the enemy on the other side of the water made in financing the war. Skipping that point, I want to come right down to the present and what is taking place now. I want to illustrate this by giving a few of my observations:

"On May 9, 1901, I happened to be in the Stock Exchange, and on that day, between 10 and 1 o'clock, we saw Northern Pacific stock advance to $1,000 a share and money lending at about 100 per cent. There had been previously no such complete collapse of values in Wall Street as had occurred that day up to 1 o'clock. Towards the middle of the day they sent word very frankly that their boxes were empty and they could not send in more margins. Our loans got so low that if we had attempted to liquidate them the proceeds of the collateral would have been insufficient to pay the face of the loan. In other words, if very many of the loans had matured and the sale of the collateral took place, it would have resulted in the complete collapse of Wall Street. Later a plan had resulted in the sale of Northern Pacific stock and Mr. Morgan and his associates sent out word that they would not be unduly severe in the sending out of margins, and later prices had risen to a point where the loans could be made good and money was practically unlendable.

"The point I am trying tobring out, in telling this story, is that it presents a picture of a complete collapse of values which resulted in a condition that meant insolvency. Money was over, and money got back to normal rates all in a period of about five hours. In similar fashion, that is what happened in the United States, and in fact the whole world in commodity values. Speculation and extravagance worked out their own natural conclusion. There are those who say that some design of man or men, or possibly the reserve banks, by advancing rates, had brought about this state of affairs. I do not believe it for a minute, and I do not think most people do. In general, I would say that no man or men had the power to stop that great wave of speculation, and no man or men had the power to stop the break which took place. On the other hand, I would say that certain policies might have been adopted so that it should not have reached its extreme limits.

"Everyone now is satisfied that something must be done to stabilize the values of goods, and they will be stabilized to some level. Certain houses that retail goods, or certain houses that wholesale goods, or certain houses that manufacture goods, by reason of foresight or some other circumstances that gave them a more favorable position than other competitors, may be out of debt and not have large inventories, and are able now to buy and stock up with goods that are coming along from producers, manufactured out of cheaper raw materials and by cheaper labor than the goods and existing stocks which are being carried upon borrowed money. The tendency among retail stores at present is to keep new goods and cheaper goods in competition with high prices. It is forcing down the selling prices of the old ones and there are some new levels taking place from it. The same thing is happening in bank credit. Put yourself in the position of any bank officer in this city and see what happens in the daily trend of your business. At the end of the day he may find that he has a surplus of reserves on deposit at the Federal Reserve Bank. That surplus is the result of a great variety of transactions in the member banks. The member banks may have made some new loans. I may have loans out. The net results of all these movements may have had some bearing on his reserves. That is going on every day. It goes on both sides of the account. The bank which is short in its reserves willcome here to borrow. In fact, the number of banks that are borrowing from us now is, I think, more than 100. As soon as a bank gets in that position where it has a credit balance at the clearing house, then it has a choice of what to do with that credit balance; then it goes out to seek an investment, and, under the conditions that exist to-day, it seeks the very best and safest investments it can get.

"The banker is a little timid just now and he is willing to debit his competitor for good commercial paper only. The influence of the lending bankers that are out of debt is the influence that will bring the market rate for money down to or below our rate. That process continued indefinitely would, of course, liquidate all of our loans. If the traditional policy of fixing the rates of the Federal Reserve Banks should prevail, I should presume we should always have our rate a little bit above the market rate. Of course, we should always provide for seasonal movements, or crop making, or withdrawals of gold from the United States, or heavy borrowings. This process I describe is what is liquidating the loan accounts in the reserve banks to a great extent. I want to come up to the point of describing, or prognostigating, if you please, a little bit about the future. Before referring to the future, I want to refer to another important influence on our rates and an important rate consideration in the Reserve bank.

"You know that every time the Treasury of the United States puts out a loan and places that loan, as it does, through the reserve banks and the member banks, the first transaction is for the member bank to buy the certificate, to make payment by credit, and then, if they can do so, to sell the certificate to a customer and to the public and make a profit on the deposit. You can see that if the member bank can't sell the certificate of indebtedness they can't make this profit. It is the thing that did the damage in 1918-1920, and the policy of the reserve banks and Treasury Department together should be designed to get the largest amount of money that can be obtained for the Treasury's notes at the lowest rates of interest and at the largest security to the public. You may say that the rate allowed by the Treasury must be sufficiently attractive to the public to enable the public to buy them, but sufficiently unattractive to the banks to make it unwise for the banks to retain them, and have every stimulus existing to sell these certificates to the public just as promptly as possible.

"It has been necessary for the past three years to determine rates between the Treasury and the Reserve banks which will enable the Treasury to successfully float its certificates, and at the same time to relieve the reserve banks and its members of any chance of loss. On the whole it is working now and the certificate issues are almost immediately distributed to the public when they are offered.

"I want to refer a little bit to the future, as to where we might land if all of our loans were paid off and we had a huge bank building and a payroll, and doing all sorts of things for nothing, with a great big expense account and nothing coming in. I do not think that is going to happen right away, however, as we have two billion dollars going to the reserve banks now. Let us assume that the day is coming when the banks of the United States are not going to find it necessary to borrow from usthe way they do. No banks like to borrow money. There is not very much profit to them when they are paying 6 or 7 per cent.

"We deal principally in the Federal Reserve Banks with three kinds of credit instruments. One is commercial paper, another government securities (the government's long loans and certificates of indebtedness) and the third acceptances, which principally are drawn to represent importations of goods from Europe.

"When all the commercial paper gets out and a considerable part of the borrowings on government securities are repaid, we will be able to put our rates down. From personal observations while I was abroad, and a comparison of banking methods generally, unless I am mistaken, through the influence of the Federal Reserve System, we could use this great reservois in financing great commodities throughout the world.

"For the first time in the history of the United States, we are in the position of being a lending nation, instead of a borrowing nation. Europe for years is going to be pressed for capital to rebuild her industries and to re-establish France, and they are going to be burdened with enormous debts, and this country has, in proportion to its wealth, a much smaller public debt than the European nations. It has a great mass of fluid capital, which can be employed, I hope, and for the first time can compete with the commerce of the world in doing a real banking business. I should suppose we now have $500,000,000 or $600,000,000 of bills representing international transactions and commodities. If we had $2,500,000,000 the rate could be changed. I do not think I could do better than read you a paragraph from a very able document that appears on that very matter, a paragraph from the so-called "Cunliffe's Report." It is from a select committee appointed to make a report on foreign exchanges after the war, in London:

(At this point Gov. Strong read the paragraph referred to, beginning with "The adverse condition of the exchanges was due not merely to seasonal fluctuations, but to circumstances pointing to ...." and ending with the sentence: "New enterprises were therefore postponed and the demand for constructive materials and other goods was lessened.")

"The point is this: that the Federal Reserve System, up to date, has been engaged in a purely domestic, local war operation. We have been financing the war for ourselves, to a great extent. You can trace almost the entire borrowings of the Federal reserve bank directly to the war. The time is coming when the American people will gradually repay this debt and the Federal Reserve System will be free of government borrowing and then we have got to take our position in the world, and, unless I am very much mistaken, that will come as the result of converting a very large amount of the paper which we now have in our vault into this paper which old Rothschild described as "salt water paper," because it had crossed the ocean and represented the payment for international goods. But there is one thing that we must bear in mind in connection with this,- and Mr. Snyder has notified me that he has three reservations - in connection with this prognostigation. The reasons for this are these: I put the first reason beyond all others. The general feeling that I have observed throughout various parts of the world is that the English banks are safe banks to do business with. The second great reason is that they have built up the facilities to do the business well, carefully, intelligently and promptly, and the third influence is that London has had a great reservoir of fluid capital to employ in this business. Now our condition at present comprises just those three fundamental influences. We have our integrity, our character, and our ability, just as good as that which is produced in the British Isles or elsewhere. I think, in other words, that the character test can be met by American bankers just as much as by any other bankers. Next we have got, or we should have in the near future, that great surplus, fluid banking capital to employ in this kind of business. One thing we have not got in the machinery. We have not got that great net-work of pipes connecting this reservoir. It takes years to create that. The British bankers have been at it for some generations. We can, however, do it promptly enough to place our reserves at the service of the world, and we have got to try and do it the way the British have done it. We have got to try and establish agencies here of any foreign banks that can come here and also abroad, and to do business in our market and borrow money. A bank would not be worth a dent if it just received money and did not lend it out. We should encourage the lending of money abroad and we should employ any agency we can get here to help us along this line.

"Mr. Snyder, I guaranteed to tire this enthusiastic audience in half an hour. I have no talked for nearly 45 minutes. Have you any points to make in connection with this matter?

Mr. Snyder remarked, in reply: "I am sure that, now that we have the Governor here, we would like to ask him some questions."

Mr. Case was called upon by Mr. Snyder, and remarked; "Why do you pick on me? I do my picking with the Governor down-stairs. I am going to leave him alone for the present. How about picking on Mr. Snyder?"

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(Mr. Snyder)

"How can we become world bankers if we do not make money interest rates? Is not that the great obstacle now to this country becoming world bankers? England's rates are always better than ours. That is the source of their great strength.

(Governor Strong)

"When I was in London I always used to say, with perfect good faith, that I did not think there was very great danger of their losing their business so long as the opportunity for the employment of capital in this country was as great. I really think conditions have changed. I think they have changed because they are going to be put to it for capital for a time. I think so and I guess you think so. Where they are going to lose is in the enormous demand upon them to pay debts, and it is going to tax their reserves to the utmost to pay debts - to pay debts to this country and to pay the interest due this country. They willtake some of our investment money, if we are willing to let them have it, at pretty high rates, and I frankly believe that this Federal Reserve System, by a capable adjustment of rates, will have plenty of reserves to compete with them, to a reasonable degree, in financing at least our own important trade. I have real confidence that, with the resources we have here, we can get our share of any foreign trade we go after."

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(Mr. Snyder)

"How can we get our rates down, so as to meet this competition and still not have another big wave of inflation? Do you see any practical means, considering politics and everything else, of meeting just that thing?"

(Governor Strong)

"What I think I do see, Mr. Snyder, is this: that the development to which I referred is not going to take place over night, nor in a year, nor even five years possibly - nor even a longer period. I would be afraid of it if it did. But I can see gradually creeping into our market here those conditions which would be most conveniently drawn for geographical reasons, because they represent our import trade. Where it becomes a convenience, at a competing rate, to do business in this market, I do not see any prospect of easier money in Europe, do you? Think about that!"

(Mr. Case)

"Well, Governor, London was the world's banking center before the war, and all these bills, import and export bills, were largely financed by London. Isn't it a fact that the world war has upset that to such an extent that she does not seek, at the present time, to do more than to look after her own import and export financing, and is very glad to have diverted to this market any import and export transaction that properly belongs here? She is in no position to continually finance the world's business. She did before the war. We are getting our machinery up to the point where we can compete for it now.

(Governor Strong)

"What happened is this: they took increasing control of all the imports and no one could properly import anything without a license and the great bulk of the imports were for account of British companies. All supplies and all things, in fact, were required for the army and navy, as well as the civic population. Now the British Government paid cash, and the British treasury borrowings took place in advance, in London, of this mass of bills that otherwise would have been drawn to represent the imports of the civic population. The facilities to do business still existed - like the Bank of Shanghai, and so on. The standards of civilization are increasing ~~thm~~ in the east. There is a greater consumption of goods. There is a greater amount of business to go around. We will do still more than we do now through the foreign institutions of the world. Certainly, if it is possible to develop some hundreds of millions of bills at the present time, we will continue to do it in the future."

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(Mr. Morgan)

"Do you think it would be in order to tell us what effect you think the change in the discount rates in this country will have upon the movement of gold? Do you think conditions are sufficiently normal now?"

(Governor Strong)

"Your question is a little bit like the question where the State asked the witness whether he is still beating his wife. I am assuming that the interest rates will decline. We have reduced one of our rates a little bit. I do not believe it is possible to answer that question, Mr. Morgan, except speculatively. -- Turning to Mr. Snyder --) Did you put him up to ask that?" (Laughter)

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(Question)

"Mr. Snyder has possibly lost sight of the fact that we have two facilities. We have a rediscount rate which is offered to various lines of business which do not necessarily have to do with our foreign trade. We have our open market purchase rate. We might keep our rediscount rate up to within a point where it is now and this would enable us to advance the business and still keep in with other lines of domestic business?

(Governor Strong)

"That opens up a field of discussion. It enables me, first, to sidestep Shepard Morgan's questions. I think it is a mistake to assume that a special rate on import bills is going tp be any check to inflation or expansion in this country, because, after all, you can't identify these dollars and insure that they are just below that type of transaction, and, even if you did, it would release other dollars for employment in other directions. The fact is that, according to my theory, what we dispense at the Reserve bank is credit. It is not one kind of credit, because it is exchanged for a commercial bill, or a commercial note, or a banker's acceptance, or a government bond, but it is just credit, and unless you meet that credit through this bank, it does not perform its function, and it does not make any difference whether you get it out with a rake, or a hoe, or a spade, - it does its business just the same. You can get at these reserves of ours with any kind of an instrument you please. By establishing this preferential rate we are able to compete in a certain line of business, it is true.

"Well, Mr. Snyder, I have doubled my promised time and now everybody expects to leave at 5 o'clock, as they have a dance on."

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(Mr. Snyder)

"I am sure we are extremely indebted to the Governor for coming here and let us ask him questions and giving us such an illuminating prospect of this country entering the world war. Our best thanks Governor!"

Meeting Adjourned.

CONFERENCE OF STATISTICS DEPARTMENT

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"We deal principally in the Federal Reserve Banks with three kinds of credit instruments. One is commercial paper, another government securities (the government's long loans and certificates of indebtedness) and the third acceptances, which principally are drawn to represent importations of goods from Europe.

"When all the commercial paper gets out and a considerable part of the borrowings on government securities are repaid, we will be able to put our rates down. From personal observations while I was abroad, and a comparison of banking methods generally, unless I am mistaken, through the influence of the Federal Reserve System, we could use this great reservois in financing great commodities throughout the world.

"For the first time in the history of the United States, we are in the position of being a lending nation, instead of a borrowing nation. Europe for years is going to be pressed for capital to rebuild her industries and to re-establish France, and they are going to be burdened with enormous debts, and this country has, in proportion to its wealth, a much smaller public debt than the European nations. It has a great mass of fluid capital, which can be employed, I hope, and for the first time can compete with the commerce of the world in doing a real banking business. I should suppose we now have $500,000,000 or $600,000,000 of bills representing international transactions and commodities. If we had $2,500,000,000 the rate could be changed. I do not think I could do better than read you a paragraph from a very able document that appears on that very matter, a paragraph from the so-called "Cunliffe's Report." It is from a select committee appointed to make a report on foreign exchanges after the war, in London:

(At this point Gov. Strong read the paragraph referred to, beginning with "The adverse condition of the exchanges was due not merely to seasonal fluctuations, but to circumstances pointing to ...." and ending with the sentence: "New enterprises were therefore postponed and the demand for constructive materials and other goods was lessened.")

"The point is this: that the Federal Reserve System, up to date, has been engaged in a purely domestic, local war operation. We have been financing the war for ourselves, to a great extent. You can trace almost the entire borrowings of the Federal reserve bank directly to the war. The time is coming when the American people will gradually repay this debt and the Federal Reserve System will be free of government borrowing and then we have got to take our position in the world, and, unless I am very much mistaken, that will come as the result of converting a very large amount of the paper which we now have in our vault into this paper which old Rothschild described as "salt water paper," because it had crossed the ocean and represented the payment for international goods. But there is one thing that we must bear in mind in connection with this,- and Mr. Snyder has notified me that he has three reservations - in connection with this prognostigation. The reasons for this are these: I put the first reason beyond all others. The general feeling that I have observed throughout various parts of the world is that the English banks are safe banks to do business with. The second great reason is that they have built up the facilities to do the business well, carefully, intelligently and promptly, and the third influence is that London has had a great reservoir of fluid capital to employ in this business. Now our condition at present comprises just those three fundamental influences. We have our integrity, our character, and our ability, just as good as that which is produced in the British Isles or elsewhere. I think, in other words, that the character test can be met by American bankers just as much as by any other bankers. Next we have got, or we should have in the near future, that great surplus, fluid banking capital to employ in this kind of business. One thing we have not got in the machinery. We have not got that great net-work of pipes connecting this reservoir. It takes years to create that. The British bankers have been at it for some generations. We can, however, do it promptly enough to place our reserves at the service of the world, and we have got to try and do it the way the British have done it. We have got to try and establish agencies here of any foreign banks that can come here and also abroad, and to do business in our market and borrow money. A bank would not be worth a cent if it just received money and did not lend it out. We should encourage the lending of money abroad and we should employ any agency we can get here to help us along this line.

"Mr. Snyder, I guaranteed to tire this enthusiastic audience in half an hour. I have no talked for nearly 45 minutes. Have you any points to make in connection with this matter?

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Mr. Snyder remarked, in reply: "I am sure that, now that we have the Governor here, we would like to ask him some questions."

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Mr. Case was called upon by Mr. Snyder, and remarked; "Why do you pick on me? I do my picking with the Governor down-stairs. I am going to leave him alone for the present. How about picking on Mr. Snyder?"

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(Mr. Snyder)

"How can we become world bankers if we do not make money interest rates? Is not that the great obstacle now to this country becoming world bankers? England's rates are always better than ours. That is the source of their great strength.

(Governor Strong)

"When I was in London I always used to say, with perfect good faith, that I did not think there was very great danger of their losing their business so long as the opportunity for the employment of capital in this country was as great. I really think conditions have changed. I think they have changed because they are going to be put to it for capital for a time. I think so and I guess you think so. Where they are going to lose is in the enormous demand upon them to pay debts, and it is going to tax their reserves to the utmost to pay debts - to pay debts to this country and to pay the interest due this country. They willtake some of our investment money, if we are willing to let them have it, at pretty high rates, and I frankly believe that this Federal Reserve System, by a capable adjustment of rates, will have plenty of reserves to compete with them, to a reasonable degree, in financing at least our own important trade. I have real confidence that, with the resources we have here, we can get our share of any foreign trade we go after."

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(Mr. Snyder)

"How can we get our rates down, so as to meet this competition and still not have another big wave of inflation? Do you see any practical means, considering politics and everything else, of meeting just that thing?"

(Governor Strong)

"What I think I do see, Mr. Snyder, is this: that the development to which I referred is not going to take place over night, nor in a year, nor even five years possibly - nor even a longer period. I would be afraid of it if it did. But I can see gradually creeping into our market here those conditions which would be most conveniently drawn for geographical reasons, because they represent our import trade. Where it becomes a convenience, at a competing rate, to do business in this market, I do not see any prospect of easier money in Europe, do you? Think about that!"

(Mr. Case)

"Well, Governor, London was the world's banking center before the war, and all these bills, import and export bills, were largely financed by London. Isn't it a fact that the world war has upset that to such an extent that she does not seek, at the present time, to do more than to look after her own import and export financing, and is very glad to have diverted to this market any import and export transaction that properly belongs here? She is in no position to continually finance the world's business. She did before the war. We are getting our machinery up to the point where we can compete for it now.

(Governor Strong)

"What happened is this: they took increasing control of all the imports and no one could properly import anything without a license and the great bulk of the imports were for account of British companies. All supplies and all things, in fact, were required for the army and navy, as well as the civic population. Now the British Government paid cash, and the British treasury borrowings took place in advance, in London, of this mass of bills that otherwise would have been drawn to represent the imports of the civic population. The facilities to do business still existed - like the Bank of Shanghai, and so on. The standards of civilization are increasing ~~the~~ in the east. There is a greater consumption of goods. There is a greater amount of business to go around. We will do still more than we do now through the foreign institutions of the world. Certainly, if it is possible to develop some hundreds of millions of bills at the present time, we will continue to do it in the future."

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(Mr. Morgan)

"Do you think it would be in order to tell us what effect you think the change in the discount rates in this country will have upon the movement of gold? Do you think conditions are sufficiently normal now?"

(Governor Strong)

"Your question is a little bit like the question where the State asked the witness whether he is still beating his wife. I am assuming that the interest rates will decline. We have reduced one of our rates a little bit. I do not believe it is possible to answer that question, Mr. Morgan, except speculatively. -- Turning to Mr. Snyder --) Did you put him up to ask that?" (Laughter)

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(Question)

"Mr. Snyder has possibly lost sight of the fact that we have two facilities. We have a rediscount rate which is offered to various lines of business which do not necessarily have to do with our foreign trade. We have our open market purchase rate. We might keep our rediscount rate up to within a point where it is now and this would enable us to advance the business and still keep in with other lines of domestic business?

(Governor Strong)

"That opens up a field of discussion. It enables me, first, to sidestep Shepard Morgan's questions. I think it is a mistake to assume that a special rate on import bills is going tp be any check to inflation or expansion in this country, because, after all, you can't identify these dollars and insure that they are just below that type of transaction, and, even if you did, it would release other dollars for employment in other directions. The fact is that, according to my theory, what we dispense at the Reserve bank is credit. It is not one kind of credit, because it is exchanged for a commercial bill, or a commercial note, or a banker's acceptance, or a government bond, but it is just credit, and unless you meet that credit through this bank, it does not perform its function, and it does not make any difference whether you get it out with a rake, or a hoe, or a spade, - it does its business just the same. You can get at these reserves of ours with any kind of an instrument you please. By establishing this preferential rate we are able to compete in a certain line of business, it is true.

"Well, Mr. Snyder, I have doubled my promised time and now everybody expects to leave at 5 o'clock, as they have a dance on."

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(Mr. Snyder)

"I am sure we are extremely indebted to the Governor for coming here and let us ask him questions and giving us such an illuminating prospect of this country entering the world war. Our best thanks Governor!"

Meeting Adjourned.

Address made July 6, 1922
at luncheon held at Hotel McAlpin
by United Waist League of
America

740
B.S.
X780 W.W.S.[?]
a.

Gentlemen:

I have not lately been making addresses, but when your Chairman, Mr. Mosessohn, invited me to address your Association, I found it quite impossible to decline, principally because during the war I asked him to do a job for us in our War Loan Organization, which he promptly and loyally agreed to do. What he did was very much better done and was of more service to his country than anything that I am able to do for your organization by making this brief address. In a word, he took hold of an important section of the War Loan Organization as its chairman, and sold four times the quota of bonds allotted to that trade.

Saratoga
Wilson

The industry which you represent is, I believe, a section of the largest industry in New York City. Your Chairman has asked me to tell you something of prevailing business conditions and what you may reasonably expect. It would indeed be a serious responsibility for one to undertake to prophesy as to the future to such a body of men as you, who are very much better acquainted with the details of the business which they are conducting than I can possibly be. And it is, in fact, quite contrary to our policy to attempt any such thing. as prophecy

But I am very glad to give you what we consider to be the actual facts both as regards industry in general, and the impression we get of your own industry from the reports that are now given to us regularly by a number of your leading firms.

In doing this I am going to take advantage of the opportunity to tell your Association of the system of business reporting which has been developed by the different Federal reserve banks, and especially our own. Perhaps it may lead to even a larger degree of cooperation from your

Association than we now enjoy.

As to the general industrial situation, you are fairly familiar with the fact that there has been, within the last ten months, a steady and a very marked improvement in most of the industries; and I think that there is good evidence that for the most part this improvement is solid and is a real one. Of course I cannot say how this would apply to each of the industries. Some of them, I have been led to believe, have been in danger of going a little too fast; they may have given a little too large a measure of hopefulness to their orders. So that there have been some setbacks here and there in the last year.

But, speaking of the majority, there is no sort of question that conditions now are very different from what they were, let us say, no more than a year ago. Probably our old friend, pig iron, is still one of the best thermometers, even if it is not a very good barometer of business; and there we find a very rapid recovery from the extreme depression of last year, so that in the iron and steel industry as a whole, production is now about double what it was a year ago, and some of the mills for special products are now almost at the peak of production.

The textile trades, of course, have been disturbed by strikes and latterly by the great rise in the cost of raw materials, but taken as a whole their production has been well up towards normal, and I think the same is true of a number of other industries. We, of course, have had a real building boom in the last year, and are still in the midst of it; and the same is true of the automobile industry, where production in May broke all records.

And we have evidence, moreover, that both wholesale and retail trade in most lines is in healthy condition. About this I can speak quite definitely. You know before we undertook the task of collecting business statistics reports of trade were confined largely to the use of adjectives. Business was said to be good or poor, improving or depressed, adjectives which mean little when the economist attempts to analyze conditions in an industry. The optimist usually said business was fine; the pessimist said business was bad. I believe that Mr. Mosessohn, in his letter to me, said that the garments trades were depressed at the present time. A study of our reports has convinced me that Mr. Mosessohn may have selected the wrong adjective. I do not know just what adjective to use. Therefore, I am going to avoid describing conditions, as we find them, in these abstract phrases.

Bulletin

About twenty of the largest clothing manufacturers in New York City, as well as in Rochester, the other great clothing center in our district, submit each month in confidence to our Statistics Department reports of their sales or shipments. These reports show the dollar value of their shipments, but regretably do not show the number of garments shipped. We have divided these firms into two groups, manufacturers of men's clothing and manufacturers of women's clothing. I believe that you are primarily interested in the women's clothing industry, which I understand is entirely distinct from the men's clothing trade.

Our reports show that the dollar value of May shipments by fourteen manufacturers of women's clothing who report to us each month was 10 per cent. greater than the dollar value of the shipments by the same firms in May, 1921. In April shipments showed a decline of about 12 per cent., as compared with a year ago. The combined value of shipments during April and May, however, was about the same as during the corresponding period last year. There is no doubt that your prices are somewhat lower this year than last, and possibly your profits less; but if we make allowances for these changes in prices we find that more shirt-waists, dresses and suits have been shipped out of

New York this spring than were shipped last spring. That is the reason why I ~~say~~ said that your Chairman, Mr. Mosessohn, may have selected the wrong adjective when he described conditions in the garment trades as "depressed."

Turning for a moment to the men's clothing industry we find that the shipments in April by the seven firms that report to us were 65 per cent. greater than shipments in April last year. This comparison is not strictly fair because, you will recall, the men's clothing industry in this city was in the midst of a labor controversy at this time last year. In May of this year shipments of men's clothing were 16 per cent. greater than the shipments made in May, 1921. These reports convince me that business is now better than it was one year ago and that the tendency is toward further improvement.

It is true that if we go back to the year 1920 we find that there has been a decline of about 25 per cent. in the value of clothing shipments. This, to my mind, has been due to lower prices which now prevail, and indicates a return to sounder and more stable business. I think we will all admit that conditions in the spring of 1920 were abnormal and, in comparing business today with that of two years ago, due allowances must be made for the decline in prices, declines in wages and declines in the ability of the public to spend with the same lavishness that characterized buying in the spring of 1920.

I have much confidence in the accuracy of the figures which the clothing firms submit to us each month, as we have other means of checking these up. In addition to the reports we receive from the wholesale trades we also get confidential reports from the retail department stores. These reports show the dollar value of sales. I believe that we now have 64 of the largest department stores in the Second Federal Reserve District cooperating with us in the collection of this business information. In the year 1921 the total volume of sales by these stores was in the neighborhood of $350,000,000, sufficient to make our figures representative.

Sales by these stores in April were about 2 per cent. greater than were the sales in April, 1921. Some of the merchants told us that this increase in business was caused by the late Easter. This, no doubt, exerted some influence but I do not believe it was an important factor, because we find that in May the stores again reported an increase of 4 per cent. in sales.

Bear in mind that these figures show the dollar sales. Again, when we make allowance for the lower prices which now exist, there is no question that the stores are actually selling a great deal more merchandise this year than they sold last year and this explains what is becoming of the clothing that you manufacturers are constantly shipping to the stores. Sales in May were the largest of any May on record with the exception of May, 1920, when a New York merchant led others in reducing prices by announcing his famous 20 per cent. reduction sale.

In addition to our reports of sales by both wholesale and retail firms, we have at our disposal other data to enable us to check up business conditions in the clothing industry. The Bureau of Labor issues reports which show the consumption of wool and cotton. These figures show that the New England woolen mills are now running at about a normal rate and we are told that many of them are sold up for their entire output for the fall season.

Prices are becoming firmer, indicating a growing manufacturer's demand. Raw cotton is selling at about double what it sold for last year. Raw wool has risen still more. The mills are, I believe, turning out goods with a greater confidence than for some time that a market for their output at a fair and just price is reasonably assured. The wheels of industry are turning, and gradually approaching a nearly normal rate. Reports show that employment is increasing rapidly and the officials in Washington have recently informed the President that the unemployment crisis had passed. Higher prices for farm products have greatly helped the rural population, again making it possible for the farmer to buy the clothing that you manufacture.

Now as to the larger outlook. At hardly any period in the history of our country has the banking situation been on a sounder basis. We now have ample facilities to supply all legitimate demands for credit and those facilities are better organized than in the past. Interest rates are at the lowest point they have reached since 1918. Prices of securities have risen sharply during the past year and all of our Liberty bonds are now selling in the open market at a small premium. Business failures are on the decline.

I do not want to leave the impression that in all business everything is all that can be desired. There are still spots on the industrial horizon which must be cleared up. In most of those industries which have recovered from the extreme depression of the past year or more, the recoveries have been built upon solid foundations and I view the future with reasonable optimism.

I should like to add one more word about our system of business reporting. Some members of your organization probably report your sales to us. Others do not. I want to take this opportunity to thank you for what you are already doing and to ask you to continue to help us in collecting this valuable information. If you are willing to help--and I believe that you will yourselves profit most from this information--I wish that you would write me a letter saying that you will work with us. We shall send you a blank to fill in each month. You may rest assured that the individual reports will be held in confidence. The aggregate figure is published in our Monthly Review of Credit and Business Conditions. If any of you wish to talk over these reports I shall be glad to ask one of the men who has charge of collecting this information to call upon you personally and explain our system in more detail.

This new system I believe has immense possibilities for the future security of trade, and I am sure no organization could find a more vital interest in cooperating with us than yours. By this means, and I think in this alone, will it be possible for you to obtain, both in your own and allied industries, a clear and reliable picture of actual conditions and tendencies. All else is as it has been in the past, mere guess work and crude estimate. When we have this new system fully developed, it will be possible to organize industry to a very high degree, and in a fashion never before possible; to avoid, ~~prevent~~ ~~[illegible]~~ the unintelligent competition which spells ruin and reduce over-production; and by this means, I believe, largely to do away with strikes and widespread unemployment. Probably we shall never quite overcome the tendency to over-enthusiasm which is the root of all waves of expansion, and subsequent depression; but we can go a long way, and here I believe _is_ the way.

I thank you for the privilege of addressing your Association; I wish you a reasonably restrained prosperity, knowing that you and your workers will pay very dearly if you have too much of it, and overdo it. And I bespeak your cordial support of the new methods whose aim is to make business and industry more of a science, and less of a hazard and a gamble, as it has been so strikingly in the last three years.

M Sterling file

Copy on 111.1 Oct 2[illegible] Joint Conference

Federal Reserve Bank District No. 2 FILE ROOM 940 B.S.

WHAT LIGHT DOES THE EXPERIENCE OF THE FEDERAL RESERVE BANKS THROW ON THE VALUE OF DIFFERENT METHODS OF MAKING THEIR CREDIT AND DISCOUNT POLICY EFFECTIVE?

CONCLUSION: The rate of discount of a reserve bank regulates in general how much member banks borrow, and consequently influences increases or decreases in the total volume of bank credit. But in sections where interest rates are high, discount rates may not always prevent overborrowing by member banks and some personal control cannot be avoided.

* * * * * * * * * * * * * *

Economic well-being depends, among other things, upon an even flow of production and consumption of goods which, in turn, depends upon stability of conditions which affect production and consumption. The most important element requiring stability is the price level. Sudden and wide variations in prices tend to disturb production and consumption. Trade becomes risky and speculative.

Of the various causes of price changes, none is so potent as changes in the volume of "money" that is of credit and currency.

Ricardo, over 100 years ago, (expressing it inversely) wrote:

> "All writers on the subject of money have agreed that uniformity in the value of the circulating medium is an object greatly to be desired. Every improvement, therefore, which can promote an approximation of that object, by diminishing the causes of variation, should be adopted ****"

Unavoidable increases in our gold reserves have enlarged the base of our credit structure, and increased our ability to expand credit. Regulation of the volume of credit (which may greatly affect prices) therefore becomes our greatest responsibility. By what methods shall we be guided so as to avoid undesirable inflation and contraction, promote credit and price stability and so serve the entire business community?

Open market investments are not controlled by rates but by "discretion" alone. They cause credit expansion as fully as do loans, and should be governed by system credit policy, rather than by the desire of individual reserve banks to make earnings. Aside therefor from our investments and gold movements, changes in the total volume of credit are now brought about almost exclusively by our loans to member banks. Every increase in our earning assets lays the foundation for a credit pyramid, estimated roughly in the ratio of eleven to one. (See Studies of W. M. Persons, Harvard Review of Economic Statistics, January 1920). Low discount rates which cause borrowing therefore have a cumulative effect upon credit volume and may in turn affect prices, even though the ratio of eleven to one may not be reached. The obverse is equally true. High discount rates which cause repayments to reserve banks will, in turn, influence liquidation of bank loans and deposits and retirement of currency by the banking system as a whole in somewhat the same ratio, and likewise affect prices:

Member banks borrow from their reserve banks to restore reserves which become deficient from a variety of closely related causes. The four principal causes are

(a) Withdrawals of deposits which reduce reserve balances.

(b) Necessary loans to customers which expand deposits and increase required reserves.

(c) Currency requirements. (Caused by general conditions and not by specific transactions of individual member banks.)

These three types of borrowings are forced upon member banks and may be termed involuntary.

(d) A fourth cause of impairment arises when member banks are induced by a low discount rate to borrow for profit.

Therefor the question: Can rates be fixed so as fairly to serve business requirements, furnish needed seasonal and other credit expansion, and still prevent such inflation as might disturb prices and business?

In cities in the second district prevailing rates are not over 4 1/2 per cent. and in the country 6 per cent. or less. There is no inducement for our city banks and little for the country banks to borrow at 4 per cent., except temporarily pending repayment of loans or sale of investment. But in districts where country banks charge as high as 12 per cent. or more, a 4 1/2 per cent. discount rate would be ineffective as to those banks, notwithstanding that it might adequately regulate borrowings by city banks of those same districts.

To illustrate: If prevailing interest rates are not over 5 per cent. in the cities and city member banks hold one half of all member banks resources, a 4 1/2 per cent. rate would probably control their borrowings. A 6 per cent. discount rate would then control borrowings by banks holding three quarters of member bank resources if but one half of the remainder were realizing not over 6 per cent. but no feasible discount rate would of itself control borrowings by the remaining 25 per cent. which charge much higher rates.

How, therefore, shall borrowings by such banks be regulated? There is no feasible method to require such banks to pay higher rates just because they are charging high rates, and one must conclude that "discretion" must supplement the rate.

Difficulties are unavoidable in determining when regulation by rate alone is effective, when it must be supplemented by "discretion," and finally when a given rate and "discretion" combined are ineffective and a rate change becomes necessary.

But the dangers arising from too great reliance upon "discretion" in granting discounts are too important to disregard. They may be briefly summarized as follows:

Intelligent "discretion" requires sufficient knowledge of the details of the member bank's business to definitely decide in each case whether borrowing is justified or not. Credit borrowed from a reserve bank goes into the members common fund. Its particular use cannot be identified. It simply restores reserves impaired by many transactions. Loans made and paid, investments purchased and sold, foreign exchange dealings, deposits received and withdrawn cause a surplus or deficiency. If a surplus, the member bank pays off loans. If a deficiency, it borrows.

"Discretion" in declining to loan would imply knowledge of all these transactions. It must be an ex post facto review, otherwise the member bank must restore reserves by calling loans or selling investments. Only interviews with bank officers can develop knowledge of all the business that caused the deficiency of reserve.

Such "discretion" extended to all member banks would necessitate passing upon every loan and investment of every member, causing annoyance, criticism of the system, and possibly radical legislation. Is human wisdom capable of such a task?

Such "discretion" when required should be exercised more as to the total borrowings of a member, in relation oto its resources, condition and the general character of its business, rather than as to any specific use of the proceeds. How could the officers of reserve banks pass upon the need for loans by members, so remote that reply to inquiry by correspondence would take ten days?

The tendency to create government agencies to supervise business is increasing. These Commissions and Boards exercise a great variety of statutory powers, often futile. Each is subject to the human weakness that once given power men seek to enlarge their powers. Reserve banks are no exception.

The writer believes that "discretionary" control over borrowings by members, except to a limited extent when rate control is ineffective, will develop the desire to exercise still greater power, and that the Reserve System, instead of being a democratic smoothly-working cooperative organization, regulating the volume and flow of credit and currency principally by adjusting its rates as conditions and public welfare require, might become a financial bureaucracy vainly attempting to dominate the banking system by methods which are obnoxious to every instinct of the American people. In special cases and districts personal "discretion" will be inescapable, but its employment should be resisted and moderately used. The effective method of regulation demonstrated by long experience abroad is by the discount rate. The rate will be effective with the great mass of banking resources and only limited and judicious use of "discretion" will be needed, and then only in those sections where general interest rates are high.

September 25, 1922. B. S.

Skeleton outline of an informal address made by Gov. Strong on his visit to Oneonta, New York, as guest of our director Mr Smith on July 27th to 30th incl. 1922

F. E. Beyer

B.S

Mr. Smith as director.
Invitation –
Story of F. R. Bank
Long Story, Saratoga farmer.
Exaggerate – obscure reasons
Very simple –
Length of Act. Japan –
12 banks & districts –
Privately owned & operated –
Co-operative – supervision –
Cannot force banks to loan,
nor prevent.
Significance explained by
functions –
Policy as to each.
Comes down to rate.
~~Quantity theory – Equation –~~
~~Character of money~~
~~Speed of circulation~~

2.

Reserves -

Protection to banks -

No other depositors save U.S. & foreign agents.

40% of worlds gold. $3.000.000.000

Engine of vast power

Frankenstein, possible speculation

Reserve system, English & Amer. contracted -

Something like 7000 tons -

German - Hoover gold -

3. Loans.

10.000. members. 21.000. next –

Compare loans & seed imports.

Elasticity, how expansion works.

Currency peak. 3½ billion now 2¼ billion

Loan Capacity 6 to 7 billion

Extent not seen at time.

Contraction caused no bank & currency

panic. Failures not excessive

Recovery unparalleled.

Credit conditions sound –

No need for relapse –

Earnings

Loans –

1920.

180.000 transactions with members –

Total over 20. billions
$

Maximum 1.100.000.000 –

4. Currency -

Credit expressed in deposits
or notes

We cut up bank deposits

How & Why -

Town depositor calls for currency
or draws checks -

If currency we must supply -

If check, we must collect

How comes collections, or
par system, should
be called domestic exchanges.

Currency —

Daily av. Oct. 1921. 180 million —

1920. Handled & Counted over 500 million

pieces = 2 1/4 billion —

200 to 500 daily shipments —

Domestic Exchanges -
Different & puzzling matter -
England, France, Germany -
Burden laid upon us by Congress -
Reasons are -
Economy -
Security -
Prompt returns -
Reduce float - but especially
Regulate flow of Credits -

How this is done by

Time schedule -
Immediate return -
Short routing.
Local clearings
Daily wire settlement -
Huge flow must be regulated -
Confusion if not -
Especially import to U.S.
in fiscal agency matters

Domestic Exchanges -
15.000 miles Telegraph lines -
Some thousands Phone lines -
954 wires daily this year -
65.000.000 " payments by wire -
over 500 messages -
— 1920 —
87 million checks 1920 55 billion over
one billion a week.
half million notes & drafts = two billion
150 000 wire trans = 17 billion

6. Fiscal Agents.

Provision of act Sect. -

Coin business -

Currency redemptions -

Checks we pay -

Loans & transfers -

What would otherwise happen -

Purch & Sale of Secys -

Relation of our rate to Treas. borrowing -

Fiscal Agents -

Secys issued by U.S. $ 22. billion -

" handled daily 1921. $ 1.940.000.000

U.S. Cks paid 1920. 10 million = 2 1/2 billion

48 million pieces of bonds. 1920 = 7 billion

100 billion value handled in 1920 for U.S. banks & members.

$ 1.400 m purch in MKT 1921 -

Coin handled - 11 to max. 17 tons daily

7. Open Market —

Bankers bills

Govt Secys —

Relation to rates & market —

Open market –
acceptances only –
106000 items
total 2 1/2 billions

Foreign a/cs -
Later Service -
Goes shipments -
Rate Effective then -

Conclusion

Character of management

9. Rates -

How they are fixed -

Caution to safeguard -

Difficulty between districts -

Varying rates within district -

Bearing upon

Reserves - % not bulk.

Loans -

Currency -

Domestic Exchanges -

Fiscal agents -

Open Market. -

Foreign a/cs -

Quantity Theory. Equation -

Speed of circulation -

Effective demand -

Prices

ADDRESS DELIVERED BY BENJ. STRONG
AT LUNCHEON
GIVEN BY COMMITTEE OF ONE HUNDRED
TO EXECUTIVE COUNCIL, AMERICAN BANKERS ASSOCIATION
on Tuesday, October 3, 1922
at Waldorf Astoria

When my old friend Mr. Prosser invited me to address this meeting, he was good enough to suggest that it would be appropriate for me to say something about present day conditions as they affect bankers. As almost anything and everything affects the banker and his business, I was reminded of the plight of the farmer in Saratoga County, who entered a long-legged mare he owned in one of the crack horse races. The mare had done pretty well for him at some Country Fair meets, but at Saratoga she came in a bad last. When his wife asked him why the mare had not won the race, he said it was because the course was too long and the time was too short. My feelings about such a discussion as was suggested by Mr. Prosser are very similar to what the mare's must have been.

Since the outbreak of the war, writers and speakers upon public questions, have set forth to us various reasons why we might expect a breakdown of the world's economic machinery, of what calamities - social, political and economic - were about to overtake the world, and in some cases just about when this was all to happen. It suggests a remark which I heard Mr. Morrow make upon his return from a trip to Europe during the war, in reply to questions as to when the war would end - I think he said very definitely that it would end at 4:45 on the afternoon of February 13, 1919. If we must prophesy, let's do it accurately and thoroughly - and take all the risks assumed by prophets. But it is safer not to prophesy at all. I do, however, wish to say a few words about some things as they are, or at least as they appear to me, and to ask you to think about them.

While gloomy and ominous views as to currencies, debts, foreign exchange, Bolshevism, government insolvencies, and like affairs are absorbing people's attention, let me remind you of the most important thing that appears to be taking place. We sometimes forget it.

The earth is still growing crops - the soil is still fertile - the sun shines on it - the rains fall upon it - and the crops are grown and harvested and feed people. The mines still furnish us with coal and metals. The forests still grow, and the oceans and rivers still give up their annual catch of fish. A small section of the world has been injured and a small fraction of Europe has been devastated by the war, considerable property has been destroyed, and millions of young men have been killed and maimed. It was a calamity of awful moment, but sad as is the plight of the sufferers, the old world still goes on producing. And how small the destruction when compared to the whole of the great earth, and its capacity to continue giving us all that we need if we are willing to work to get it. It is I believe a fact that since the Armistice was signed in 1918, standards of living in the world at large have gradually shown a net improvement and especially so in most parts of middle Europe; the ships of commerce still traverse the seven seas - means of transportation and communication in most parts of the world are as abundantly supplied as ever - the world's institutions of learning are crowded with students - science seems to have suffered no check in its development - and yet we know that something is wrong. Surely nature remains the same and retains her capacity to reward us for our labor.

I am tempted to quote from the 100 year old hymn that "every prospect pleases and only man is vile" because unless I am wholly mistaken - and I believe I am not - if there is nothing fatally wrong with nature and with the material things of this world, then the trouble must be with some of the workers and possibly with the instruments, especially what I shall call the systems of bookkeeping, which they employ.

The point that I wish to make can be illustrated in a crude way by describing another very simple fact: we think of wealth in terms of money, which is simply a representative word, enabling us to express measurement, and we think of our own country in terms of dollars as the one enjoying the greatest national wealth. Three or four hundred years ago our country had greater resources in the soil, in mineral and oil deposits, in the forests and rivers, than exist to-day because some of those resources have since been consumed, and yet three hundred years ago many of the few million Indians living in the midst of this abundance starved every winter for lack of food. Natural resources alone, therefore, do not make wealth. On the other hand, there are nations in the East with populatinns in numbers and density far exceeding our own, where poverty, famine and starvation have existed in recent years in appalling proportions. What does this all mean? To me it means that natural resources alone are not wealth; that population alone is not wealth. Wealth, then, must be what the earth delivers in response to the work - the energy - of hard working people, applied to nature with useful instruments to aid their toil. It is the practice of thrift the capacity for invention that makes wealth. The damage to the world's economic welfare and the consequent impairment of morale is due not alone to a war of four years duration, but to forty years or more of preparation for war, in which too many of the world's workers were engaged in building up military machines. Their principal product was heavier taxes. It was misdirected energy in which millions of men were only consumers and not equivalent producers. And this process of arming for conflict had its natural and usual outcome in the conflict itself, which completed in a dramatic and tragic way the work of destruction which had been going on for many years in a less obvious way. This destruction, not of physical proper alone - which has been comparatively slight - but of morale - of the spirit of energy and enterprise - cannot be wholly restored until the conditions are suitable to inspire it.

But looking at the situation more strictly with regard to material progress, there seems to be much from which todraw encouragement. We know, for instance, that the world is producing an increasing su pply of food stuffs; that the requirement for emergency feeding in various parts of the world has almost disappeared; and that the distribution of food supplies and other essentials of life, is becoming more effective. Even with respect to Germany, we may gain some idea of the material progress which is being made by quoting from recent reports. Take for example German imports. Figures published this month in the London Economist show increases from 1,500,000 metric tons in May, 1921, in an almost steady ratio, until they reached 4,800,000 tons in July of this year. I have been told within the last few days that unemployment in Germany is now estimated at 100,000 men, although considerable sections of industry are still working on part time. A dispatch from Berlin dated September 11th, states the ship movement in and out of the Port of Hamburg for the first seven months of this year to be 14 1/2 million net tons, compared with 9 million tons in the corresponding period last year, 4 millions tons in 1920, and less than 1 1/2 million tons in 1919. The improvement in shipping in the Port of Bremen is reported to be equally striking. Reports of exports also indicate improvement. Measured by weight - as values in marks are meaningless - they averaged in the last five months of 1921, a million and three quarter metric tons a month against two million a month in the first seven months of 1922. Figures of similar import can be reported for other countries. Do not understand me to imply that the recovery has been fully to pre-war conditions, nor in fact to such standards as are essential to the well being of Europe. But it has been both striking and encouraging. These and similar reports do emphasize, however, that the materialwell being of the world, which can be judged in part by the quantity of goods produced and consumed, has been improving despite the deplorable impairment of the instruments which we have heretofore considered almost essential to the successful conduct of modern industry and commerce.

What the world needs today is a reconstruction of economic machinery so that there may be a more effective application of the energy of workers to the production and distribution of the things that we need, and such a reorganization as will insure that what is produced is fairly distributed among the workers in return for the work done by each.

Bank notes, bank deposits, credit, foreign exchange - all of these things are simply man devised bookkeeping instruments with which the transactions and accounts of trade are conducted, just as government loans and taxes are the instruments with which the financial business of governments are conducted. Fluctuations in the value of purchasing power of these instruments means uncertainty as to the value of everything, including the labor of working men, but still worse, injustice to one or another class of people, and consequently dissatisfaction and discontent. You have observed how quite inevitably discussion centers upon just such matters as government debts, taxes, currencies and exchange, but the restoration of depreciated currencies, the return of foreign exchanges to par, the resumption of gold payment, even the cancellation of government debts, the reduction of taxes, and the balancing of budgets in consequence, will not of themselves alone increase production one iota, any more than the creation of these enormous debts and the printing of the currency increased production. Only work will do that. But the object to be accomplished by a reorganization of these bookkeeping affairs is nevertheless of prime importance. It will help to repair shattered morale, increase the incentive to work, to produce and to save, and replace discouragement with hope. It will lessen causes for dissatisfaction and social unrest, and dispel the feeling that injustice is being suffered. Without improved morale, increase of production and distribution will be slow, people will not work hopefully and efficiently for inadequate or uncertain return, and the standard of living, which means not only food and clothing, but education and healthy enjoyment, may indeed decline.

A great variety of proposals have been advanced for dealing with these matters, especially depreciated currencies and foreign exchanges.

Possibly a word of doubt is justified as to some of these plans, but I shall only refer to those relating to the foreign exchanges. They all present one similar characteristic, which is that some new kind of currency or instruments of payment shall be created through the agency of a new organization with a vast capital and gold reserve; that these new instruments shall be employed for international payments and be issued against credits extended by the organization, and that theyshall be maintained at gold par. Any such currency, issued against credits extended to Europe, could be stable in value and equivalent togold only so long as it was promptly redeemed in gold. It would, in fact, be subject to the same influences which now influence any gold movement. In other words, it would immediately come to this country. There would be nothing for us to do with it except to redeem it. Such currency could not make our foreign payments any better than present instruments of payment, nor could it be exported any more than gold can be exported under present conditions. Once here it would stay here. The gold reserve would promptly be shipped to this country just as other gold now comes to this country. If, on the other hand, it was not redeemed in gold, then it would depreciate just as any other irredeemable currency depreciates and its value as a stable international medium would disappear. Such an organization could do no more than our existing credit organization is now doing in extending credit to Europe and in maintaining an international gold currency, so long as the currency depreciation continues in Europe and gold payment is suspended.

In fact, no one of the plans that I have seen is capable of success until governments live within their incomes and until the amount of taxes required to enable governments to live within their incomes is within the capacity of those upon whom the taxes are levied to pay them. The penalty of an unbalanced budget is a depreciated currency, and a depreciated exchange. The penalty of excessive taxation is to retard enterprise and production. We here see the vicious circle of currency depreciation and declining revenues, increasing expenses and taxes and arrested or reduced production, which means a reduced capacity to pay taxes. So soon as public opinion enables or requires governments to reduce expenditures to the point where bearable taxes will cover them, then further issues of currency will cease, and not until then.

Fluctuating currency and exchange values render trade speculative and hazardous. They retard the development of our trade with the rest of the world and theirs with us. How may the American bankers assist in European recovery, and by so doing how may we assist ourselves? I believe that no one questions the generosity of the American people, nor doubts their desire to help. It is upon such matters as this that we can reflect with some profit.

The emergency of the war created conditions which resulted in our receiving about a billion dollars of the world's monetary gold prior to our entering the war, and onbalance over half a billion more since the war ended. Our gold stock is still being increased by importations. The warring nations, which suspended gold payment, resorted to printing paper money and suffered currency depreciation. We, on the other hand, with this great store of gold, have had thrust upon us the capacity to expand our credit and currency upon a gold basis just as a large part of Europe expanded its currency issues without adequate gold basis. If permitted to do so this gold is capable of bringing about a dangerous enlargement of credit in this country with consequences which might be more disturbing to our economic welfare than if we had never received the gold. We should, I believe, regard our excess of gold as a sacred trust. Of course, we shall employ it as the basis for the extension of all the credit that is required for the sound development of our domestic and foreign commerce. But it must not be permitted to encourage or sustain the kind ofspeculation which adds nothing to our wealth, our welfare or our happiness, which would in fact only raise prices, and which would eventually undermine our prosperity. It is so ample and more than ample for all of our legitimate requirements that we need feel no misgivings as to the solidity of our credit structure no matter what emergency may arise.

Now our bankers can probably do little to influence the policies of foreign governments and finance ministers. I do not believe that we can just now successfully aid with schemes for issuing new currencies, or for stabilizingthe exchanges until the fundamental conditions which I have mentioned justify that kind of help; but we can at least maintain ourselves in condition so that we may render effective aid when conditions warrant our doing so and in the meantime preserve our own economic strength unimpaired.

It is, however, my confident belief that gradual improvement is taking place in the material conditions under whicih people are living abroad, notwithstanding what you may regard as evidence to the contrary. This affords ground for steadily increasing hope that European governments will be able to deal successfully with the bookkeeping problems to which I have referred. More regular employment and more comfort for the working man, gradual enlargement of the business turnover, the subsidence of political uneasiness and distrust, a better public understanding of the problem of debts, taxation and currencies, and the adjustment of men's minds and habits to new conditions of life for which the human race seems to enjoy an unexpected capacity, all lead me tobelieve that while still obscure, the foundations of public opinion upon which the work of repair must rest, are gradually being laid.

If all this be true, then indeed the day may come when American bankers can safely and profitably enter into undertakings which in fact we alone of all the nations have the strength to make. We can furnish assistance for currency and banking reestablishment in Europe, we can invest in their enterprises and aid in their refunding, not alone by lending them credit - but by later returning the gold which will be essential to enable them to help themselves.

But of paramount importance in restoring the confidence of people in their governments, in their financial systems, in credit, in the purchasing power of currencies and in all of those things which afford us security in the value of our labor, of what we produce, and of what we save, is the assurance we must have that we have seen the end of devastating wars.

ADDRESS

delivered by Benj. Strong

at

LUNCHEON

given by Committee of One Hundred

to

Executive Council, American Bankers Association

on

Tuesday, October 3, 1922

WALDORF-ASTORIA

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I am tempted to quote from the 100 year old hymn that "every prospect pleases and only man is vile" because unless I am wholly mistaken - and I believe I am not - if there is nothing fatally wrong with nature and with the material things of this world, then the trouble must be with some of the workers and possibly with the instruments, especially what I shall call the systems of bookkeeping, which they employ.

The point that I wish to make can be illustrated in a crude way by describing another very simple fact: We think of wealth in terms of money, which is simply a representative word, enabling us to express measurement, and we think of our own country in terms of dollars as the one enjoying the greatest national wealth. Three or four hundred years ago our country had greater resources in the soil, in mineral and oil deposits, in the forests and rivers, than exist to-day, because some of those resources have since been consumed, and yet three hundred years ago many of the few million Indians living in the midst of this abundance starved every winter for lack of food. Natural resources alone, therefore, do not make wealth.

On the other hand, there are nations in the East with populations in numbers and density far exceeding our own, where poverty, famine and starvation have existed in recent years in appalling proportions. What does this all mean? To me it means that natural resources alone are not wealth; that population alone is not wealth. Wealth, then, must be what the earth delivers in response to the work - the energy - of hard working people, applied to nature with useful instruments to aid their toil. It is the practice of thrift the capacity for invention that makes wealth. The damage to the world's economic welfare and the consequent impairment of morale is due not alone to a war of four years duration, but to forty years or more of preparation for war, in which too many of the world's workers were engaged in building up military machines. Their principal product was heavier taxes. It was misdirected energy in which millions of men were only consumers and not equivalent producers. And this process of arming for conflict had its natural and usual outcome in the conflict itself, which completed in a dramatic and tragic way the work of destruction which had been going on for many years in a less obvious way. This destruction, not of physical property alone - which has been comparatively slight - but of morale - of the spirit of energy and enterprise - cannot be wholly restored until the conditions are suitable to inspire it.

But looking at the situation more strictly with regard to material progress, there seems to be much from which to draw encouragement. We know, for instance, that the world is producing an increasing supply of food stuffs; that the requirement for emergency feeding in various parts of the world has almost disappeared; and that the distribution of food supplies and other essentials of life, is becoming more effective. Even with respect to Germany, we may gain some idea of the material progress which is being made by quoting from recent reports. Take for example German imports. Figures published this month in the London Economist show increases from 1,500,000 metric tons in May, 1921, in an almost steady ratio, until they reached 4,800,000 tons in July of this year. I have been told within the last few days that unemployment in Germany is now estimated at 100,000 men, although considerable sections of industry are still working on part time. A dispatch from Berlin dated September 11th, states the ship movement in and out of the Port of Hamburg for the first seven months of this year to be 14 1/2 million net tons, compared with 9 million tons in the corresponding period last year, 4 millions tons in 1920, and less than 1 1/2 million tons in 1919. The improvement in shipping in the Port of Bremen is reported to be equally striking. Reports of exports also indicate improvement. Measured by weight - as values in marks are meaningless - they averaged in the last five months of 1921, a million and three quarter metric tons a month against two million a month in the first seven months of 1922. Figures of similar import can be reported for other countries. Do not understand me to imply that the recovery has been fully to pre-war conditions, nor in fact to such standards as are essential to the well being of Europe. But it has been both striking and encouraging. These and similar reports do emphasize, however, that the material well being of the world, which can be judged in part by the quantity of goods produced and consumed, has been improving despite the deplorable impairment of the instruments which we have heretofore considered almost essential to the successful conduct of modern industry and commerce.

What the world needs to-day is a reconstruction of economic machinery so that there may be a more effective application of the energy of workers to the production and distribution of the things that we need, and such a reorganization as will insure that what is produced is fairly distributed among the workers in return for the work done by each.

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You have observed how quite inevitably discussion centers upon just such matters as government debts, taxes, currencies and exchange, but the restoration of depreciated currencies, the return of foreign exchanges to par, the resumption of gold payment, even the cancellation of government debts, the reduction of taxes, and the balancing of budgets in consequence, will not of themselves alone increase production one iota, any more than the creation of these enormous debts and the printing of the currency increased production. Only work will do that. But the object to be accomplished by a reorganization of these bookkeeping affairs is nevertheless of prime importance. It will help to repair shattered morale, increase the incentive to work, to produce and to save, and replace discouragement with hope. It will lessen causes for dissatisfaction and social unrest, and dispel the feeling that injustice is being suffered. Without improved morale, increase of production and distribution will be slow, people will not work hopefully and efficiently for inadequate or uncertain return, and the standard of living, which means not only food and clothing, but education and healthy enjoyment, may indeed decline.

A great variety of proposals have been advanced for dealing with these matters, especially depreciated currencies and foreign exchanges.

Possibly a word of doubt is justified as to some of these plans, but I shall only refer to those relating to the foreign exchanges. They all present one similar characteristic, which is that some new kind of currency or instruments of payment shall be created through the agency of a new organization with a vast capital and gold reserve; that these new instruments shall be employed for international payments and be issued against credits extended by the organization, and that they shall be maintained at gold par. Any such currency, issued against credits extended to Europe, could be stable in value and equivalent to gold only so long as it was promptly redeemed in gold. It would, in fact, be subject to the same influences which now influence any gold movement. In other words, it would immediately come to this country. There would be nothing for us to do with it except to redeem it. Such currency could not make our foreign payments any better than present instruments of payment, nor could it be exported any more than gold can be exported under present conditions. Once here it would stay here. The gold reserve would promptly be shipped to this country just as other gold now comes to this country. If, on the other hand, it was not redeemed in gold, then it would depreciate just as any other irredeemable currency depreciates and its value as a stable international medium would disappear. Such an organization could do no more than our existing credit organization is now doing in extending credit to Europe and in maintaining an international gold currency, so long as the currency depreciation continues in Europe and gold payment is suspended.

In fact, no one of the plans that I have seen is capable of success until governments live within their incomes and until the amount of taxes required to enable governments to live within their incomes is within the capacity of those upon whom the taxes are levied to pay them. The penalty of an unbalanced budget is a depreciated currency, and a depreciated exchange. The penalty of excessive taxation is to retard enterprise and production. We here see the vicious circle of currency depreciation and declining revenues, increasing expenses and taxes and arrested or reduced production, which means a reduced capacity to pay taxes. So soon as public opinion enables or requires governments to reduce expenditures to the point where bearable taxes will cover them, then further issues of currency will cease, and not until then.

Fluctuating currency and exchange values render trade speculative and hazardous. They retard the development of our trade with the rest of the world and theirs with us. How may the American bankers assist in European recovery, and by so doing how may we assist ourselves? I believe that no one questions the generosity of the American people, nor doubts their desire to help. It is upon such matters as this that we can reflect with some profit.

The emergency of the war created conditions which resulted in our receiving about a billion dollars of the world's monetary gold prior to our entering the war, and on balance over half a ~~million~~ billion more since the war ended. Our gold stock is still being increased by importations. The warring nations, which suspended gold payment, resorted to printing paper money and suffered currency depreciation. We, on the other hand, with this great store of gold, have had thrust upon us the capacity to expand our credit and currency upon a gold basis just as a large part of Europe expanded its currency issues without adequate gold basis. If permitted to do so this gold is capable of bringing about a dangerous enlargement of credit in this country with consequences which might be more disturbing to our economic welfare than if we had never received the gold. We should, I believe, regard our excess of gold as a sacred trust. Of course, we shall employ it as the basis for the extension of all the credit that is required for the sound development of our domestic and foreign commerce. But it must not be permitted to encourage or sustain the kind of speculation which adds nothing to our wealth, our welfare or our happiness, which would in fact only raise prices, and which would eventually undermine our prosperity. It is so ample and more than ample for all of our legitimate requirements that we need feel no misgivings as to the solidity of our credit structure no matter what emergency may arise.

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It is, however, my confident belief that gradual improvement is taking place in the material conditions under which people are living abroad, notwithstanding what you may regard as evidence to the contrary. This affords ground for steadily increasing hope that European governments will be able to deal successfully with the bookkeeping problems to which I have referred. More regular employment and more comfort for the working man, gradual enlargement of the business turnover, the subsidence of political uneasiness and distrust, a better public understanding of the problems of debts, taxation and currencies, and the adjustment of men's minds and habits to new conditions of life for which the human race seems to enjoy an unexpected capacity, all lead me to believe that while still obscure, the foundations of public opinion upon which the work of repair must rest, are gradually being laid.

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But of paramount importance in restoring the confidence of people in their governments, in their financial systems, in credit, in the purchasing power of currencies and in all of those things which afford us security in the value of our labor, of what we produce, and of what we save, is the assurance we must have that we have seen the end of devastating wars.

Address delivered Nov. 16, 1922 before Rensselaer County Bankers, at dinner at Troy, New York.

740A
B.S.
x 780 Rensselaer Co. Bankers

The opportunity for bankers to become more intimately acquainted with the detailed operations of the reserve banks have multiplied recently to such an extent that any discussion of what they do and why they do it has become almost unnecessary. The literature both from within and without ~~in regard to~~ the System has recently been most illuminating as to the principles which have governed the managers of the ~~System~~ Organization and as to the policies they have adopted, and the reasons for doing so. It seems to me, however, that there is still one aspect of the Federal Reserve System which has not been very fully discussed or even inquired into, - and that is - very broadly expressed - the position which it has come to occupy as a part of that complicated organization which we may describe as the country's economic machine.

All bankers know that we act as the government's fiscal agents and about what we do in that capacity. They know that we discount eligible paper - issue the principal currency of the country - hold the reserves of the member banks - collect checks - and effect the great bulk of the domestic transfers, commonly called exchange payments, between different sections of the country. Beyond this the reserve banks perform a great variety of collateral and subordinate service for the government, the member banks and the public.

With most of these things you are familiar. You may not, however, have given thought - as we are now required to do - to ~~this~~ Some of the broader aspects of the Federal Reserve System in its relation to the economic welfare of the country as a whole. In a general way it can be stated that the most important function performed by the Federal Reserve Banks in an economic sense is that of regulating the volume of "money" ~~credit~~ - and I use the word "money ~~credit~~" in its broad sense, meaning all types of credit instruments which perform the function of money, including bank deposits upon which checks are drawn.

Permit me, therefore, to introduce a discussion of the Federal Reserve System along these lines by a few words of a theoretical character in regard to money.

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For many years now economists have accepted as a general principle that the quantity of "money" ~~in existence~~ has a direct relation to the prices of everything - that is, of the things that we buy and sell, including the wages of labor, ~~and~~ the salary of clerks, rents etc - There are, of course, many reservations and many modifications which apply to this theory; for instance, the function performed by money in its relation to prices may be either static or dynamic according to the state of mind of the people. If all of the people of the country because of fright, distrust, political disturbance, or for one or another reason, quit buying goods, prices for a time might even decline in the face of an increasing volume of money, although the chances are that under a well regulated banking system such a state of mind would result in a very prompt reduction in the amount of money in circulation. In other words, it would bring about a period of liquidation when ~~loans and~~ bank deposits & currency would be applied to paying off loans, so that deposits and loans would be reduced and ~~offset against each other and~~ and currency ~~in circulation~~ would be retired. On the other hand, without any increase in the quantity of money, an optimistic outlook and a speculative state of mind might result in very considerable advances in prices without any increase in the quantity of money giving rise to it at all. When that happens, however, the quantity or efficiency of money must increase or prices advances will usually be arrested. These illustrations ~~relate to~~ must allow for that reservation in regard to the absolute or narrow quantity theory which economists refer to as velocity of circulation of money.

(Illustrate by the beer story)

~~Then again~~ The conditions which may arise where in fact a given quantity of money may be made to work more efficiently ~~to~~ and perform a greater service, in an economic sense, than it had formerly performed, and ~~this again may~~ so give rise to or ~~may be the~~ result ~~of~~ from advancing prices, ~~and such a condition~~ is exhibited in ~~fact by~~ the change in our banking loans since the establishment of the Reserve System, which has in effect reduced reserve requirements and permitted a similar amount of gold to support a larger total of deposits, currency and loans. I am reviewing these very obvious economic principles in order to sum them up in a rather hypothetical statement which will illustrate somewhat the new economic aspect of the country's affairs resulting from the organization of the reserve banks, ~~and~~ This brief hypothetical statement ~~which is of course hypothetical~~ may do so.

If a given quantity of goods that is being produced, sold and consumed requires the employment of a given amount of money and bank credit, then in the long run we may say - for purpose of illustration - that the quantity of goods multiplied by the price of those goods would give a figure which would be representative of the amount of credit and money required to conduct that volume of business at that price level. Of course, there are an infinite number of modifying factors to be taken into account, so I am stating this equation only hypothetically in its barest terms. But upon this principle you will observe that if the quantity of goods is being much increased it will soon ~~automatically~~ require an increase in the amount of money and credit required to produce & distribute ~~carry~~ them. On the other hand, with the same quantity of goods, if the price is much increased necessarily an increase in the amount of money and credit will again be required. But there is still a third possibility and that is that there might be an increase in the quantity of money and credit without any change in the quantity of goods, in which event the result would be simply an increase in price. Now please bear in mind that my Equation is ~~simply~~ for purposes of illustration, I am leaving out of account in this equation many subordinate but nevertheless important factors, such as the psychology of the people, the velocity of circulation, increases or decreases in the efficiency with which money and credit are employed.

¶ You will at once observe, therefore, that Congress has created a great organization known as the Federal Reserve System, which has in its power the actual creation, of an ~~that is, the~~ increase ~~of~~ in the volume of money and credit, ~~and~~ but it has likewise the power somewhat to restrain that increase in money and credit within certain limitations. This to my mind is ~~a very~~ the great Est ~~and grave~~ responsibility and a very grave one, touching upon ~~and~~ our reserve System, and creates a situation so different from any which has existed in our country for the last 80 or 90 years that I shall hope to interest you by elaborating upon it somewhat. Before doing so, I must digress to the extent of pointing out wherein lies the difference between real progress in our economic welfare - which in a broad sense means ~~a better~~ improved standards of living, which in turn means more and better food and clothes and shelter, steady work, higher standards of education, more healthy enjoyment for all the people. The establishment of higher standards of living, which is the basis of all economic effort and strife is brought about by ~~an~~ increased production and consumption of things that are necessary ~~to~~ forward which promote the welfare, ~~both~~ physical, moral and intellectual of all the people. Such an elevation of the standard of living or economic well being is not promoted by misdirected effort which results in the wasteful production of useless things and in the cultivation of habits of extravagance and laziness;-that is what happens to the people,- ~~that is a~~ those are the habits which ~~the~~ people cultivate at a time when prices are sharply rising but when the production of useful things is not increased.

(Illustrate here by story of the use of iron ore.)

This digression is intended to emphasize the fact that the economic well being of the people of this country can be promoted by a sound direction of the affairs of the Federal Reserve System, and, on the other hand, that the economic well being can be undermined and impaired by unsound policies which attain no other result than to cause speculation, advancing prices and no real advance in economic well being.

To return to my theme. Under our old banking system there was no means by which the general volume of credit of the country might be increased beyond a given point without an impairment of the minimum ~~resources~~ reserves which banks are required by law, to maintain, unless it resulted from the importation of gold or the domestic production of gold which went into bank resources. Of course, I leave out of account such expansion as might result from changes in our monetary standards such as was attempted in the early 90s, or by changes in the statutory reserve requirements for banks. When, under the old system, as, for instance, in the early 90s, and again in 1907, we experienced a wave of liquidation and business depression, bank loans and deposits were very much reduced as a result, and in consequence surpluses of bank reserves were built up all over the country - interest rates sharply declined - and bond values rose. Then later, speculation would start in the money centers - usually in the stock market - and gradually the beginning of a new cycle of advancing prices resulted. Likewise, at the culmination of such a cycle of advancing prices, bank reserves would become impaired in various parts of the country, and if any shock to confidence occurred - as it did in 1893 and again in 1907 - reserve requirements actually had to be suspended and even currency payments suspended. Such periods of advancing prices, with all the speculation which generally accompanies them, have in the past - whether in this country or in other countries - always had one result: They have made the markets of that country the best selling markets. The world at once would start to pour goods into a country where domestic prices get out of line with world prices. Thereupon the banking system would at once begin to lose gold to Europe in order to pay for these goods. That served as a natural check to the speculation - caused interest rates to advance - made people who were borrowing money get timid - and would usually bring about selling of goods and price reductions so that the country was again able to enter into the world's market as an exporter of goods, thus changing the international balance of payments, arresting the gold movement, and restoring equilibrium again. Under our old banking system these movements were wholly unregulated. We had no bank of issue as they have in England, France, Germany and elsewhere, and no organized means of dealing with the money market, with foreign exchanges or with gold movements. Now we have such an organization, but the consequences of the war have resulted in almost universal embargoes upon the shipment of gold. We are the only important banking country which has no such embargo. The consequence of that is that we might indeed indulge in this country in a riot of extravagant speculation and of extravagant personal expenditure upon luxuries. We could cultivate habits of idleness, quit practicing thrift, and in fact go to almost any extreme of economic waste before it could be possible for any of the important nations of the world to take gold from us in such quantities as would imperil our bank reserves at all. Therefore, the natural check which had operated before the war to hold us to a certain accountability when our economic machine gets working badly has been lost and we have not only lost the power to lose gold - so to speak - but the amount of monetary gold which we now hold - nearly, if not quite one-half of the entire world's supply - is so vast that we have a capacity for over-indulgence in speculation and extravagance beyond anything ever known before in history, either in this country or any other country. You will, I hope, therefore, appreciate that if the premise of my argument is sound, this instrument which we have created for the control of the volume of credit must rely more upon good sound management than would be the case under ordinary circumstances, because the usual checks applying in a smooth and orderly world system are no longer present.

The question at once arises as to how these policies may indeed be controlled and directed so as to escape the penalties which I believe would be inevitable were we either ignorant, or careless or wilfully wrong. I think it may be said that there are two chief reliances to which we must look - and hardly any of importance outside of those two:

The first is a sound helpful and constructive point of view with regard to the Reserve System by those who own it - that is, the member banks. They must be vigilant to see that these banks are well managed. They must scrutinize their reports and their statements. They must examine carefully the qualifications of the men who are proposed for directors and they must indeed satisfy themselves that the directors choose competent officers. Here I believe lies the most direct responsibility as to the policies of the System. The other safeguard is an intelligent public opinion generally which, on the one hand, will not tolerate a political domination or misuse of the System, and, on the other hand, will not consent to its becoming, through its financial power, a super-government.

I do not refer to this situation as one which may be regarded as permanent, for if it were, no one would be more prompt than I in advocating that the general structure of the System should indeed be changed. This world is going to recover its economic equilibrium. It will be a slow process, but it is now under way, despite the gloomy predictions of those prophets of disaster who are always with us no matter how affairs may be going. During this period, however, when the gold standard and free gold payments have been suspended, human wisdom, sound intelligence, and the highest type of integrity must be ~~the~~ substitute for some of the automatic checks which normally work.

I have left to the conclusion the real point that I wish to make. It is quite possible, due to mistaken notions of unenlightened people, that policies might be forced upon the Reserve System to bring about a deliberate expansion of credit. You have read of the many proposals just to issue Federal reserve notes without any particular regard as to how it is done, to whom the notes should be issued, or what the effect would be. You have heard numerous proposals that we should make credit cheap, and although much less frequently expressed, I think there are many bankers in this country who still hold the view that if any money can be made by borrowing at the Reserve Bank, it is good easy money and advantage should be taken of it. It is just such doctrine as this that would lead - if unrestrained - to an increase in the amount of money and credit in the country that I have earlier referred to, without its being in response to an increase in production and consumption of goods. That in turn would lead to speculative advances in the prices of everything which in turn would increase the cost of living and again lead to strikes and all of the disorders which result from the sense of injustice which such a policy of inflation always brings about.

Behind the Federal Reserve System as a bulwark stands, I believe, first, the sound and helpful and constructive friendship and confidence of most of the bankers of the country. Behind that stands the confidence and respect in general of most of the business interests of the country. Outside of these circles of protection lies the enemy, & the enemy is ignorance. and the enemy consists in that body - how great we cannot estimate - that would have the Reserve Banks manufacture credit and print money-just as we did during the Civil War,- under the mistaken notion that that will make prosperity.

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Troy, N. Y., Nov. ~~18~~, 17 1922

Money and Prosperity.

One of the popular delusions that it is hard to remove is the belief that the more money a country has the greater is its prosperity. In addressing the bankers of Rensselaer County last night Benjamin Strong, the distinguished Governor of the Federal Reserve Bank of New York, impressed the necessity, in the interest of sound economics, of combating this delusion by exposing its inaccuracy. The "campaign of education" —just such a one, by the way, as was necessary to controvert and to subvert the Bryan "16 to 1" slogan in 1896—is made easier at present by the almost appalling results of the money inflation in Europe. As the stock of rubles and marks increases, their purchasing power decreases in even a greater ratio. That is always the result when the quantity of money of a country—its currency, its bank deposits and its credit—increases faster than the commodities, the of speculation and with its hardships to persons of small and limited means. Yet it is hard to stop the cry of the inflationists and of the dicontented generally for "more money", as if a man's, or a country's, wealth were increased by adding to the number of his promises to pay.

The war unsettled the established forms of adjustment by which exchanges of gold automatically settled the temporary differences caused by price inflation. Thus it becomes more necessary that periods of runaway fluctuations in price should be avoided, and, as one of the elements producing such violent changes is monetary inflation, the public should be warned against padding of the currency to give a balloonlike impression of wealth.

The Federal Reserve Bank has been of inestimable worth as a stabilizer of financial values, and its officers and the officers of its member banks are doing the people a good service and are justifying public confidence by showing the folly of leaping from solid foundations into an airy void.

Incidentally, the banks of Rensselaer County are to be commended for their part in providing the bulwark of sound sense and appropriate action to preserve the integrity of the nation and its currency. Rensselaer County banks answered nobly every call of the government during the war period for assistance in negotiating the popular loans which were essential to keep Uncle Sam in business at the old stand. These banks, as t[illegible] fiscal agents of the community, [illegible] only steady the progress of finan[illegible] [illegible]ansactions but also make pos[illegible] [illegible] entire system of production [illegible] [illegible]hange of products in which [illegible] [illegible]munity lives and moves a[illegible]

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The inevitable result of money i
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ADDRESS BY BENJ. STRONG
DELIVERED NOV. 16, 1922,
BEFORE RENSSELAER COUNTY
BANKERS, at dinner at
Troy, New York.

The opportunity for bankers to become more intimately acquainted with the detailed operations of the reserve banks have multiplied recently to such an extent that any discussion of what they do and why they do it has become almost unnecessary. The literature both from within and without the System has recently been most illuminating as to the principles which have governed the managers of the organization and as to the policies they have adopted, and the reasons for doing so. It seems to me, however, that there is still one aspect of the Federal Reserve System which has not been very fully discussed or even inquired into, - and that is - very broadly expressed - the position which it has come to occupy as a part of that complicated organization which we may describe as the country's economic machine.

All bankers know that we act as the government's fiscal agents and about what we do in that capacity. They know that we discount eligible paper - issue the principal currency of the country - hold the reserves of the member banks - collect checks - and effect the great bulk of the domestic transfers, commonly called exchange payments, between different sections of the country. Beyond this the reserve banks perform a great variety of collateral and subordinate service for the government, the member banks and the public.

With most of these things you are familiar. Youmay not, however, have given thought - as we are now required to do - to some of the broader aspects of the Federal Reserve System in its relation to the economic welfare of the country as a whole. In a general way it can be stated that the most important function performed bythe Federal reserve banks in an economic sense is that of regulating the volume of "money" - and I use the word "money" in its broad sense, meaning all types of credit instruments which perform the function of money, including bank deposits upon which checks are drawn.

Permit me, therefore, to introduce a discussion of the Federal Reserve

System along these lines by a few words of a theoretical character in regard to money.

For many years now economists have accepted as a general principle that the quantity of "money" has a direct relation to the prices of everything - that is, of the things that we buy and sell, including the wages of labor, the salary of clerks, rents, etc. There are, of course, many reservations and many modifications which apply to this theory; for instance, the function performed by money in its relation to prices may be either static or dynamic according to the state of mind of the people. If all of the people of the country because of fright, distrust, political disturbance, or for one or another reason, quit buying goods, prices for a time might even decline in the face of an increasing volume of money, although the chances are that under a well regulated banking system such a state of mind would result in a very prompt reduction in the amount of money in circulation. In other words, it would bring about a period of liquidation when bank deposits and currency would be applied to paying off loans, so that deposits and loans would be reduced and would be retired. On the other hand, without any increase in the quantity of money, an optimistic outlook and a speculative state of mind might result in very considerable advances in prices without any increase in the quantity of money giving rise to it at all. When that happens, however, the quantity or efficiency of money must increase or price advances will usually be arrested. These illustrations must allow for that reservation in regard to the absolute or narrow quantity theory which economists refer to as velocity of circulation of money.

(Illustrate by the beer story)

The conditions which may arise where in fact a given quantity of money may be made to work more efficiently and perform a greater service, in an economic sense, than it had formerly performed, and so give rise to or result from advancing prices, is exhibited in the change in our banking loans since the establishment of the Reserve System, which has in effect reduced reserve requirements and permitted a similar amount of gold tosupport a larger total of deposits, currency and loans. I am reviewing these very obvious economic principles in order to sum them up in a rather hypothetical statement which will illustrate somewhat the new economic aspect of the country's affairs resulting from the organization of the reserve banks. This brief hypothetical statement may do so.

If a given quantity of goods that is being produced, sold and consumed requires the employment of a given amount of money and bank credit, then in the lnng run we may say - for purpose of illustration - that the quantity of goods multiplied by the price of those goods would give a figure which would be representative of the amount of credit and money required to conduct that volume of business at that price level. Of course, there are an infinite number of modifying factors to be taken into account, so I am stating this equation only hypothetically in its barest forms. But upon this principle you will observe that if the quantity of goods is being much increased it will soon require an increase in the amount of money and credit required to produce and distribute them. On the other hand, with the same quantity of goods, if the price is much increased necessarily an increase in the amount of money and credit will again be required. But there is still a third possibility and that is that there might be an increase in the quantity of money and credit without any change in the quantity of goods, in which event the result would be simply an increase in price. Now please bear in mind that my equation is for purposes of illustration. I am leaving out of account in this equation many subordinate but nevertheless important factors, such as the psychology of the people, the velocity of circulation, increases or decreases in the efficiency with which money and credit are employed.

You will at once observe, therefore, that Congress has created a great organization known as the Federal Reserve System, which has in its power the actual creation of an increase in the volume of money and credit, but it has likewise the power somewhat to restrain that increase in money and credit within certain limitations. This to my mind is the greatest responsibility and a very grave one resting upon our Reserve System, and creates a situation so different from any which has existed in our countryfor the last 80 or 90 years that I shall hope to interest you by elaborating upon it somewhat. Before doing so, I must digrees to the extent of pointing out wherein lies the difference between real and fictitious progress # in our economic welfare - which in a broad sense means improved standards of living, which in turn means more and better food and clothes and shelter, steady work, higher standards of education, more healthy enjoyment for all the people. The establishment of higher standards of living, which is the basis of all economic effort and strife is brought about by increased production and consumption of things that are necessary for and which promote the welfare, physical, moral and intellectual of all the people. Such an elevation of the standard of living or economic well being is not promoted by misdirected effort which results in the wasteful production of useless things and in the cultivation of habits of extravagance and laziness; - that is what happens to the people, - those are the habits which people cultivate at a time when prices are sharply rising but when the production of useful things is not increased.

(Illustrate here by story of the use of iron ore.)

This digression is intended to emphasize the fact that the economic well being of the people of this country can be promoted by a sound direction of the affairs of the Federal Reserve System, and, on the other hand, that the economic well being can be undermined and impaired by unsound policies which attain no other result than to cause speculation, advancing prices and no real advance in economic well being.

To return to my theme. Under our old banking system there was no means by which the general vo,ume of credit of the country might be increased beynnd a given point without an impairment of the minimum reserves which banks are required by law to maintain, unless it resulted from the importation of gold or the domestic production of gold which went into bank resources. Of course, I leave out of account such expansion as might result from changes in our monetary standards such as was attempted in the early 90s, or by changes in the statutory reserve requirements for banks. When, under the old system, as, for instance, in the early 90s, and again in 1907, we experienced a wave of liquidation and business depression, bank loans and deposits were very much reduced as a result, and in consequence surpluses of bank reserves were built up all over the country - interest rates sharply declined - and bond values rose. Then later, speculation would start in the money centers - usually in the stock market - and gradually the beginning of a new cycle of advancing prices resulted. Likewise, at the culmination of such a cycle of advancing prices, bank reserves would become impaired in various parts of the country, and if any shock to confidence occurred - as it did in 1893 and again in 1907 - reserve requirements actually had to be suspended and even currency payments suspended. Such periods of advancing prices, with all the speculation which generally accompanies them, have in the past - whether in this country or in other countries - always had one result: They have made the markets of that country the best selling markets. The world at once would start to pour goods into a country where domestic prices get out of line with world prices. Thereupon the banking system would at once begin to lose gold to Europe in order to pay for these goods. That served as a natural check to the speculation - caused interest rates to advance - made people who were borrowing money get timid - and would usually bring about selling of goods and price reductions so that the country was again able to enter into the world's market as an exporter of goods, thus changing the international balance of payments, arresting the gold movement, and restoring equilibrium again. Under our old banking system these movements were wholly unregulated. We had no bank of issue as they have in England, France, Germany and elsewhere, and no organized means of dealing with the money market, with foreign exchanges or with gold movements. Now we have such an organization, but the consequences of the war have resulted in almost universal embargoes upon the shipment of gold. We are the only important banking country which has no such embargo. The consequence of that is that we might indeed indulge in this country in a riot of extravagant speculation and of extravagant personal expenditure upon luxuries. We could cultivate habits of idleness, quie practicing thrift, and in fact go to almost any extreme of economic waste before it could be possible for any of the important nations of the world to take gold from us in such quantities as would imperil our bank reserves at all. Therefore, the natural check which had operated before the war to hold us to a certain accountability when our economic machine gets working badly has been lost and we have not only lost the power to lose gold - so to speak - but the amount of monetary gold which we now hold - nearly if not quite one-half of the entire world's supply - is so vast that we have a capacity for over-undulgence in speculation and extravagance beyond anything ever known before in history, either in this country or any other country. You will, I hope, therefore, appreciate that if the premise of my argument is sound, this instrument which we have created for the control of the volume of credit must rely more upon good sound management than would be the case under ordinary circumstances, because the usual checks applying in a smooth and orderly world system are no longer present.

The question at once arises as to how these policies may indeed be controlled and directed so as to escape the penalties which I believe would be inevitable were we either ignorant, or careless or wilfully wrong. I think it may be said that there are two chief reliances to which we must look - and hardly any of importance outside of those two:

The first is a sound helpful and constructive point of view with regard to the Reserve System by those who own it - that is, the member banks. They must be vigilant to see that these banks are well managed. They must scrutinize their reports and their statements. They must examine carefully the qualifications of the men who are proppsed for directors and they must indeed satisfy themselves that the directors choose competent officers. Here I believe lies the most direct responsibility as to the policies of the System. The other safeguard is an intelligent public opinion generally which, on the one hand, will not tolerate a political domination or misuse of the System, and, on the other hand, will not consent to its becoming, through its financial power, a super-government.

I do not refer to this situation as one which may be regarded as permanent, for if it were, no one would be more prompt than I in advocating that the general structure of the System should indeed be changed. This world is going to recover its economic equilibrium. It will be a slow process, but it is now under way, despite the gloomy predictions of those prophets of disaster who are always with us no matter how affairs may be going. During this period, however, when the gold standard and free gold payments have been suspended, human wisdom, sound intelligence, and the highest type of integrity must be substituted for some of the automatic checks which normally work.

I have left to the conclusion the real point that I wish to make. It is quite possible, due to mistaken notions of unenlightened people, that policies might be forced upon the Reserve System to bring about a deliberate expansion of credit. You have read of the many proposals just to issue Federal reserve notes without any particular regard as to how it is done, to whom the notes should be issued, or what the effect would be. You have heard numerous proposals that we should make credit cheap, and although much less frequently expressed, I think there are many bankers in this country who still hold the view that if any money can be made by borrowing at the Reserve bank, it is good easy money and advantage should be taken of it. It is just such doctrine as this that would lead - if unrestrained - to an increase in the amount of money and credit in the country that I have earlier referred to, without its being in response to an increase in production and consumption of goods. That in turn would lead to speculative advances in the prices of everything which in turn would increase the cost of living and again lead to strikes and all of the disorders whichresult from the sense of injustice which such a policy of inflation always brings about.

Behind the Federal Reserve System as a bulwark stands, I believe, first, the sound and helpful and constructive friendship and confidence of most of the bankers of the country. Behind that stands the confidence and respect in general of most of the business interests of the country. Outside of these circles of protection lies the enemy, and the enemy is ignorance, and the enemy consists in that body - how great we cannot estimate - that would have the Reserve banks manufacture credit and print money - just as we did during the Civil War, - under the mistaken notion that that will make prosperity.

Address made before Students

of Graduate College, Harvard University,

Cambridge, Massachusetts.

Tuesday, November 28, 1922.

Since the Federal Reserve Banks were established, and, in recent years in increasing quantity, the reports of the System have been so complete and have described the operations in such detail that students of banking require hardly more than the official reports to gain a fairly complete knowledge of the business conducted by the System.

Even those who have not studied this literature understand that the Reserve Banks hold the banking reserves of the country; that they discount paper for their member banks; that they invest in bills or bankers acceptances and in the securities of the United States Government; that they issue and redeem the principal currency of the country and distribute the metallic money coined by the mints; that they collect checks and practically all other types of instruments of payment for their members; effect the settlement of the domestic exchanges; and, in their capacity as fiscal agents of the Treasury, borrow all the money required for the Treasury's operations; handle the Government debt; receive on deposit the revenues; and pay checks drawn by the disbursing officers.

It is important that this business be visualized as to volume as well as character. Bearing in mind that the Federal Reserve Bank of New York does about 40% of the business of the whole System, its transactions for the ten months of this year were briefly as follows: It held an average of $1,150,000,000 of reserves, practically all gold; discounted 46,000 pieces of paper aggregating $5,200,000,000 for its members; purchased 81,000 acceptances for itself and for other Reserve Banks and for member banks and foreign banks aggregating $1,150,000,000; and for account of all Reserve and other banks and of the Government and foreign banks purchased and sold $2,400,000,000 of Government and other securities; it counted and handled 315,000,000 pieces of paper currency aggregating $2,000,000,000 and handled a daily average of 26 tons of coin; collected 118,300,000 checks, notes, drafts, coupons and other negotiable instruments aggregating $51,000,000,000; and effected payments by telegraph, over the 15,000 miles of telegraph wires which the System now operates, aggregating $17,600,000,000. Its transactions for the Treasury as the Government's fiscal agent were of too great a volume and variety to express briefly in figures.

These figures are recounted for the purpose of emphasizing the character and extent of the contact of the Reserve System with the credit and currency operations of the country and, consequently, the significance of the functions which the Reserve Banks exercise.

As to the System's policies and the purposes which inspired them, there is now an extensive literature in the shape of critical books, magazine articles and public addresses. It would be but repetition for me to go over ground so fully discussed by so many competent students and critics.

There is, however, one function of the Reserve System the importance of which cannot be over-emphasized and which I have determined to discuss tonight because it is, in fact, the heart of the System upon which the operation of every other part depends. I refer to the entirely new element which was superimposed upon our banking System in 1914 by the establishment of the Reserve Banks, which were given the power to influence or to regulate or to control the volume of credit. Every other function exercised by the Reserve Banks sinks into insignificance along side of the far reaching importance of this major function.

Without regard to the views which you may entertain as to the various theories in regard to the purchasing power of money, or what may be more popularly described as the quantity theory of money, there is hardly anyone who is familiar with these matters who will not agree that no influence upon prices is so great in the long run as is the influence of considerable changes in the quantity of money, - by which I mean not only metal coins and paper money, but bank deposits upon which checks may be drawn. The Reserve Act did in fact, whether by conscious design of its authors, or not, bring about an almost revolutionary change in three important particulars in bank credit which may in turn have had an important relation to prices. (1) The Act originally reduced the reserve requirements of the national banks, and, subsequently in 1917, reduced them again. The effect of this was to make reserve money more efficient in that it was permitted to sustain a larger volume of loans and deposits than previously had been permitted. (2) By conferring the so-called clearing house functions upon the Reserve Banks, it speeded up the whole System of payments; checks are collected and paid more promptly; the course of currency shipments throughout the country has been greatly shortened and currency passes more promptly to points of redemption; and the country-wide clearing house, known as the Gold Settlement Fund, operated on the basis of daily telegraph settlements, has greatly shortened the length of time required to effect settlement of the entire domestic exchanges of the country. (3) But the most important change, as I have stated, is that conferring the power upon the Reserve Banks to actually permit or influence changes in the volume of money which serves as bank reserves or circulates as currency. My thesis, therefore, is addressed solely to this question of the regulation of the volume of credit and to make clear what a change has taken place because of the granting of this power.

Let me refresh your memory as to how credit matters operated prior to 1914: Practically all of the commercial banks and trust companies of the country were subject to various statutory limits as to the minimum amounts of cash and redeposited reserve which they were required to carry. Except by legislative change in reserve requirements, there was no possibility of increasing the supply of reserve money beyond what arose through gold production or gold imports, neither could the supply of reserve money be contracted unless gold was exported. So it may be generally stated that the total reserves of all the banks was incapable of contraction except by paying it out to the public or exporting it; and equally incapable of expansion unless redeposited by the public or unless gold flowed into the country from abroad or was produced from the mines. Bear in mind I say total and not percentage. This had serious consequences in its relation to that mysterious phenomenon which is now being so carefully investigated and which we call the business (or, as I would prefer to call it, the credit) cycle. At one extreme of the cycle the reserves of the banks regularly became impaired. With deficient bank reserves we were liable to see rates for "speculative" money advance to 100% or even more at times, and the charge for credit to merchants and manufacturers became a severe burden upon production and distribution. In such a situation almost any percussion cap would start an explosion. In 1893-5 deficient revenues of the Government and an unfavorable trade balance which resulted in gold exports, coming at a time when there was agitation for a change in our monetary laws led to great uneasiness. The reserves of the New York Clearing House banks showed shortages from $________ ? to $ 16,500,000. Fear developed that the Treasury would not have sufficient gold to meet its obligations and finally the crash came on Nov 11 1890 (date) resulting in the New York banks, and banks generally throughout the country, suspending currency payments; very largely suspending cash settlements between themselves for checks sent for collection not only through the local Clearing House but throughout the country. At that time a total of $ 41,490,000 ? Clearing House loan certificates were issued.

Much the same thing happened in 1907, when, after a period of deficient banking reserves running from $________ to $________ the extended condition of a number of New York City banks caused alarm and general suspensions of like character to those of the early 90's throughout the country. Call money loaned as high as 125%; currency went to 4 % premium; and the domestic exchanges again were frozen.

Then again at the other extreme of the cycle, after a period of liquidation, surplus reserves poured into the money centers. After this same liquidation in the early 90's the New York Clearing House banks at one time showed surplus reserves of $ 111,600,000. And bear in mind that at that time the total required reserves of the New York Clearing House banks were but 1/4 % of what they now are. Money then loaned at less than 1%. And the same occurrence was witnessed after the liquidation of 1907 when the surplus reserves of the New York City Clearing House banks rose to $ 71,000,000.

While under the conditions first described, every bank was seeking to withdraw loans, under the conditions last described, the banks were forcing money into the market. Money would become almost unloanable and the temptation to the speculator and his kind was extreme. I, personally, recall making loans on the New York Stock Exchange at 3/4 of 1%.

These extreme credit conditions arose because there was no stretch. When the period of surplus reserves arose funds poured into the speculative markets. When the period of deficient reserves arrived all the banks sought to contract their loans to make good their reserves and we witnessed the extremes of speculation and of business embarrassment. There was neither control of the volume of credit, nor moderating influence as to rates of interest. And, finally, there was no control over the movements of gold in and out of the country. I recall the Governor of the Bank of England telling me in 1916 that one of the most menacing influences on their reserve position was the possibility of a gold movement to America or from America as a result of our erratic money market, which no influence that they could exert was capable of stemming; of their regarding our so-called free gold market as one of the worst menaces to the stability of their own credit position.

I have refreshed your memory as to the conditions which prevailed under the old System in order to bring out in contrast the extent to which it differs from present conditions. As things are now, when a period of business expansion arrives, whether it be an annual and seasonal one, or whether it be due to a series of favorable crops at home and bad harvests abroad, - in other words whether it be the short cycle of seasons or the long cycle of periods of years, - such expansion, whatever its cause, can now be easily financed because of the power of the Federal Reserve System to furnish the required reserve money as needed and thereby permit the member banks in turn and in larger volume to increase their loans and discounts, and, correspondingly, their deposits.

But now we come to one or two grave fallacies in regard to the Reserve System. I fear there are many people who still hold to the notion that some mysterious influence or process will operate when this enlarged volume of credit is no longer needed so that it will be induced, without any compulsion or persuasion, complacently to walk back to the Reserve Bank and surrender itself for cancellation. And possibly another fallacy still prevails among those who believe that because of certain very exacting requirements of the Federal Reserve Act, and the regulations of the Reserve Board, as to the type of loan which the Reserve Banks may make, or the character of the paper which they may discount, that there is some control exercised by the Reserve System as to the uses to which the credit so extended by the Reserve Banks shall be applied by the borrowing member bank. Practical experience in the operation of the Reserve System seems to have disclosed something of importance as to the way credit is extended; as to the way that credit is retired when it is no longer needed; and as to the impossibility of control of the use that shall be made of it while it is in existence.

First as to the extension of credit, which may be described as normal or seasonal or necessary and legitimate. Practically the only motive which impels a member bank to borrow from the Reserve Bank is to make good an existing, or expected, impairment of its reserve. I think you may accept my statement that this is true, but let me give one illustration. Every member bank is required by law to maintain a certain minimum reserve on deposit with its Reserve Bank and if it fails to do so it is subject to an interest penalty upon the amount of the impairment considerably higher than the regular rate of discount of the Reserve Bank. This reserve in some cities is figured as a weekly average and in the rest of the country as the average of a fortnight. Every member bank must report its reserve position and submit to penalty if the average is impaired. Now, in practice, the way this works is very simple, and I shall use the case of a large New York City bank to illustrate: Early in the morning it sends its exchanges through the Clearing House and, as the result, it has to pay out reserve money or receives surplus reserve money according to whether it is debtor or creditor. Throughout the day it has deposits made and withdrawn; it makes new loans and has old loans repaid; it buys and sells securities; and foreign exchange and furnishes currency to customers. And as the result of these and other transactions, at some hour of the day the member bank must make up what it calls its "position." If its reserve has become impaired as the result of the day's business it borrows from us to make good its reserve. If the day's transactions give rise to a surplus reserve with us, the proper thing for the member bank to do would be to at once repay any funds which it had already borrowed from the Reserve Bank, although it may not do so. The chances are that if it does not do so it will be because it has an opportunity to employ the funds in some more profitable way than in paying off the Reserve Bank, - that is to say it can lend the money at a higher rate than the rate which it pays us upon its loan, namely our discount rate.

You will observe that in every case, and practically every day, the member bank, in gauging its reserve position, must of necessity determine whether it shall borrow, and if so how much, or whether it shall repay borrowings already made, and if so how much, and the alternative to borrowing or repaying is either withdrawing loans from the market in some form, if it is short, or making additional loans, if it is over, without recourse to the Reserve Bank in either case. Now, in the long run, it is my belief that the greatest influence upon the member bank in adjusting its daily position is the influence of profit or loss; that while it may regularly borrow to make good impaired reserves, it will repay its borrowings at the earliest possible moment unless the inducement of profit leads it to continue borrowing and to employ any surplus that arises in fresh loans. It may, therefore, be safely stated that as business expands for seasonal reasons or for any other reason, member banks will borrow from the Reserve Banks to make good deficient reserves caused by the expansion of their loans, provided the rate at the Reserve Bank is not so high as to make that borrowing too costly. But, on the other hand, if borrowing at the Reserve Bank is profitable beyond a certain point, there will be strong temptation to use surplus reserves when they arise for the making of additional loans rather than for repaying the Reserve Bank.

I shall discuss the question of rate control later, but I wish first to emphasize this important fact: Practically all borrowing by member banks from the Reserve Banks is ex post facto. The condition which gave rise to the need for borrowing had already come into existence before the application to borrow from the Reserve Bank was made, and experience has shown that large borrowings in New York City have in the past usually been explained by the member bank as caused by the borrowing operation of the Treasury, by seasonal demands, but more frequently because of the withdrawal of deposits.

Now as to the limitations which the Federal Reserve Act seeks to impose as to the character of paper which a Reserve Bank may discount. When a member bank's reserve balance is impaired, it borrows to make it good, and it is quite impossible to determine to what particular purpose the money so borrowed may have been applied. It is simply the net reserve deficiency caused by a great mass of transactions. The borrowing member bank selects the paper which it brings to the Reserve Bank for discount not with regard to the rate which it bears, but with regard to various elements of convenience, that is the denomination of the paper, its maturity, whether it is in form to be easily and inexpensively delivered physically to the Reserve Bank or not, and it makes little difference to the borrowing bank what transactions may have caused the impairment of its reserve, because the paper which it discounts with the Reserve Bank may have no relation whatever to the impairment that has arisen. To specify more exactly, because this is an important point, suppose a member bank's reserve became impaired solely because on a given day it had made a number of loans on the stock exchange; it might then come to us with commercial paper which it had discounted two months before and which had no relation whatever to the transactions of the day; and with the proceeds of the discount make good the impairment. If it was the design of the authors of the Federal Reserve Act to prevent these funds so advanced by Federal Reserve Banks from being loaned on the stock exchange or to non-member state banks or in any other type of ineligible loan, there would be only one way to prevent the funds being so used, and that is by preventing the member banks from making any ineligible loans whatsoever, or deny it loans if it had. And, in fact, during the peak of the period of expansion I believe the amount of paper which had been discounted with the Federal Reserve Banks equalled only about 14% of the loans and discounts of the member banks. The member banks undoubtedly had a very much larger amount of eligible paper than indicated by this small percentage, but, beyond that, a great mass of ineligible loans, and surely it cannot be claimed that the provisions of the Act, which specify so exactly what paper is eligible, can possibly have exercised any influence upon the application of the proceeds of these loans by the member banks.

I have enlarged upon this point so as to bring out this fact: - that the expansion of the loan account of the Federal Reserve Banks, which as you know furnishes the foundation for a much greater expansion of loans and deposits of the commercial banks, can be brought about as the result of any expansion in the banking position of the country, no matter what may be its cause. The eligible paper we discount is simply the vehicle through which the credit of the Reserve System is conveyed to the members. But the definition of eligibility does not effect the slightest control over the use to which the proceeds are applied.

Going a step further, this means that the Reserve Banks will be subject to demands upon them, expressed to be sure in the form of eligible paper but which may have had their origin in any sort of expansive development, stock speculation, real estate speculation, crop moving, building operation, foreign bond issues, or anything else. Such an influence can arise through the borrowings not only of the

United States Government in the market, but, indirectly, through borrowings of all kinds which have the effect of impairing reserves.

Now going still one step further, let me emphasize the contrast between the conditions which prevailed in the old System and those which have now arisen. I have pointed out how, in the extremes of the trade cycle we have on the one hand impaired reserves and very high interest rates and on the other hand surplus reserves and very low interest rates. That condition has now quite disappeared. In actual operation, when the reserves of the member banks become impaired they promptly borrow and they do not have to scramble around among their customers or on the stock exchange to call loans so as to make good the impairment. So, on the other hand, when they have surplus reserves they are generally inclined to repay what they may have already borrowed from us rather than make new loans, provided, of course, our rates are properly adjusted to market rates, and they will continue to do so unless borrowing from the Reserve Bank becomes so profitable as to be a temptation.

Now you will observe that under the old System we experienced these periods of reserve deficiency and extremely high rates for money and reserve surpluses and extremely low rates for money, but under the present System all that has changed. Broadly speaking, there is no surplus reserve in the hands of the banks, whether members of the System or not. When business expansion or new loans cause impaired reserves the member banks borrow from us; when surplus reserves arise for one reason or another, they repay to us. The consequence of this is, of course, that we have no such extraordinarily high or low interest rates as sometimes obtained. The funds flow in and out of the Reserve Bank day by day as sort of a leveling off process, so to speak. Now in a banking System where 10,000 banks, which represent over 55% of the banking deposits of the country, have convenient access to a source of borrowing such as the Reserve Banks, what are the possibilities that this borrowing may get beyond control; that the volume of credit may become dangerously enlarged and that in consequence we may be guilty of furnishing credit which might only result in marking up prices without any increase in production, with all of the injustices which are sure to result?

The chances of such a development can only be understood if one is familiar with credit conditions in allparts of the country. They could well be expressed in the form of a map upon which current local rates of interest throughout the country would be expressed as maps are shaded to indicate mountain ranges and their peaks. It would be found that over a large part of the south, considerable portions of the middle west, and generally throughout the Rocky Mountain region interest rates are not only high, but in many cases as high as 12%. Not only do the usury laws of some states permit banks to lend money as high as 10% or 12%, but in practice a very large number of the smaller banks throughout the country in states which permit high rates make practically all of their loans at rates ranging all the way from 8% to 12%, and there are many banks that charge even higher rates by various round about methods. But the rate difficulty becomes more acute when it is realized that even within one Federal Reserve district of large area like Kansas City or San Francisco, there may be sections where rates as high as 12% are charged, but, on the contrary, in the money centers, especially in the city where the Reserve Bank is located, the rates may be little if any higher than those prevailing in New York City.

Bearing in mind, however, that a member bank may be impelled to borrow not only because deposits are withdrawn but equally because it has made loans, in all of those sections where the loaning rate is much higher than the Reserve Bank rate the temptation will naturally be ever present to expand loans indefinitely so long as the Reserve Bank is in a position to lend. This situation, which prevails in some parts of the country, is quite different from that in New York City, where the vast bulk of bank loans are made at a fairly uniform rate and where it is possible for the Reserve Bank, by an adjustment of its rate, to exert some restraint upon the extent to which its members borrow from it.

Deferring until later any further discussion of methods of control of borrowing, which means control of the volume of credit, let me now refer to what appears to me to be the most perplexing difficulty in the exercise of such control as may be possible through the discount rate. It is a condition which has arisen as a result of the war and it is appropriate to introduce this part of the discussion by quoting from the report made by the British Committee on Currency and Foreign Exchange, frequently called the Cunliffe report, as follows:

> "Whenever before the war the bank's reserves were being depleted, the rate of discount was raised. This, as we have already explained, by reacting upon the rates for money generally, acted as a check which operated in two ways. On the one hand, raised money rates tended directly to attract gold by lessening the demands for loans for business purposes, they tended to check expenditures and so to lower prices in this country, with the result that imports were discouraged and exports encouraged, and the exchanges thereby turned in our favor. Unless this twofold check is kept in working order the whole currency system will be imperilled. To maintain the connection between a gold drain and a rise in the rate of discount is essential."

Various influences were set in motion by the war which have resulted in our receiving over $2,000,000,000, in gold in excess of what we held before the war started, giving us now a total gold stock of about $3,800,000,000 of which nearly $3,100,000,000 is held by the Reserve Banks. This is roughly a billion and three-quarters in excess of what the minimum legal reserve requirements of the Federal Reserve Act would now require us to hold against our present deposit and note liabilities. Under the provisions of the Federal Reserve Act as originally passed by Congress, the Federal Reserve Banks, when all of the reserves had been paid in, would have had a loaning power of roughly $ 3,000,000,000?. With this enormous mass of gold now in our hands, we have a lending power at present in excess of the billion and one-quarter of loans and investments now made of roughly $ 4,400,000,000?. Had there been no war there would have been no disturbance to the foreign exchanges. With the foreign exchanges fluctuating within the gold shipping points any considerable expansion of credit in this country which caused prices to sharply advance would very probably have been penalized by a gold export movement. With the exchanges as they now are, that is with the dollar at a premium practically the world over, gold cannot be exported, certainly not in large quantity except after such a period of expansion and rising prices in this country as would entail a veritable orgy of speculation; such a debauch in credit, in fact, as would reduce the purchasing power of the dollar progressively first possibly to the level of the currencies of the neutral countries, then to sterling, then to the franc, etc. And this brings me to the point which is of such importance to the management of the Reserve System.

Before the war, as is set out in the Cunliffe report, a large gold export movement was the visible and convincing evidence, not only to the management of the bank of issue, but to the country generally, that the bank rate must be raised. To be sure other conditions than a gold movement could well justify increasing the rate of discount of the bank of issue, but a large gold export movement, such, for instance, as we suffered in the early 90's, which even impaired the gold reserves of the Government of the United States, would require little argument or explanation to convince the country that the bank of issue must take steps to protect the gold reserve.

As we are now situated, it is true that we may from time to time lose small amounts of gold to those countries where the currency has not been greatly depreciated. We have recently shipped some gold to Canada and it was a natural movement because the Canadian exchange had gone to a premium and dollars to a discount as the result of a large loan which the Canadian Government floated in this country. And from time to time the currents of trade and the balance of international payments may indeed result in small amounts of our excessive gold holdings being withdrawn, but, with the currencies of most of the trading and banking nations of the world so much depreciated below ours -- ranging from 10% in the case of sterling to the vanishing point in the case of Germany, Austria and Russia --- it seems altogether unlikely that any considerable amount of our surplus gold will be taken from us. Other than such a debauch of expansion as I have described, the only possibilities of early losses in gold that I can see would be through radical changes in the monetary laws of those nations whose currencies are greatly depreciated, implying, of course, the balancing of their governmental revenues and expenditures.

In the absence of the possibility, I may say even the remote possibility, of any such movement and in the face of the conditions which I have described as to interest rates in different sections of the country, what should be the policy of the Federal Reserve System in exercising this function which is of such supreme importance of regulating or influencing the volume of credit.

This brings us in fact to those important questions of policy in which human judgment plays so large a part. Various suggestions as to the policy of the Reserve System have been advanced by critics and students. They all seem to lead back to the two methods of regulation of credit volume which are, after all, fundamental. One may be described as the exercise of discretion by each Reserve Bank as to the amount which it is willing or which it thinks wise to lend to borrowing members. The other is the exercise of such influence or control as is possible through the fixing of the discount rate. It might at first seem that these two methods of regulation were in conflict with each other, but they are in fact both necessary and complementary; both have advantages and limitations.

In a general way it is my opinion, although others may differ from me, that, so long as present conditions exist, rate regulation will operate effectively in the long run as to the great mass of American bank credit, that is as to those banks which hold the principal amount of deposits and loans, provided the rates are wisely established by all of the Reserve Banks, and especially by those Reserve Banks which are located in the larger cities of the east. It is in those centers that interest rates are lowest and most stable and where the range is narrowest between minimum and maximum rates; but in the sections of the country more remote from the money centers, where interest rates are higher, as was earlier described, the exercise of a wise discretion by the management of the Reserve Bank is imperative, otherwise the facilities of the Reserve System might be abused by member banks borrowing excessively for profit.

Let me describe some of the difficulties of exercising discretion. First, the discretion, as I have earlier described, must be exercised ex post facto. The transactions giving rise to impaired reserves by the borrowing members have already occurred when the borrowing from the Reserve Bank is desired. Applying discretion to the borrowings of members under these circumstances really means that all one can do is to scold them. If the funds are not advanced to make good the reserve, then indeed the reserve balance is used by the member just the same only the penalty rate is higher. In the course of time that bank would restore its reserve because the law would prevent its paying dividends or making new loans until it is restored. That type of scolding, however, generally causes irritation.

A second difficulty is geographical. How can discretion be exercised in the case of applications for loans by member banks so remote that even the mail takes four days one way?

A third difficulty arises as to the basis upon which discretion shall be exercised. Who is to judge as to whether the transactions which cause the reserve impairment were justified or unjustified? A loss of deposits, theoretically, would always justify borrowing, but if the impairment arises because of loans made how is a judgment possible as to any one loan without judging equally of all loans made by a member bank?

Fourth, even assuming that such judgment were possible, who shall say how much each member bank shall be permitted to borrow without exceeding the bounds of prudence? Is it fair to assume that a member bank should liquidate once a year, or twice a year, so that its borrowing requirements are seasonal only, or should we admit that a certain amount of borrowing from the Reserve Banks may be permanent? Section 4 of the Act provides that a Reserve Bank shall "extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks." Much difficulty will be experienced by the bank managers of any one district in making these nice decisions as to its own district members only, but, extending this to all the managers of the twelve Reserve Banks, with the 10,000 members with which they must deal, it would indeed appear to be impossible to exercise such discretion with universal justice. Indeed it may well be that in the absence of a Branch Banking System the Federal Reserve System will be the vehicle for furnishing a certain amount of credit permanently to those remote sections of the country where interest rates are high and where liquid capital is deficient.

A fifth difficulty appears to arise as to the regulation of the total amount of credit for the whole banking system, as distinguished from the total which any one member may be allowed to borrow. Obviously the twelve Reserve Banks cannot work out such a nice mathematical arrangement of credit as would serve the requirements of all the banking System and work smoothly, because these requirements vary greatly at different seasons of the year and in different sections.

A sixth difficulty is at once obvious were the System to assume responsibility for declining loans to members which made it necessary for those members to decline loans to customers. It has always seemed to me that the primary responsibility for any loan made by a bank to its customer should rest with the officers and directors of that bank and that the Reserve Bank should never assume that responsibility nor be willing to accept the consequences of exercising it.

And a seventh and last difficulty, although this may not indeed be all of them, is one which I regard as more serious than any of the others, - the exercise of powers conferred by the Reserve Act upon the Reserve Banks by this rule of personal discretion, I fear, would develop inevitably in time a bureaucratic attitude of mind on the part of the managers of the Reserve Banks which would be unfortunate indeed for the welfare of the whole banking System. Power excites appetite for more power. Bankers in time would rebel and the public would rebel.

Now, on the other hand, it must be admitted that if a member bank is able to loan all of its funds at 10% or at 12%, and if it is paying as high as 5% interest upon its deposits, and has the opportunity to discount paper at its Reserve Bank at 4 1/2%, the temptation to make the additional profit by enlarging its business and discounting freely cannot well be escaped. Nor can the Reserve Bank charge that member bank a rate which would operate as a restraint to its borrowing without charging a like rate to member banks in its own city or in the money centres of its district which would put the resources of the Reserve Bank entirely beyond the reach of most, if not all, of the large banks of the district. Therefore, however difficult may be the exercise of discretion, in some Reserve districts that would appear for the present to be the only means of exercising a regulatory influence.

On the other hand, let us see how the rate will operate. I think one should look upon the credit structure of the country as an inverted pyramid at the base of which is a foundation of bricks of gold which enjoy the peculiar power of sustaining each its own proportion of the entire inverted pyramid. Those bricks of gold are the bank reserves held by the Reserve Bank. If one brick is taken out of the base, the series of stones resting upon it, representing the volume of credit sustained by that reserve brick, must, inevitably, come down. And if a brick is added, by so much the pyramid is very shortly enlarged. If the Reserve Bank rate is so low as to be an inducement to borrowing additional tiers of bricks will be laid at the foundation and the pyramid will be by so much enlarged; and the reverse is equally true if the rate does not induce borrowing, - the size of the pyramid may be kept unchanged, or even reduced.

A rate control of the volume of credit has a variety of advantages. One is that it is democratic. It applies to all alike and it requires little, if any, expostulation and remonstrance to make it effective. It must be admitted that an advance in the discount rates by the Reserve Banks will not necessarily influence promptly the mountain peaks of high interest rates in some sections. But I rather doubt whether it is necessary that it should do so. Although not capable of statistical support, I think the statement may be hazarded from past experience that a rate which is effective in checking borrowing in the money centers, or even in reducing borrowing, will indirectly be an influence in all sections of the country. It certainly has the effect of what I might describe as "driving borrowers back home." It is customary for many concerns which do a large business to borrow in the cheapest money markets, no matter where their offices and business may be located. If New York, for instance, should advance discount rates and member banks in turn advanced rates to their customers, a certain number of these out-of-town borrowers would go to their local banks for their loans if the rates there are satisfactory so as to enable the borrower to pay off in New York. This process I believe would be found, could it be analyzed, to be many times repeated, so that the effect of rate changes in the twelve Reserve cities is not confined alone to those cities but extends throughout the country.

Another point frequently overlooked in regard to the effect of the rate is due to lack of understanding of the way in which borrowing from the Reserve Bank originates, - that is through impaired reserves. Every bank knows about what its loanable funds cost it on the average and about what it receives on all of the money which it is loaning. It knows about what its expenses and overhead amount to and the difference is its profit. When a bank's reserve becomes impaired so that it must borrow, it does not pick out a particular piece of paper which it has discounted at a higher rate of interest and then rediscount that paper at the Reserve Bank rate and figure that it is making a profit, but it is much more liable to see whether the borrowing from the Reserve Bank at the Reserve Bank rate involves in point of fact an absolute loss, or whether it may not be less expensive to reduce loans or sell investments and avoid borrowings. Expressing it differently, the rate at which a Reserve Bank lends to its member bank has no particular relation to the rate which a member bank receives on any of its transactions, but it has a relation to the average of all rates received by the member bank and the average cost of all of its loanable funds. And from this I have always concluded what I firmly believe to be the fact, that a Reserve Bank rate in order to be effective in restraining undue borrowing, does not necessarily need to be a penalty rate, that is to say a rate fixed so high that there will be no differential in favor of the borrowing bank on <u>any</u> paper which it may have taken from its customers, even the highest rate paper. But an effective rate will likely be somewhere within the range between the average cost of all its loanable funds, including overhead, and the average that it receives upon all of its earning assets, with due allowance, of course, for loss of interest on reserves.

The chief advantage of rate control, however, is in the way it serves more definitely to regulate the total volume of credit as distinguished from the total amount of loans to any one individual member bank. I would regard the determination of the amount to be loaned to an individual member bank as a credit matter to be determined just as any loan would be determined by any bank to any customer. But, on the other hand, I would regard the rate policy of the Federal Reserve System as a national credit policy more directly related to regulating the volume of credit in the country so as to maintain stable credit conditions.

Finally, however, we must recognize that there are many people who believe that more money, and cheap money, means prosperity and happiness. To those people an advance of discount rates may at times be difficult to explain. It is on that account that the absence of natural movements of gold is most unfortunate; and it is for that reason, as well as for many others, that the world will be better off by a prompt return to the gold standard and free gold payments.

Permit me now to make a brief resume of this long argument: The Reserve Banks have been given the power to create reserve balances and to a large extent to regulate the volume of credit. That volume of credit expands in response to ex post facto borrowing by member banks; the mass of their transactions causing the borrowing having already occurred, there is no means by which the Reserve Bank can control the use which is made of the funds which it loans to its members. Credit so borrowed from the Reserve Banks is less likely to return for cancellation when no longer legitimately required if discount rates are too low, and a high discount rate will operate to induce its return. The present banking System has created a situation where there is no surplus of banking reserves in the country, and where there is not likely to be a deficiency. The real reserve barometer is the reserve percentage of the Reserve Banks. The impulse which will lead the Reserve System to change rates must for the present largely arise from general conditions, and it cannot be expected that the impulse to advance rates will be given by gold exports for a long time to come. Therefore, the regulation of the volume of credit which is the chief function of the Reserve System must be effected by a combination of rate changes and due caution as to members' borrowings.

The Federal Reserve System has always impressed me as being essentially a social institution. It is not a super-Government, it is simply the creature of C Congress, brought into being in response to a public demand. It was not created only to serve the banker, the farmer, the manufacturer, nor the merchant, nor the Treasury of the United States. It was brought into being to serve them all. Its guiding influence is not profit. Practically all its receipts over expenses go to the Government. For some the service it performs is direct, for others it is indirect, but is not less definite nor any less important. It needs and asks that it be given the benefit of intelligent study and enlightened criticism. Its future depends upon its own good behaviour and upon its success in winning and holding the confidence of the public.

Increasing quantity reports for students

Generally understood that Reserve Banks hold all reserves
- Discount paper
- Invest in bills and U. S. securities
- Issue and redeem paper currency
- Distribute metallic money
- Collect checks and instruments of payment
- Settle Domestic Exchanges

As fiscal agents -
- Borrow
- Handle Debt
- Receive Revenues
- Pay disbursing officers checks

Important to visualize volume -
New York Bank 40%
10 months' transactions this year -

Average Reserve $1,150,000,000 gold	
Discounts - 46,000 pieces Aggregate	$ 5,200,000,000
Acceptances 81,000 pieces Aggregate	1,150,000,000
Government and other securities purchased and sold - - - - - - -	2,400,000,000
Currency counted 315,000,000 pieces;	2,000,000,000
Coin, daily - 26 tons	
Checks, notes, etc., 118,300,000 pcs.;	51,000,000,000
Telegraphic payments (15,000 miles)	17,600,000,000

Treasury Transactions too great volume and variety

Figures emphasized contact with credit and currency
Significance of functions

Policies and purposes inspired in extensive literature
Repetition of competent students and critics to discuss

One function heart of system; operation other parts depend

New element in power to influence, regulate or control volume

Other functions insignificance

Whatever views purchasing power -- quantity theory -- influence upon prices of considerable changes in quantity; metal coins, paper money; bank deposits.

Revolutionary changes of Act -- relation to prices

1. Reduced reserve requirements
   Original and 1917

2. Clearing House functions
   Speeding payments check collections
   Shortening currency shipments and redemptions

Gold Settlement Fund
Daily telegraphic settlements
Less time settling domestic exchanges

3. Most important power to permit or influence change in volume
Bank Reserves
Currency

Thesis solely regulation volume - change due to new development

Beer Story

Refresh memory credit matter prior 1914
All banks statutory minimum reserve
Except legislation no possible increase reserve money except gold production; imports
Nor contraction unless exported
Contraction by paying out or exporting
Expansion redepositing or importing
Bear in mind <u>total</u> and <u>not percentage</u>

This had serious consequences -- business or credit cycle
One extreme - impaired; speculative rates 100%; merchants and manufacturers burden; percussion cap

Early 90's -
Deficient revenues
Unfavorable Trade Balance
Gold Exports
Monetary agitation
Uneasiness
Clearing House reserves short $16,500,000
Fear Treasury default gold payment
Crash November 1890 - June 1893
New York, and banks generally, suspending currency payments; also cash settlements for collections throughout country 1890 $16,645,000
Clearing House Certificates 1893 $41,490,000

1907 same -

Deficient Reserves $
Extended condition certain New York City Banks
Alarm
Same development as early 90's
Call money 125%
Currency 4% premium
Domestic Exchanges frozen

Other extreme of cycle - liquidation; surplus reserves in Money centers

Early 90's

Surplus $111,600,000
Required reserve 1/4 of present
Money below 1%

1907 same -

Surplus $71,000,000 June 1908

First condition banks calling loans

Last described conditions forcing money
Money unloanable
Temptation speculator beyond resistance
Personally recall 3/4 of 1%

Extreme credit conditions because no stretch
Period of surplus funds poured into speculation
Period of deficient banks withdrew causing extremes
1. Speculation
2. Embarrassment

No control of volume; no moderating influence rates; no influence gold movements.
Governor Bank of England 1916 -
menacing influence to their reserve position
our unregulated gold movement

Refreshing memory old conditions contrast with present conditions

Business expansion arrives natural and seasonal, or series good crops vs bad abroad
Either short or long cycle
Whatever cause Reserve System finances
Manufacture reserve money
Members increase loans and discounts larger volume; correspondingly deposits

One or two fallacies

1. Notion mysterious influence credit walk back surrender for cancellation
2. Exacting requirements type of loan, character of paper
Cannot control use of proceeds

Practical experience throws light upon

1. Way credit extended
2. Way retired when not needed
3. Impossibility to control use

First extension of normal, seasonal, necessary, legitimate credit
Motive only impaired reserves
Illustration -
Minimum reserve impaired
Interest penalty
Weekly; fortnightly average
Regular report
Way borrowing works simple
Illustrate New York City bank -
Morning exchanges; debtor or creditor; we settle balance
Deposits made and withdrawn
New loans made and old paid
Buy and sell securities and exchange
Furnish currency

Makes up "position"
Reserve impaired - borrow
If surplus - should pay
May not do so because opportunity for profit; loan higher rate
Member always watching
If must borrow - how much
If can repay - how much
Which is most profitable
Greatest influence profit and loss
Regularly borrow but always repay unless profit induces otherwise
Business expansion - borrowing will increase if rate not too high
if level too low, credit will not come back

Discuss rate control later
Emphasize borrowing ex post facto
Conditions already existing
Explanation usually Treasury, seasonal demands, loss of deposits

Limitations on eligible paper -
Reserve impaired, member borrows
Cannot determine proceeds applied
Amount simply net deficiency
Borrower selects paper <u>not</u> for <u>rate</u>, <u>but convenience</u>
Denomination
Maturity
Easily delivered
Discounted paper no relation to transactions causing impairment
Illustrate -
Stock Exchange Loans -
Commercial paper discounted two months before; no relation to transactions
Proceeds makes good reserve

If design of authors prevent funds stock exchange or other ineligible only way prohibit any such loans

Peak of expansion 14%
Member banks held much larger amount
Also large amount ineligible
No possibility to influence application

Enlarged upon point to emphasize
Expansion Reserve Bank loans foundation greater expansion
Result from any cause
Eligible paper simply vehicle
Definition effects no control over use

Step further -
Reserve Banks feel demand expressed eligible paper
Origin in expansion stock speculation, real estate, crops, building, Treasury, anything impairing reserves

Step still further -
Contrast old and new situation
Old -
Extremes; impaired reserves high interest; surplus reserves low interest

That largely disappeared

Now -

No scrambling to call, but borrowing
When surplus, repaying
Broadly speaking no surplus, everything over swept into us
Consequence, no very high or very low rates
Funds flow in and out of Reserve Banks
Leveling process

10,000 banks 55% of resources

Convenient access
Possibilities getting beyond control
Volume of credit dangerously enlarged
Mark up prices with no increased production
Injustice such development

Must understand credit conditions throughout country

Could be expressed in map
Variations in rates in sections
Usury laws
Rates from 8% to 12%
Difficulties within district between cities and country
Need for borrowing not only deposit withdrawals, but new loans
Temptation in high rate sections extreme
Very different from New York City and money centers, - rates more uniform

Defer further discussion of control until later

Another perplexing difficulty

Condition resulting wholly from war

Cunliffe Report -

"Whenever before the war the bank's reserves were being depleted, the rate of discount was raised. This, as we have already explained, by reacting upon the rates for money generally, acted as a check which operated in two ways. On the one hand, raised money rates tended directly to attract gold by lessening the demands for loans for business purposes, they tended to check expenditures and so to lower prices in this country, with the result that imports were discouraged and exports encouraged, and the exchanges thereby turned in our favor. Unless this two-fold check is kept in working order the whole currency system will be imperiled. To maintain the connection between a gold drain and a rise in the rate of discount is essential."

Influence of war - Received	$2,000,000,000 gold
Stock	3,800,000,000
Reserve Banks	3,100,000,000
Excess over minimum requirements - - - -	1,640,000,000

As originally constituted lending power $900,000,000

Mass of gold, excess reserves,
further lending power - - - - - 4,400,000,000

If normal exchange rates within gold shipping point
Expansion
Price advances
Gold exports

With exchanges now premium
No large gold exports
Orgy of speculation
Price advances
Reduced purchasing power of dollar progressively
Neutral countries
Sterling
Franc
Etc., etc.

This bring to the point -
Gold exports visible and convincing evidence
Other conditions might justify rate increase
Large gold exports as in 90's convincing
United States gold reserves imperiled
No argument needed
Small losses now possible
Canadian shipments
Currents of trade and balances of payments could draw some gold
Discounts -
Sterling 10%
Vanishing point, Germany, Austria, Russia
Large exports unlikely
Only large possibility change of monetary laws, balanced budgets

Absence of gold movements and great rate differences how regulate?

Questions of policy of human judgment

Various policies suggested
All suggest two plans which are fundamental -
1. Discretion
2. Rates
Do not conflict - complementary
Both have advantages and limitations

My opinion rate regulation most effective under present conditions with great mass if rates wisely established, especially in large cities, where interest rates lowest, most stable and narrowest range.
More remote sections; personal judgment and discretion

Difficulties of discretion -
1. Ex post facto; transactions already occurred
Scolding
If loan declined penalty applies
Loans called
Scolding causes irritation

2. Geographical -- distances from bank

3. Basis of discretion; who shall judge
    Loss of deposits justify
    How about new loans

4. If judgment possible, who shall decide limitations of prudence
    Should members liquidate periodically, or
    Should any borrowing be continuous
    Section 4 provides that Federal Reserve Bank shall
        "extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks"
    Difficult making nice decisions within district
    Much greater in all 12 districts
    Difficult exercising universal judgment
    Possibly permanent credit to high rate sections

5. Regulation total amount credit
    Mathematical arrangement impossible
    Requirements vary in seasons and sections

6. Responsibility declining loans causing members to decline customers
    Responsibility rests upon member bank directors and officers
    Consequences to System too serious

7. Possibly not all difficulties
    Power excites appetite for more power
    Bureaucratic
    Autocratic developments
    Bankers and Public rebel

Rate Control -
  Members rates 10% and 12%
  5% on deposits
  Reserve Bank rate 4 1/2%
  Temptation to member
  Restraining rate would penalize city banks
  Discretion seems only possible plan
  See how rate operates -
    Inverted pyramid
  Rate control has variety of advantages
    Democratic
    Applies to all
    Little expostulation or remonstrance
    But will not influence mountain peaks
    Will apply to great bulk
    Without statistical support influence extends back
      Drives borrowers home
  Describe how it operates
    Difference between effective and penalty rate
    Each bank knows cost of funds; return on funds
    Rate on particular piece of paper discounted not controlling
    No relation between two rates
    Effective rate might be somewhat below penalty rate
    Probably somewhere within range of average cost, including overhead, and average of earning rate

Chief advantage of rate control
- Regulates total volume of credit, distinguished from total individual borrowings
- Individual bank line credit matter
- Rate policy is national; designed to regulate total volume and promote stability
- Many people believe more money, cheap money means prosperity and happiness
- Impossible to explain advances of rates
- Absence natural movements gold unfortunate
- Prompt return to gold standard and gold payment

Resume:
- Power to create reserve balance and
- Considerably regulate volume
- Expansion ex post facto; transactions have already occurred
- Cannot control application of proceeds
- Credit unlikely to return if rates too low
- High rate induces return
- Under present System no surplus
- Also no deficiency
- Reserve barometer is reserve bank percentage
- Impulse to change rates, general conditions
- Gold exports not likely
- Regulation of volume chief function
- Effected by rate changes and due caution individual borrowings
- Federal Reserve System social institution - not super-government
- Creature of Congress
- Public demanded it
- Not created banker, farmer, manufacturer, merchant, Treasury
- Serves all
- Guiding influence <u>not</u> profit
- Surplus earnings to Government
- Some service direct
- Others indirect
- Intelligent study and enlightened criticism
- Future depends on good behavior - winning and holding confidence

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FEDERAL RESERVE BANK
OF NEW YORK

OFFICE CORRESPONDENCE

DATE ______ 192__

TO Mr. Strong

SUBJECT:

FROM Statistics Department

The Federal Reserve Act was amended on June 21, 1917 and for purposes of calculating the lending power of the Reserve Banks under the requirements of the Act prior to that time we have taken the figures for June 15, 1917.

The following table answers the questions on comparative lending power then and now:

	June 15, 1917	November 22, 1922
Total Reserves	$1,080,000,000	$3,220,000,000
Gold reserves	1,050,000,000	3,090,000,000
Reserve Required	550,000,000	1,580,000,000
Excess Reserves	530,000,000	1,640,000,000
Additional Lending Power	1,400,000,000	4,400,000,000
Total Lending Power	2,800,000,000	8,600,000,000

1a. At what time in the early 90's (when the endless chain was working) were the Revenues of the Treasury deficient?

In the fourth quarter of the fiscal year of 1891 and in two quarters of 1892.

b. When was the period of unfavorable trade balances?

Fiscal year 1888 - $28,000,000
1889 - 3,000,000
1893 - 19,000,000 (but for the last six months of this year the unfavorable balance was $69,000,000.)

c. When were we exporting gold and how much?

Excess of exports over imports fiscal years as follows:

1889 -	$50,000,000
1890 -	4,000,000
1891 -	68,000,000
1892 -	500,000
1893 -	88,000,000
1894 -	5,000,000
1895 -	30,000,000
1896 -	79,000,000

d. On what dates and for what amounts in the early 90's were the reserves of the New York Clearing House banks impaired?

1890			1893		
33rd	week	$ 600,000	27th	week	$ 5,100,000
34	"	2,500,000	28	"	4,300,000
35	"	500,000	29	"	1,300,000
36	"	1,400,000	30	"	4,300,000
37	"	3,200,000	31	"	4,000,000
42	"	300,000	32	"	16,500,000
43	"	100,000	33	"	11,800,000
45	"	2,500,000	34	"	6,800,000
46	"	900,000	35	"	1,500,000
49	"	2,400,000			

e. When did the actual crash come that resulted in the issuing of Clearing House Loan certificates?

November 11, 1890 June 1893

f. What was the total amount of certificates issued in the early 90's?

Total issue New York Clearing House banks in 1890 - $16,645,000
" " " " " " " " 1893 - 41,490,000

2a. When did the Associated Clearing House Banks' reserves become deficient in 1907 and for what amounts and on what dates?

1907	Oct.	26	$ 1,200,000	
	Nov.	2	38,800,000	
		9	51,900,000	
		16	53,700,000	
		23	54,100,000	(maximum)
		30	53,000,000	
	Dec.	7	46,200,000	
		14	40,100,000	
		21	31,800,000	
		28	20,200,000	
1908	Jan.	4	surplus	

b. How high did call money loan?

125%

c. What was the premium on currency at the time of the 1907 panic?

Reached 4 per cent three times in November.

3a. After the liquidation in the early 90's the Clearing House banks developed enormous surpluses and, as I recall, money loaned below one per cent. When did this surplus reach its maximum and how much was it?

January-February 1894 Maximum $111,600,000, first week February

b. The same occurred in 1907 or 1908: when did the surplus arise and how much was it?

Began January, 1908 and reached maximum, $71,000,000 last week of June.

c. In the early 90's when this great surplus reserve arose what was the total required reserves of the associated banks, as distinguished from the reserve they actually had, and what percentage is that compared to the required reserves of the New York Clearing House banks today?

Average required for year 1894 was $138,300,000
Average required week ending November 18, 1922 was $511,000,000
per cent 1894 to 1922 is 27.

4. What percentage of the banking deposits of the country are represented by the 10,000 banks which are members of the Reserve System?

About 55 per cent (June 30, 1921).

5. Am I correct in my belief that prior to the war our total gold stock was $1,800,000,000 and that today it is $3,800,000,000, so that our net increase is about $2,000,000,000? (This should be taken from the Treasury statements or the Assay Office reports.)

$1,891,000,000 in 1914 (June 30) and $3,902,000,000 in November 1922.

6. Under the original terms of the Federal Reserve Act, how much could the Reserve Banks have loaned without getting below the minimum reserve, i. e., after they had received payment of all the capital and reserve deposits contemplated to be paid in as the Act originally stated? (This should not be confused with the condition after later amendments to the Act)

(On June 15, 1917) about $3,000,000,000.

7. What additional lending power have we now by reason of our surplus reserve? In other words, how much can we loan without getting below the legal minimum reserve? I refer to the whole Reserve System in both sets of figures, and allowance must be made in some arbitrary way for the effect of the note issues which would inevitably accompany such expansion.

Over $4,390,000,000.

Since the Federal Reserve Banks were established, and, in recent years in increasing quantity, the reports of the System have been so complete and have described the operations in such detail that students of banking require hardly more than the official reports to gain a fairly complete knowledge of the business conducted by the ~~Reserve~~ System.

Even those who have not studied this literature understand that the Reserve Banks hold the banking reserves of the country; that they discount paper for their member banks; that they invest in bills or bankers acceptances and in the securities of the United States Government; that they issue and redeem the principal currency of the country and distribute the metallic money coined by the mints; that they collect checks and practically all other types of instruments of payment for their members; effect the settlement of the domestic exchanges; and, in their capacity as fiscal agents of the Treasury, borrow all the money required for the Treasury's operations; handle the Government debt; receive on deposit the revenues; and pay checks drawn by the disbursing officers.

It is important that this business be visualized as to volume as well as character. Bearing in mind that the Federal Reserve Bank of NewYork does about 40% of the business of the whole system, its transactions for the ten months of this year were briefly as follows: It held an average of $1,150,000,000 of reserves, practically all gold; discounted 46,000 pieces of paper aggregating $5,200,000,000 for its members; purchased 81,000 acceptances for itself and for other Reserve Banks and for member banks and foreign banks aggregating $1,150,000,000; and for account of all Reserve and other banks and of the Government and foreign banks purchased and sold $2,400,000,000. of Government and other securities; it counted and handled 315,000,000 pieces of paper currency aggregating $2,000,000,000 and handled a daily average of 26 tons of coin; collected 118,400,000 checks, notes, drafts, coupons and other negotiable instruments aggregating $56,000,000,000~~.85~~; and effected payments by telegraph, over the 15,000 miles of telegraph wires which the System nowoperates, aggregating $17,600,000,000~~.52~~. Its transactions for the Treasury as the Government's fiscal agent were of too great a volume and variety to express briefly in figures.

These figures are recounted for the purpose of emphasizing the character and extent of the contact of the Reserve System with the credit and currency operations of the country and, consequently, the significance of the functions which the Reserve Banks exercise.

As to the System's policies and the purposes which inspired them, there is now an extensive literature in the shape of critical books, magazine articles and public addresses. It ~~will~~ would be but repetition for me to go over ground so fully discussed by so many competent students and critics.

There is, however, one function of the Reserve System the importance of which cannot be over-emphasized and which I have determined to discuss tonight because it is, in fact, the heart of the System upon which the operation of every other part depends. I refer to the entirely new element which was superimposed upon our banking system in 1914 by the establishment of the Reserve Banks, which were given the power to influence or to regulate or to control the volume of credit. Every other function exercised by the Reserve Banks sinks into insignificance along side of the far reaching importance of this major function.

Without regard to the views which you may entertain as to the various theories in regard to the purchasing power of money, or what may be more popularly described as the quantity theory of money, there is hardly anyone who is familiar with these matters who will not agree that no influence upon prices is so great in the long run as is the influence of considerable changes in the quantity of money, - by which I mean not only had

metal coins and paper money, but bank deposits upon which checks may be drawn. The Reserve Act did in fact, whether by conscious design of its authors, or not, bring about an almost ~~a~~ revolutionary change in three important particulars in ~~the relation between~~ bank credit ~~and~~ which may in turn have an important relation to prices. (1) The Act originally reduced the reserve requirements of the national banks, and, subsequently in 1917, reduced them again. The effect of this was to make reserve money more efficient in that it was permitted to sustain a larger volume of loans and deposits than previously had been permitted. (2) By conferring the so-called clearing house functions upon the Reserve Banks, it speeded up the whole system of payments; checks are collected and paid more promptly; the course of currency shipments throughout the country has been greatly shortened and currency passes more promptly to points of redemption; and the country-wide clearing house, known as the Gold Settlement Fund, operated on the basis of daily telegraph settlements, has ~~immensely~~ greatly shortened the length of time required to effect settlement of the entire domestic exchanges of the country. (3) But the most important change, as I have stated, is that conferring the power upon the Reserve Banks to actually permit or influence ~~the~~ changes in the volume of money which serves as bank reserves or circulates as currency. My thesis, therefore, is addressed solely to this question of the regulation of the volume of credit and to make clear what a change has taken place because of the granting of this power.

Beer-

Let me refresh your memory as to how credit matters operated prior to 1914: Practically all of the commercial banks and trust companies of the country were subject to various statutory limits as to the minimum amounts of cash and redeposited reserve which they were required to carry. Except by legislative change in reserve requirements, there was no possibility of increasing the supply of reserve money beyond what arose through gold production or gold imports, neither could the supply of reserve money be contracted unless gold was exported. So it may be generally stated that the total reserves of all the banks was incapable of contraction except by paying it out to the public or exporting it; and equally incapable of expansion unless redeposited by the public or unless gold flowed into the country from abroad or was produced from the mines. Bear in mind Loan total and not percentage. This had serious consequences in its relation to that mysterious phenomenon which is now being so carefully investigated and which we call the business (or, as I would prefer to call it, the credit) cycle. At one extreme of the cycle the reserves of the banks regularly became impaired. With deficient bank reserves we were liable to see rates for "speculative" money advance to 100% or even more at times, and the charge for credit to merchants and manufacturers became a severe burden upon production and distribution. In such a situation almost any percussion cap would start an explosion. In 1893-5 deficient revenues of the Government and an unfavorable trade balance which resulted in gold exports, coming at a time when there was agitation for a change in our monetary laws led to great uneasiness. The reserves of the New York Clearing House banks showed shortages from $__________ to $____________. Fear developed that the Treasury would not have sufficient gold to meet its obligations and finally the crash came on _________ (date) resulting in the New York banks, and banks generaly throughout the country, suspending currency payments; very largely suspending cash settlements between themselves for checks sent for collection not only through the local Clearing House but throughout the country. At that time a total of $____________ Clearing House loan certificates were issued.

Much the same thing happened in 1907, when, after a period of deficient banking reserves running from $____________ to $____________ the extended condition of a number of New York City banks caused alarm and general suspensions of like character to those of the early 90s throughout the country. Call money loaned as high as ___%; currency went to _____% premium; and the domestic exchanges again were frozen.

Then again at the other extreme of the cycle, after a period of liq uidation, surplus reserves poured into the money centers. After this same liquidation in the early 90s the NewYork Clearing House banks at one time showed surplus reserves of $__________________. And bear in mind that at that time the total required reserves of the New York Clearing House banks were but ____% of what they now are. Money then loaned at less than 1%. And the same occurrence was witnessed after the liquidation of 1907 when the surplus reserves of the New York City Clearing House banks rose to $______________________.

While under the conditions first described, every bank was seeking to withdraw loans, under the conditions last described, the banks were forcing money into the market. Money would become almost ~~literally~~ unloanable and the temptation to the speculator and his kind was extreme. ~~excited beyond resistance~~. I, personally, recall making loans on the New York Stock Exchange at 3/4 of 1%.

These extreme credit conditions arose because there was no stretch. When the period of surplus reserves arose funds poured into the speculative markets. When the period of deficient reserves arrived all the banks sought to contract their loans to make good their reserves and we witnessed the extremes of s peculation and of business embarrassment. There was neither ~~any~~ control of the volume of credit, nor moderating influence as to rates of interest. A nd, finally, there was no control over the movements of gold in and out of the country. I recall the Governor of the Bank of England telling me in 1916 that one of the most menacing influences on their reserve position was the possibility of a gold movement to America or from America as a result of our erratic money market, which no influence that they could exert was capable of stemming; of their regarding our so-called free gold market as one of the worst menaces to the stability of their own credit position.

I have refreshed your memory as to the conditions which prevailed under the old system in order to bring out in contrast the extent to which it differs from present conditions. As things are now, when a period of business expansion arrives, whether it be an annual and seasonal one, or whether it be due to a series of favorable crops at home and bad harvests abroad, - in other words whether it be the short cycle of seasons or the long cycle of periods of years,- such expansion, whatever its cause, can now be easily financed because of the power of the Federal Reserve System to furnish the required reserve money as needed and thereby permit the member banks in turn and in larger volume to increase their loans and discounts, and, correspondingly, their deposits. But now we come to one or two grave fallacies in regard to the Reserve System. I fear there are many people who still hold to the notion that some mysterious influence or process will operate when this enlarged volume of credit is no longer needed so that it will be induced, without any compulsion or persuasion, to complacently walk back to the Reserve Bank and surrender itself for cancellation. And possibly another fallacy still prevails among those who believe that because of certain very exacting requirements of the Federal Reserve Act, and the regulations of the Reserve Board, as to the type of loan which the Reserve Banks may make, or the character of the paper which they may discount, that there is some control exercised by the Reserve System as to the uses to which the credit so extended by the Reserve Banks shall be applied by the borrowing member bank. ~~But~~ Practical experience in the operation of the Reserve System seems to have disclosed something of importance ~~the following~~ as to the way credit is extended; as to the way that credit is retired when it is no longer needed; and as to the impossibility of control of the use that shall be made of it while it is in existence.

First as to the extension of credit, which may be described as normal or seasonal or necessary and legitimate. Practically the only motive which impels a member bank to borrow from the Reserve Bank is to make good an existing, or expected, impairment of its reserve. I think you may accept my statement that this is true, but let me give one illustration. Every member bank is required by law to maintain a certain minimum reserve on deposit with ~~the~~ Reserve Bank~~s~~ and if it fails to do so it is subject to an interest penalty upon the amount of the impairment considerably higher than the regular rate of discount of the Reserve Bank~~s~~. This reserve in some cities is figured as a weekly average and in the rest of the country as the average of a fortnight. Every member bank must report its reserve position and submit to penalty if the average is impaired. Now, in practice, the way this works is very simple, and I shall use the case of a large New York City bank to illustrate; Early in the morning it sends its exchanges through the Clearing House and, as the result, it has to pay out reserve money or receives surplus reservemoney according to whether it is debtor or creditor. We settle - Throughout the day it has deposits made and withdrawn; it makes now loans and has old loans repaid; it buys and sells ~~investments and other~~ securities; and ~~buys and sells~~ foreign exchange, and furnishes currency to customers. And as the result of ~~all of this mass of~~ These and other transactions, at some hour of the day the member bank must ~~makes~~ make up what it calls its "position." If its reserve has become impaired as the result of the day's business it borrows from us to make good its reserve. If the day's transactions give rise to a surplus reserve with us, the proper thing for the member bank to do wold be to at once repay any funds which it had already borrowed from the Reserve Bank, although it may not do so. The chances are that if it does not do so it will be because it has an opportunity to employ the funds in some more profitable way than in paying off the Reserve Bank, - that is to say it can lend the money at a higher rate than the rate which it pays us upon its loan, namely ~~or~~ our discount rate. You will observe that in every case, and practically every day, the member bank, in gauging its reserve position, must of necessity determine whether it shall borrow, and if so how much, or whether it shall repay borrowings already made, and if so how much, and the alternative to borrowing or repaying is either withdrawing loans from the market in some form, if it is short, or making additional loans, if it is over, without recourse to the Reserve Bank in either case. Now, in the long run, it is my belief that the greatest influence upon the member bank in adjusting its daily position is the influence of profit or loss; that while it may regularly borrow to make good impaired reserves, it will repay its borrowings at the earliest possible moment unless the inducement of profit leads it to continue borrowing and to employ any surplus that arises in fresh loans. It may, therefore, be safely stated that as business expands for seasonal reasons or for any other reason, member banks will borrow from the Reserve Banks to make good deficient reserves caused by the expansion of their loans, provided the rate at the Reserve Bank is not so high as to make that borrowing too costly. But, on the other hand, if borrowing at the Reserve Bank is profitable beyond a certain point, there will be strong temptation to use surplus reserves when they arise for the making of additional loans rather than for repaying the Reserve Bank.

I shall discuss the question of rate control later, but I wish first ~~want~~ to emphasize this important fact: Practically all borrowing by member banks from the Reserve Banks is ex post facto. The condition which gave rise to the need for borrowing had already come into existence before the application to borrow from the Reserve Bank was made, and experience has shown that large borrowings in New York City have in the past usually been explained by the member bank as caused by the borrowing operation of the Treasury, by seasonal demands, but more frequently because of the withdrawal of deposits.

Now as to the limitations which the Federal Reserve Act seeks to impose as to the character of paper which a Reserve Bank may discount. When a member bank's reserve balance is impaired, it borrows to make it good, and it is quite impossible to determine to what particular purpose the money so borrowed may have been applied. It is simply the net reserve deficiency caused by a great mass of transactions. The borrowing member bank selects the paper which it brings to the Reserve Bank for discount not with regard to the rate which it bears, but with regard to various elements of convenience, that is the denomination of the paper, its maturity, whether it is in form to be easily and inexpensively delivered physically to the Reserve Bank or not, and it makes little difference to the borrowing bank what transactions may have caused the impairment of its reserve, because the paper which it discounts with the Reserve Bank may have no relation whatever to the impairment that has arisen. To specify more exactly, because this is an important point, suppose a member bank's reserve became impaired solely because on a given day it had made a number of loans on the stock exchange; it might then come to us with commercial paper which it had discounted two months before and which had no relation whatever to the transactions of the day; and with the proceeds of the discount make good the impairment. If it was the design of the authors of the Federal Reserve Act to prevent these funds so advanced by Federal Reserve Banks from being loaned on the stock exchange or to nonmember state banks or ~~upon~~ in any other type of ineligible loan, there would be only one way to prevent the funds being so used, and that is by preventing the member banks from making any ineligible loans whatsoever, or deny it loans if it had. And, in fact, during the peak of the period of expansion I believe the amount of paper which had been discounted with the Federal Reserve Banks equalled only about 14% of the loans and discounts of the member banks. The member banks undoubtedly had a very/much larger amount of eligible paper than indicated by this small percentage, but, beyond that, a great mass of ineligible loans, and surely it cannot be claimed that the provisions of the Act, which specify so exactly what paper is eligible, can possibly have exercised any influence upon the application of the proceeds of these loans by the member banks.

I have enlarged upon this point so as to bring out this fact:- that the expansion of the loan account of the Federal Reserve Banks, which as you know furnishes the foundation for a much greater expansion of loans and deposits of the commercial banks, can be brought about as the result of any expansion in the banking position of the country, no matter what may be its cause. The eligible paper we discount is simply the vehicle through which the credit of the Reserve System is conveyed to the members. But the definition of eligibility does not effect the slightest control over the use to which the proceeds are applied.

Going a step further, this means that the Reserve Banks will be subject to demands upon them, expressed to be sure in the form of eligible paper but which may have had their origin in any sort of expansive development, stock speculation, real estate speculation, crop moving, building operations, foregin bond issues, or anything else. Such an influence can arise through the borrowings not only of the UnitedStates Government in the market, but, indirectly, through ~~the~~ borrowings of all kinds which have the effect of impairing reserves.

Now going still one step further, let me emphasize the contrast between the conditions which prevailed in the old system and those which have now arisen. I have pointed out how, in the extremes of the trade cycle we have on the one hand impaired reserves and very high interest rates and on the other hand surplus reserves and very low interest rates. That condition has now quite disappeared. In actual operation, when the reserves of the member banks become impaired they promptly borrow and they do not have to scramble around among their customers or on the stock exchange to call loans so as to make good the impairment. So, on the other hand, when they have surplus reserves they are generally inclined to repay what they may have already borrowed from us rather than make new loans, provided, of course, our rates are properly adjusted to market rates, and they will continue to do so unless borrowing from the Reserve Bank becomes so profitable as to be a temptation. Now you will observe that under the old system we experienced these periods of reserve deficiency and extremely high rates for money and reserve surpluses and extremely low rates for money, but under the present system all that has changed. Broadly speaking, there is no surplus reserve in the hands of the ~~member~~ banks, ~~nor, in fact, the whole banking system~~ whether member of the system or not. When business expansion or new loans cause impaired reserves the member banks borrow from us; when surplus reserves arise for one reason or another, they repay to us. The consequence of this is, of course, that we have no such extraordinarily high or low interest rates as sometimes obtained. The funds flow in and out of the Reserve Bank day by day as sort of a leveling off process, so to speak.

Now in a banking system where 10,000 banks, which represent over 55 % of the banking deposits of the country, have convenient access to a source of borrowing such as the Reserve Banks, what are the possibilities that this borrowing may get beyond control; that the volume of credit may become dangerously enlarged and that in consequence we may be guilty of furnishing credit which might only result in marking up prices without any increase in production, with all of the injustices which are sure to result?

The chances of such a development can only be understood if one is familiar with credit conditions in al parts of the country. They could well be expressed in the form of a ~~colored~~ map upon which current local rates of interest throughout the country would be expressed as maps are shaded to indicate mountain ranges and their peaks. It would be found that over a large part of the south, considerable portions of the middle west, and generally throughout the Rocky Mountain region interest rates are not only high, but in many cases as high as 12%. Not only do the usury laws of some states permit banks to lend money as high as 10% or 12%, but in practice a very large number of the smaller banks throughout the country in states which permit high rates make practically all of their loans at rates ranging all the way from 8% to 12%, and there are many banks that charge even higher rates by various round about methods. But the rate difficulty becomes more acute when it is realized that even within one Federal Reserve district of large area like Kansas City or San Francisco, there may be sections where rates as high as 12% are charged, but, on the contrary, in the money centers, especially in the city where the Reserve Bank is located, the rates may be little if any higher than those prevailing in New York City.

Bearing in mind, however, that amember bank may be impelled to borrow not only because deposits are withdrawn but equally because it has made loans, in all of those sections where the loaning rate is much higher than the Reserve Bank rate the temptation will naturally be ever present to expand loans indefinitely so long as the Reserve Bank is ~~willing~~ in a position to lend. This situation, which prevails in some parts of the country, is quite different from that in New York City, where the vast bulk of bank loans are made at a fairly uniform rate and where it is possible for the Reserve Bank, by an adjustment of its rate, to exert some restraint upon the extent to which its members borrow from it.

Deferring until later any further discussion of methods of control of borrowing, which means control of the volume of credit, let ke now refer to what appears to me to be the most perplexing difficulty in the exercise of such control as may be possible through the discount rate. It is a condition which has arisen as a result of the war and it is appropriate to introduce this part of the discussion by quoting from the report made by the British Committee on Currency and Foreign Exchange, frequently called the Cunliffe report, as follows:

> "Whenever before the war the bank's reserves were being depleted, the rate of discount was raised. This, as we have already explained, by reacting upon the rates for money generally, acted as a check which operated in two ways. On the one hand, raised money rates tended directly to attract gold by lessening the demands for loans for business purposes, they tended to check expenditures and so to lower prices in this country, with the result that imports were discouraged and exports encouraged, and the exchanges thereby turned in our favor. Unless this twofold check is kept in working order the whole currency system will be imperilled. To maintain the connection between a gold drain and a rise in the rate of discount is essential."

Various influences were set in motion by the war which have resulted in our receiving ~~from Europe~~ over $2,000,000,000, in gold in excess of what we held before the war started, giving us now a total gold stock of about $3,800,000,0000 of which nearly $2,100,000,000 is held by the Reserve Banks. This is roughly a billion and three-quarters in excess of what the minimum legal reserve requirements of the Federal Reserve Act would now require us to hold against our present deposit and note liabilities. Under the provisions of the Federal

Reserve Act as originally passed by Congress, the Federal Reserve Baks, when all of the reserves had been paid in, would have had a loaning power of roughly $ ____________________. With this enormous mass of gold now in our hands, we have a lending power at present in excess of the billion and one-quarter of loans and investments now made of roughly $________________. Had there been no war there would have been no disturbance to the foreign exchanges. With the foreign exchanges fluctuating within the gold shipping points any considerable expansion of credit in this country which caused prices to sharply advance would very probably have been penalized by a gold export movement. With the exchanges as they now are, that is with the dollar at a premium practically the world over, gold cannot be exported, certainly not in large quantity except after such a period of expansion and rising prices in this country as would ~~indicate~~ entail a veritable orgy of speculation; such a debauch in credit, in fact, as would reduce the purchasing power of the dollar progressively first possibly to the level of the currencies of the neutral countries, then to sterling, then to the franc, etc. And this brings me to the point which is of such importance to the management of the Reserve System.

Before the war, as is set out in the Cunliffe report, a large gold export movement was the visible and convincing evidence, not only to the management of the bank of issue, but to the country generally, that the bank rate must be raised. To be sure other conditions than a gold movement could well justify increasing the rate of discount of the bank of issue, but a large gold export movement, such, for instance, as we suffered in the early 90s, which even impaired the gold reserves of the Government of the United States, would require little argument or explanation to convince the country that the bank of issue must take steps to protect the gold reserve.

As we are now situated, it is true that we may from time to time lose small amounts of gold to those countries where the currency has not been greatly depreciated. We have recently shipped some gold to Canada and it was a natural movement because the Canadianexchange had gone to a premium and ~~with~~ dollars ~~at~~ to a discount as the result of a large loan which the Canadian

Governmentfloated in this country. And from time to time the currents of trade and the balance of international paymentsmay indeed result in small amounts of our excessive gold holdings being withdrawn, but, with the currencies of most of the trading and banking nations of the world so much depreciated below ours -- ranging from 10% in the case of sterling to the vanishing point in the case of Germany, Austria and Russia --- it seems altogether unlikely that any considerable amount of our surplus gold will be taken from us. Other than such a debauch of expansion as I have described, the only possibilities of early losses in gold that I can see would be through radical changes in the monetary laws of those nations whose currencies are greatly depreciated, implying, of course, the balancing of their governmental revenues and expenditures.

In the absence of the possibility, I may say even the remote possibility, of any such movement and in the face of the conditions which I have described as to interest rates in different sections of the country, what should be the olicy of the Federal Reserve System in exercising this function which is of such supreme importance of regulating or influencing the volume of credit.

This brings us in fact to those important questions of policy in which human judgment plays so large a part. Various suggestions as to the policy of the Reserve System have been advanced by critics and students. They all seem to lead back to the two methods of regulation of credit volume which are, after all, fundamental. One may be described as the exercise of discretion by each Reserve Bank as to the amount which it is willing or which it thinks wise to lend to borrowing members. The other is the exercise of such influence or control as is possible through the fixing of the discount rate. It might at first seem that these two methods of regulation were in conflict with each other, but they are in fact both necessary and complementary; both have advantages and ~~disadvantages~~ limitations.

In a generalway it is my opinion, although others may differ from me, that so long as present conditions exist, rate regulation will operate effectively in the long run as to the great mass of American bank credit, that is as to those banks which hold the principal amount of deposits and loans, provided the rates are wisely established by all of the Reserve Banks, and especially by those Reserve Banks which are located in the larger cities of the east. It is in those centers that interest rates are lowest and most stable and where the range is narrowest between minimum and maximum rates; but in the sections of the country more remote from the money centers, where interest rates are higher, as was earlier described, the exercise of a wise discretion by the management of the Reserve Bank is imperative, otherwise the facilities of the Reserve System might be abused by member banks borrowing excessively for profit.

Let me describe some of the difficulties of exercising discretion. First, the discretion, as I have earlier described, must be exercised ex post facto. The transactions giving rise to impaired reserves by the borrowing members have already occurred when the borrowing from the Reserve Bank is desired. Applying discretion to the borrowings of members under these circumstances really means that all one can do is to ~~Restore~~ Scold them. If the funds are not advanced to make good the reserve, then indeed the reserve balance is used by the member just the same only the penalty rate is higher. In the course of time that bank would restore its reserve because the law would prevent its paying dividends or making new loans until it is restored. That type of ~~lecturing also~~ Scolding however generally causes irritation.

A second difficulty is geographical. How can discretion be exercised in the case of applications for loans by member banks so remote that even the mail takes four days one way?

A third difficulty arises as to the basis upon which discretion shall be exercised. Who is to judge as to whether the transactions which cause the reserve impairment were justified or unjustified? A loss of deposits, theoretically, would always justify borrowing, but if the impairment arises because of loans made howis a judgment possible as to any one loan without judging equally of all loans made by amember bank?

Fourth, even assuming that such judgment were possible, who shall say how much each member bank shall be permitted to borrow without exceeding the bounds of prudence? Is it fair to assume that a member bank should liquidate once a year, or twice a year, so that its borrowing requirements are seasonal only, or should we admit that a certain amount of borrowing from the Reserve Banks may be permanent? Section 4 of the Act provides that a Reserve Bank shall " e xtend to each member bank such discounts, advancements and accommodations as may be safely and reasonable made with due regard for the claims and demands of other member banks." ~~but~~ Much difficulty will be experienced by the bank managers of any one district in making these nice decisions as to its own district members only, but ~~and,~~ extending this to all the managers of the twelve Reserve Banks, with the 10,000 members with which they must deal, it would indeed appear to be impossible to exercise such discretion with universal justice ~~to all~~. ~~discretion.~~ Indeed it may well be that in the absence of a ~~the~~ Branch Banking system the Federal Reserve System will be the vehicle for furnishing a certain ? amount of credit permanently to those remote sections of the country where interest rates are high and where liquid capital is deficient.

A fifth difficulty ~~will~~ appears to arise as to the regulation of the total amount of credit for the whole banking system, as distinguished from the total which any one member may be allowed to borrow. Obviously the twelve Reserve Banks cannot work ~~make~~ out such a nice mathematical arrangement of credit as would serve the requirements of all the banking system and work smoothly, because these requirements vary greatly at different seasons of the year and in different sections.

A sixth difficulty is at once obvious were the system to assume responsibility for declining loans to members which make it necessary for those members to decline loans to customers. It has always seemed to me that the primary responsibility for any loan made by a bank to its customer should rest with the officers and directors of that bank and that the Reserve Bank should never assume that ~~the~~ responsibility ~~of~~ nor be willing to accept the consequences of exercising it.

And a seventh & last difficulty, although this may not indeed be all of them, is one which I regard as more serious than any of the others, - the exercise of powers conferred by the Reserve Act upon the Reserve Banks by this rule of personal discretion, I fear, would develop inevitably in time a bureaucratic attitude of mind on the part of the managers of ~~those~~ the Reserve banks which would be unfortunate indeed for the welfare of the whole banking system. Power excites appetite for more power. Bankers in time would rebel and the public would rebel.

Now, on the other hand, it must be admitted that if a member bank is able to loan all of its funds at 10% or at 12%, and if it is paying as high as 5% interest upon its deposits, and has the opportunity to discount paper at its Reserve Bank at 4-1/2%, the temptation to make the additional profit by enlarging its business and discounting freely cannot well be escaped. Nor can the Reserve Bank charge that member bank a rate which would operate as a restrain to its borrowing without charging a like rate to member banks in its own city or in the money centres of its district which would put the resources of the Reserve Bank entirely beyond the reach of most, if not all, of the large banks of the district. Therefore, however, difficult may be the exercise of discretion, in some Reserve districts, that would for the present appear to be the only means of exercising a regulatory influence.

On the other hand, let us see how the rate will operate. I think one should look upon the credit structure of the country as an inverted pyramid at the base of which is a foundation of bricks of gold which ~~have a particular property~~ Enjoy the peculiar power of sustaining each its own proportion of the entire inverted pyramid. Those bricks of gold are the bank reserves ~~deposited with~~ held by the Reserve Bank. If one brick is taken out of the base, the series of stones resting upon it, representing the volume of credit sustained by that reserve ~~base~~ brick, must, inevitably, come down. And if a brick is added, by so much the pyramid is very shortly enlarged. If the Reserve Bank rate is so low as to be an inducement to borrowing additional tiers of bricks will be laid at the foundation and the pyramid will be by so much enlarged;and the reverse is equally true if the rate does not induce borrowing, - the size of the pyramid may be kept unchanged, or even reduced.

A rate control of the volume of credit has a variety of advantages. One is that it is democratic. It applies to all alike and it requires little, if any, expostulation and remonstrance to make it effective. It must be admitted that an advance in the discount rates by the Reserve Banks will not necessarily influence promptly the mountain peaks of high interest rates in ~~the~~ some ~~various~~ sections. But I rather doubt whether it is necessary that it should do so. Although not capable of statistical support, I think the statement may be hazarded from past experience that a rate which is effective in checking borrowing in the money centers, or even in reducing borrowing, will indirectly be an influence in all sections of the country. It certainly has the effect of what I might describe as "driving borrowers back home." It is customary for many concerns which do a large business to borrow in the cheapest money markets, no matter where their offices and business may be located. If New York, for instance, should advance discount rates and member banks in turn advanced tates to their customers, a certain number of these out-of-town borrowers would go to their loca l banks for their loans if the rates there are satisfactory so as to enable the borrower to pay off in New York. This process I believe would be found, could it be analyzed, to be many times repeated, so that the effect of rate changes in the twelve Reserve cities is not confined alone to those cities but extends throughout the country.

Another point frequently overlooked in regard to the effect of the rate is due to lack of understanding of the way in which borrowing from the Reserve Bank originates, - that is through impaired reserves. Every bank knows about what ~~itsxexpensesxandxoverheadxamountxtox~~ its loanable funds cost it on the average and about what it receives on all of the money which it is loaning. It knows about what its expenses and overhead amount to and the difference is its profit. When a bank's reserve becomes impaired so that it must borrow, it does not pick out a particular piece of paper which it has discounted at a higher rate of interest and then rediscount that paper at the Reserve Bank rate and figure that it is making a profit, but it is much more liable to see whether the borrowing from the Reserve Bank at the Reserve Bank rate involves in point of fact an absolute loss, or whether it may not be less expensive to reduce loans or sell investments and avoid borrowings. Expressing it differently, the rate at which a Reserve Bank lends to its member bank has no particular relation to the rate ~~xk~~ which a member bank receives on any of its transactions, but it has a relation to the average of all rates received by the member bank and the average cost of all of its loanable funds. And from this I have always concluded what I firmly believe to be the fact, that a Reserve Bank rate in order to be effective in restraining undue borrowing, does not necessarily need to be a penalty rate, that is to say a rate fixed so high that there will be no differential in favor of the borrowing bank on any paper which it may have taken from its customers, even the highest rate paper. But an effective rate will likely be somewhere within the range between the average cost of all its loanable funds, including overhead, and the average that it receives upon all of its earning assets, with due allowance, of course, for loss of interest on reserves.

The chief advantage of rate control, however, is in the way it serves more definitely to regulate the total volume of credit as distinguished from the total amount of loans to ~~an~~ any one individual member bank. I would regard the determination of the amount to be loaned to an individual member bank as a credit matter to be determined just as any loan would be determined by any bank to any customer. But, on the other hand, I would regard the rate policy of the Federal Reserve System as a national credit policy more directly related to regulating the volume of credit in the country so as to maintain stable credit conditions.

Finally, however, we must recognize that there are many people who believe that more money, and cheap money, means prosperity and happiness. To those people an advance of discount rates may at times be difficult to explain. It is on that account that the absence of natural movements of gold is most unfortunate;

and it is for that reason, as well as for many others, that the world ~~is~~ will be better off ~~for~~ by a prompt return to the gold standard and free gold payments.

Permit me now to make a brief resume of this long argument: The Reserve Banks have been given the power to create reserve balances and ~~somehow~~ to a large extent to regulate the volume of credit. That volume of credit expands in response to ex post facto borrowing by member banks; the mass of their transactions causing the borrowing having already occurred, there is no means by which the Reserve Bank can control the use which is made of the funds which it loans to its members. Credit so borrowed from the Reserve Banks is less likely to return for cancellation when no longer legitimately required if discount rates are too low, and a high discount rate will operate to induce its return. The present banking system has created a situation where there is no ~~great~~ surplus of banking reserves in the country, and where there is not likely to be a deficiency. The real reserve barometer is the reserve percentage of the Reserve Banks. The impulse which will lead the Reserve System to change rates must for the present largely arise from ~~personal judgment~~ general conditions, and it cannot be expected that the impulse to advance rates will be given by gold exports for a long time to come. Therefore, the regulation of the volume of credit which is the chief function of the Reserve System must be effected by a combination of rate changes and ~~personal discretion~~ due caution as to members' borrowings.

The Federal Reserve System has always impressed me as being essentially a social institution. It is not a super-Government, it is simply the creature of Congress, brought into being in response to a public demand. It was not created ~~especially~~ only to serve the banker, the farmer, the manufacturer, nor the merchant, nor ~~even~~ the Treasury of the United States. It was brought into being to serve them all. For some the service it performs is direct, for others it is indirect, but ~~on that account~~ is not less definite nor any less important. It needs and asks that it be given the benefit of intelligent study and enlightened criticism. Its future depends upon its own good behaviour and upon its success in winning and holding the confidence of the public.

Its guiding influence is not profit. Practically all its receipts over expenses go to the government.

Not for profit.

Law as it is
Offer here for purposes
of illustration only.

Beer X

Increasing quantity reports for students

Generally understood that Reserve Banks ~~now~~ hold all reserves
Discount paper
Invest in bills and U. S. securities
Issue and redeem paper currency
Distribute metallic money
Collect checks and instruments of payment
Settle Domestic Exchanges

As fiscal agents -
Borrow
Handle Debt
Receive Revenues
Pay disbursing officers checks

Important to visualize volume -
New York Bank 40%
10 months' transactions this year -
Average Reserve $1,150,000,000 <u>gold</u>

Discounts - 46,000 pieces	Aggregate	$5,200,000,000
Acceptances 81,000 pieces	Aggregate	1,150,000,000
Government and other securities purchased and sold--------------		2,400,000,000
Currency counted 315,000,000 pieces;		2,000,000,000
Coin, <u>daily</u> - 26 tons		
Checks, notes, etc. 118,300,000 pcs;		51,000,000,000
Telegraphic payments (15,000 miles)		17,600,000,000

Treasury Transactions too great volume and variety

Figures emphasized contact with credit and currency
Significance of functions

X Policies and purposes inspired in extensive literature
Repetition of competent students and critics to discuss

One function heart of system; operation other parts depend

New element in power to influence, regulate or control volume

Other functions insignificance

Whatever views purchasing power -- quantity theory -- influence upon prices of considerable changes in quantity; metal coins, paper money; bank deposits.

4 main Elements, quantity theory - Efficiency
Velocity
Volume. Psychology -

Revolutionary changes of Act -- relation to prices

1. Reduced reserve requirements
   Original and 1917 Sustain loans & deposits -

2. Clearing House functions
   Speeding payments check collections
   Shortening currency shipments and redemptions
   Gold Settlement Fund
      Daily telegraphic settlements
      Less time settling domestic exchanges

3. Most important power to ~~prompt~~ permit or influence change in volume
   Bank Reserves
   Currency

Thesis solely regulation volume - change due to newdevelopment

Beer Story

Refresh memory credit matter prior 1914
   All banks statutory minimum reserve
   Except legislation no possible increase reserve money except gold production; imports
   Nor contraction unless exported
   Contraction by paying out or exporting
   Expansion redepositing or importing
   Bear in mind <u>total</u> and <u>not</u> <u>percentage</u>

This had serious consequences -- business or credit cycle
   One extreme - impaired; speculative rates 100%; merchants and manufacturers burden; percussion cap

      Early 90s - Rio. Def. Fall and Winter 1890 - also 1893 - $ -16,500,000 Aug -
         Deficient revenues
         Unfavorable Trade Balance last 6 mos. 1893 $ 69,000,000
         Gold Exports 1889 - 1896. $ 300,000,000
         Monetary agitation
         Uneasiness
      1893- Clearing House reserves short $16,500,000 -
         Fear Treasury default gold payment
         Crash Nov 1890 - June 1893 (date)
         NewYork, and banks generally, suspending currency payments; also cash settlements for collections throughout country 1890. 16,645,000
         Clearing House Certificates $ 1893. 41,490,000

Continuous Oct. thru' Dec.

1907 same -
Deficient Reserves $ Max. 54.000.000. Nov -
Extended condi ion certain New York City Banks
Alarm
Same development as early 90s
Call money 125 %
Currency 4 % premium
Domestic Exchanges frozen

Other extreme of cycle - liquidation; surplus reserves in Money centers

Early 90s-
Surplus $ 111.600.000. First week Feb. 1894 - 1/4 vol. = 450 Mm
Required reserve 1/4 % of present
Money below 1%

1907 same -
Surplus $ 71.000.000. June 1908

First condition banks calling loans

Last described conditions forcing money
Money unloanable
Temptation speculator beyond resistance
Personally recall 3/4 of 1%

Extreme credit conditions because no stretch
Period of surplus funds poured into speculation
Period of deficient banks withdrew causing extremes
1. speculation
2. embarrassment

No control of volume; no moderating influence rates; no influence gold movements.
Governor Bank of England 1916 -
menacing influence to their reserve position
our unregulated gold movement

Refreshing memory old conditions contrast with present conditions

Business expansion arrives natural and seasonal, or series good crops vs bad abroad
Either short or long cycle
Whatever cause Reserve System finances
Manufacture reserve money
Members increase loans and discounts larger volume; correspondingly deposits

One or two fallacies

1. Notion mysterious influence credit walk back surrender for cancellation

2. Exacting requirements type of loan, character of paper
Cannot control use of proceeds

Information Talk -

Practical experience throws light upon

1. Way credit extended
2. Way retired when not needed
3. Impossibility to control use

First extension of normal, seasonal, necessary, legitimate credit
Motive only impaired reserves
Illustration -
Minimum reserve impaired
Interest penalty
weekly; fortnightly average
Regular report
Way borrowing works simple
Illustrate NewYork City bank-
Morning exchanges; debtor or creditor; we settle balance
Deposits made and withdrawn
New loans made and old paid
Buy and sell securities and exchange
Furnish currency
Makes up "position"
Reserve impaired - borrow
If surplus - should pay
May not do so because opportunity for profit; loan higher rate
Member always watching
If must borrow - how much
If can repay - how much
Which is most profitable
Greatest influence profit and loss
Regularly borrow but always repay unless profit induces otherwise
Business e xpansion - borrowing will increase if rate not too high
if level too low, credit will not come back

Discuss rate control later
Emphasize borrowing ex post facto
Conditions already existing
Explanation usualy Treasury, seasonaldemands, loss of deposits

Limitations on eligible paper -
    Reserve impaired, member borrows
    Cannot determine proceeds applied
    Amount simply net deficiency
    Borrower selects paper <u>not</u> for <u>rate</u>, <u>but</u> <u>convenience</u>
        Denomination
        Maturity
        Easily delivered
    Discounted paper no relation to transactions causing impairment
    Illustrate -
        Stock Exchange Loans -
            Commercial paper discounted two months before; no relation to transactions
            Proceeds makes good reserve

If design of authors prevent funds stock exchange or other ineligible only way prohibit any such loans.

Peak of expansion 14%
    Member banks held much larger amount
    Also large amount ineligible
    No possibility to influence application

Enlarged upon point to emphasize
    Expansion Reserve Bank loans foundation greater expansion
    Result from any cause
    Eligible paper simply vehicle
    Definition effects no control over use

Step further -
    Reserve Banks feel demand expressed eligible paper
    Origin in expansion stock speculation, real estate, crops, building, Treasury, anything impairing reserves.

Step still further -
    Contrast old and new situation
        Old -
            Extremes; impaired reserves high interest; surplus reserves low interest.
    That ~~all~~ largely disappeared
        Now -
            No scrambling to call, but borrowing — Exc. in Rio. BR:
            When surplus, repaying
            Broadly speaking no surplus, everything over swept into us
            Consequence, no very high or very low rates
            Funds flow in and out of Reserve Banks
            Leveling process

10,000 banks 55 % of ~~reserves~~ Resources -
Convenient access
Possibilities getting beyond control
Volume of credit dangerously enlarged
Mark up prices with no increased production
Injustice such development

Difficulties of Control

Must understand credit conditions throughout country
Could be expressed in map
Variations in rates in sections
Usury laws
Rates from 8%t o 12%
Difficulties within district between cities and country
Need for borrowing not only deposit withdrawals, but newloans
Temptation in high rate sections extreme
Very different from New York City and money centers, - rates more uniform

Defer further discussion of control until later

Gold drain

A nother perplexing difficulty -
Condition resulting wholly from war
Cunliffe Report -
"Whenever before the war the bank's reserves were being depleted, the rate of discount was raised. This, as we have already explained, by reacting upon the rates for money generally, acted as a check which operated in two ways. On the one hand, raised money rates tended directly to attract gold by lessening the demands for loans for business purposes, they tended to check expenditures and so to lower prices in this country, with the result that imports were discouraged and exports encouraged, and the exchanges thereby turned in our favor. Unless this twofold check is kept in working order the whole currency system will be imperiled. To maintain the connection between a gold drain and a rise in the rate of discount is essential."

Influence of war - Received $ 2,000,000,000 gold
Stock $3,800,000,000
Reserve Banks $3,100,000,000
Excess over minimum requirements ------ $ 1,640,000,000

June 14. $ 1,891. m m
Nov 22. $ 3,902. m m

As originally constituted lending power $ 900,000,000 in Excess Dec 31/15 min. Res. -
Mass of gold, excess reserves,
further lending power ---------- $ 4,400,000,000

Gold Gathered in from Circles

If normal exchange rates within gold shipping point
    Expansion
    Price advances
    Gold exports

With exchanges now premium
    No large gold exports
    Orgy of speculation
    Price advances
    Reduced purchasing power of dollar progressively
        Neutral countries
        Sterling
        Franc
        Etc., Etc.

This bring to the point -
    Gold exports visible and convincing evidence
    Other conditions might justify rate increase
        Large gold exports as in 90s convincing
        United States gold reserves imperilled
        No argument needed
    Small losses now possible
        Canadian shipments
        Currents of trade and balances of payments could draw some gold
        Discounts -
            Sterling 10%
            Vanishing point, Germany, Austria, Russia
    Large exports unlikely
    Only large ~~possibility~~ change of monetary laws, balanced budgets

Now as to Control -

Absence of gold movements and greatrate differences how regulate?

Questions of policy of human judgment

Various policies suggested
    All suggest two plans which are fundamental -
        1. Discretion
        2. Rates
    Do not conflict - complementary
    Both have advantages and limitations

My opinion rate regulation most effective under present conditions with great mass if rates wisely established, especially in large cities, where Interest rates lowest, most stable and narrowest fange.
    More remote sections; personal judgment and discretion

Difficulties of discretion -

1. Ex post facto; transactions already occurred
   Scolding
   If loan declined penalty applies
   Loans called
   Scolding causes irritation

2. Geographical -- distances from bank

3. Basis of discretion; who shall judge
   Loss of deposits justify
   How about new loans

4. If judgment possible, who shall decide limitations of prudence
   Should members liquidate periodically, or
   Should any borrowing be continuous
   Section 4 provides that Federal Reserve Bank shall
   "extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks"
   Difficult making nice decisions within district
   Much greater in all 12 districts
   Difficult exercising universal judgment
   Possibly permanent credit to high rate sections.

5. Regulation total amount credit
   Mathematical arrangement impossible
   Requirements vary in seasons and sections

6. Responsibility declining loans causing members to decline customers
   Responsibility rests upon member bank directors and officers
   Consequences to system too serious

7. Possibly not all difficulties Not Super. Govt -
   Power excites appetite for more power
   Bureaucratic
   Autocratic developments
   Bankers and Public rebel

Admit need however in some way to control -

Rate Control -
- Members rates 10% and 12%
- 5% on deposits
- Reserve Bank rate 4-1/2%
- Temptation to member
- Restraining rate would penalize city banks
- Discretion seems only possible plan
- See how rate operates -
  - Inverted pyramid
- Rate control has variety of advantages
  - Democratic
  - Applies to all
  - Little ~~No~~ expostulation or remonstrance
  - But will not influence mountain peaks
  - Will apply to great bulk
  - Without statistical support influence extends back
    - Drives borrowers home

Describe how it operates General Conception of borrowing -

Difference between effective and penalty rate
Each bank knows cost of funds; return on funds
Rate on particular piece of paper discounted not controlling
No relation between two rates
Effective rate might be somewhat below penalty rate
Probably somewhere within range of average cost, including overhead, and average of earning rate.

Chief advantage of rate control

Regulates total volume of credit, distinguished from total individual borrowings
Individual bank line credit matter
Rate policy is national; designed to regulate total volume and promote stability
Many people believe more money, cheap money means prosperity and happiness
Impossible to explain advances of rates
Absence natural movements gold unfortunate
Prompt return to gold standard and gold payment

Resume:

Power to create reserve balance and
Considerably regulate volume
Expansion ex post facto; transactions have already occurred
Cannot control application of proceeds
Credit unlikely to return if rates too low
High rate induces return
Under present system no surplus rates
Also no deficiency
Reserve barometer is reserve bank percentage
Impulse to change, general conditions
Gold exports not likely
Regulation of volume chief function
Effected by rate changes and due caution individual borrowings
Federal Reserve System social institution - not super-government
Creature of Congress
Public Demanded it
Not created banker, farmer, manufacturer, merchant, Treasury
Serves all
Guiding influence <u>not</u> profit
Surplus earnings to Government
Some service direct
Others indirect
Intelligent study and enlightened criticism
Future depends on good behavior- winning and holding confidence.

Contact by operations shown prior page

Federal Res. System -

Only New York -

Personal views -

Earnestly -

Criticise

R. H. Green

don't know enough -

Resentment - Help -

Inadvertance -

1a. At what time in the early 90s (when the endless chain was working) were the Revenues of the Treasury deficient?

In the fourth quarter of the fiscal year of 1891 and in two quarters of 1892.

b. When was the period of unfavorable trade balances?

Fiscal year 1888 - $28,000,000
1889 - 3,000,000
1893 - 19,000,000 (but for the last six months of this year the unfavorable balance was $69,000,000.)

c. When were we exporting gold and how much?

Excess of exports over imports fiscal years as follows:

1889 -	$50,000,000
1890 -	4,000,000
1891 -	68,000,000
1892 -	500,000
1893 -	88,000,000
1894 -	5,000,000
1895 -	30,000,000
1896 -	79,000,000
	324,500

d. On what dates and for what amounts in the early 90s were the reserves of the New York Clearing House banks impaired?

1890			1893		
33rd	week	$ 600,000	27th	week	$ 5,100,000
34	"	2,500,000	28	"	4,300,000
35	"	500,000	29	"	1,300,000
36	"	1,400,000	30	"	4,300,000
37	"	3,200,000	31	"	4,000,000
42	"	300,000	32	"	16,500,000
43	"	100,000	33	"	11,800,000
45	"	2,500,000	34	"	6,800,000
46	"	900,000	35	"	1,500,000
49	"	2,400,000			

e. When did the actual crash come that resulted in the issue of Clearing House Loan certificates?

November 11, 1890 June 1893

f. What was the total amount of certificates issued in the early 90s?

Total issue New York Clearing House banks in 1890 - $16,645,000
" " " " " " " " 1893 - 41,490,000

2a. When did the Associated Clearing House Banks' reserves become deficient in 1907 and for what amounts and on what dates?

1907	Oct.	26	$1,200,000	
	Nov.	2	38,800,000	
		9	51,900,000	
		16	53,700,000	
		23	54,100,000	(maximum)
		30	53,000,000	
	Dec.	7	46,200,000	
		14	40,100,000	
		21	31,800,000	
		28	20,200,000	
1908	Jan.	4	surplus	

b. How high did call money loan?

125%

c. What was the premium on currency at the time of the 1907 panic?

Reached 4 per cent. three times in November.

3a. After the liquidation in the early 90s the Clearing House banks developed enormous surpluses and, as I recall, money loaned below one per cent. When did this surplus reach its maximum and how much was it?

January-February 1894 Maximum $111,600,000, first week February.

b. The same occurred in 1907 or 1908: when did the surplus arise and how much was it?

Began January, 1908 and reached maximum, $71,000,000 last week of June.

c. In the early 90s when this great surplus reserve arose what was the total required reserves of the associated banks, as distinguished from the reserve they actually had, and what percentage is that compared to the required reserves of the New York Clearing House banks today?

Average required for year 1894 was $138,300,000
Average required week ending November 18, 1922 was $511,000,000.
per cent. 1894 to 1922 is 27.

4. What percentage of the banking deposits of the country are represented by the 10,000 banks which are members of the Reserve System?

About 55 per cent. (June 30, 1921)

5. Am I correct in my belief that prior to the war our total gold stock was $1,800,000,000 and that today it is $3,800,000,000, so that our net increase is about $2,000,000,000? (This should be taken from the Treasury statements or the Assay Office reports)

(June 30)
$ 1,891,000,000 in 1914/and 3,902,000,000 in November 1922.

6. Under the original terms of the Federal Reserve Act, how much could the Reserve Banks have loaned without getting below the minimum reserve, i.e. after they had received payment of all the capital and reserve deposits contemplated to be paid in as the Act originally stated? (This should not be confused with the condition after later amendments to the Act)

(On June 15, 1917) about $3,000,000,000.

7. What additional lending power have we now by reason of our surplus reserve? In other words, how much can we loan without getting below the legal minimum reserve? I refer to the whole Reserve System in both sets of figures, and allowance must be made in some arbitrary way for the effect of the note issues which would inevitably accompany such expansion.)

Over $4,390,000,000.

MISC. 3.1 60M-4-22

FEDERAL RESERV[...]NK
OF NEW YORK

OFFICE CORRESPONDENCE

DATE ______ 192

To Mr. Strong

SUBJECT:

FROM Statistics Dept.

The Federal Reserve Act was amended On June 21, 1917 and for purposes of calculating the lending power of the Reserve Banks under the requirements of the Act prior to that time we have taken the figures for June 15, 1917.

The following table answers the questions on comparative lending power then and now:

	June 15, 1917	November 22,1922
Total Reserves	$1,080,000,000	$3,220,000,000
Gold reserves	1,050,000,000	3,090,000,000
Reserve Required	550,000,000	1,580,000,000
Excess Reserves	530,000,000	1,640,000,000
Additional Lending Power	1,400,000,000	4,400,000,000
Total Lending Power	2,800,000,000	8,600,000,000

War College Address

CONSCRIPTION OF LABOR AND OF SERVICE

1. It is plain that throughout the Middle Ages, that is to say the period between the fall of the Roman Empire and the barbaric invasions on the one hand and the end of the Tudors, the age of Louis XIV and for some countries the French Revolution on the other, the ordinary man, from free tenant to serf, was bound to the soil in some degree in all European lands. His sense of dependency might vary according as the power from which his tenure was derived was the Crown, the Church or some intervening Lord of the Manor, but the service due was practically the same, labor of some sort whether agricultural or military, commuted as the years went on into money payments or their equivalent.

W. J. Ashley, "Economic History and Theory." Vol. 1, page 41.

Almost all the labour upon the demesne was furnished by the villeyn tenants, who contributed ploughs, oxen and men for the bailiff's disposal. Long after commutation of services had largely taken place, the lords retained the right to assistance in all the more important processes, ploughing, reaping, threshing, carting."

Serfs worked three and four days a week from Michaelmas till August on their lord's land at field labor, and were called in also at harvest time. Where there was no intervening lord the Church and the State could exact the same labor from those holding from them. This held good for France, Germany, Italy as well as England. The labor obligation was commuted for payment in money or in goods gradually, The feudal tenure had been largely done away with in England by the Tudor period, in France by the eighteenth century, in Germany by the time of the French Revolution; but traces have survived down to modern times, as in working on the roads to pay off taxes, and in jury duty.

See articles in Palgrave's Dictionary of Political Economy on Corvée, forced labour, prestation, predial service.

The feudal tenantry in England was obliged to give forty days a year of military service. It was part of the work of the continental tenants as well, and the foot soldiers, who were the less important portion of the forces, were formed from them. The traditions of Greece, Rome, and the Germanic tribes were that every man was obliged to fight for his country or his people, and if this ideal was not enforced in feudal times, it was because fighting came to be looked upon as a privilege of the higher classes; the lords, their attendants, and the free tenants could use horses and armour, while the villeyns and serfs fought on foot, when required; in time it seemed more practical to lords and to the cities to leave them at their work and to hire trained, professional soldiers, mercenaries.

In Charlemagne's empire, the forces were unpaid and had to provide their own equipment and food. All were called out in the levée générale, their obligation being to fight for their King, for their lord and for the right to hold their land. Under the Capets in France, military services were unpaid, after them a paid soldiery was employed. Under Louis XIV there was in fact no general service, volunteers, mercenaries and drafted men forming the army, but in theory the reserves, the arrière-ban, and, for the cities, the milices bourgeoises, included every man. These theoretical conditions of obligations to serve, whether with labor or with military service, were accepted throughout Europe; the revolts against them of peasants, of religious sects, and later of men unwilling to serve in the army, were caused by some form or other of oppression or abuse in applying them or from their being revived after many years of disuse.

For the French army see: "L'armée à travers les ages," lectures delivered before the war college by E. Lavisse, C. V. Langlois and others.

In France the armies of the Revolution and of Napoleon were raised chiefly by conscription; the same process was applied to the German and Austrian armies formed to oppose Napoleon.

By the time the war broke out military service was compulsory for all males in Germany, France and Italy, as it still is; the assumption there is that every man has had military training. In Germany during the war, every man between 17 and 60 not in the army was obliged to work in war industries. In Great Britain efforts were made for some years before the war to substitute something like general military training for the militia. (Sir Ian Hamilton in "Compulsory Service"). With the outbreak of the war the conscription was introduced and, in 1915 Lloyd George advocated conscripting labor for war work too. A. B. Keith in "War Government of the British Dominions" says that conscription was not needed in New Zealand because all men were organized into a reserve force, which was called upon for labor also. In South Africa it was impossible; in Australia it was voted down; in Canada it was put through with difficulty in 1917.

Encyclopedia Britannica - Militia, Conscription.

PRICE FIXING

Governments in Europe from the beginnings have exercised the right of fixing prices for commodities and for labor. The records of prices we have back of the eighteenth century are almost wholly of prices fixed by the authorities, from Diocletian down. The rates for wages are fixed in the Code of Hammurabi. In England the Statute of Labourers, 23 Edward III, compelled men to work and determined the rate of compensation, and subsequent statutes maintained the practice; in Elizabeth's time the justices of the peace were empowered to set the wages and retained the power till near the end of George III's reign.

Palgrave Dictionary of Political Economy, Labour Statutes.

In time of war every European Government has undertaken to fix prices. In the late war Germany at once fixed prices and rationed out food. In Great Britain the Government through the Ministry of Food undertook to control prices from the start; New Zealand regulated prices by the Cost of Living Act of 1915; Australia controlled prices in general and appointed the Food Adjustment Board in 1916; Canada appointed the Food Controller in 1917, followed by the Food Board in 1918; South Africa only enforced food control after the war ended.

A. B. Keith, War Government of the British Dominions.

For the United States the fixing of prices is dealt with by W. C. Mitchell, "History of Prices during the War" and P. W. Garrett, "Government Control of Prices," Bulletins 1 and 3 of the War Industries Board's publications.

Lewis H. Haney, "Price Fixing in the United States during the War" and Simon Litman, "Prices and Price Control in Great Britain and the United States."

Mr. Garrett says that the President was finally responsible for all "Congress did not grant to the President or to any other agency authority to work out a programme of general price regulation during the war".... "The President deemed it necessary himself to become in reality a minister of price controls .... The whole body of regulations relating to prices, whether specifically allowed by legislative enactment or set up loosely under war powers, took their final administrative authority from the President.

Prof. Mitchell says, "The Government's efforts to control prices met with wide spread support among business men and consumers. Patriotism and the pressure of public opinion supported a vigorous policy of positive reduction of prices in many lines, and of "pegging" prices in many others. Conservation of food, of fuel and of miscellaneous goods was effected in considerable measure by voluntary effort, by systematic reorganization of trade practices, by Government rationing, and by control over imports..... The whole country achieved a nearer approach to rational direction of its energies than had ever been attempted before."

Mr. Litman gives a very brief history of price control in the past, with a fuller account of what was done in the French Revolution, to back up his views that price control was never successful. He shows that from time immemorial Governments have tried to handle prices. He goes fully with equally severe criticism, into all that was done in Great Britain, and the United States to control prices in the late war.

Mr. Haney says: "The price fixing agencies were so numerous, and the arrangements made often so informal, that an exhaustive treatment of the subject would be well nigh impossible.

"Prices were more or less formally fixed by various departments or branches of the United States Government for at least 110 important products, each of which required a separate price-fixing operation."

He enumerates the agencies: Congress, the President, War Industries Board (Price fixing committee), U. S. Food Administration, U. S. Fuel Administration, War Trade Board, Federal Trade Commission, U. S. Shipping Board (Emergency Fleet Corporation), International Nitrate Executive Committee, U. S. Shipping Board, Food Purchase Board, Army and Navy departments, Appraisal Boards of the Army and the Navy, U. S. Railroad Administration.

"Price fixing, in war time, is a necessary evil.... The evils may be reduced to such a minimum that, in war time, the advantages outweigh the disadvantages. On the whole, it is our opinion, that such was the case in the United States, but that the balance in favor of the price fixing was, on account of the way in which it was done, much slighter than it should have been."..... "A feeling of loyalty to the nation, or some substitute therefor, made possible much that would be difficult or impossible in time of peace."

G ~~A~~. Bendelari
Statistical Department
December 7, 1922.

Address by Gov Strong

Convention - American Farm
Bureau Federation

Sherman Hotel - Chicago.

Dec. 13, 1922.

11

Miss Mary Parker

glad guest
accept
realize
precious
opportunity
restricted
second-hand
intimately
familiarly
average farmer
perplexing
trade industry
foreign
breed
Wall Street
agriculturist
works hard
country
good time
works hard
city

I am glad to be the guest of your association and to be able to accept your invitation to address this meeting. But you realize that a New York banker probably knows precious little about farming. His opportunity to learn of farming conditions is much restricted, and most of the information which comes to him in regard to the farmer's problems is second-hand. So you will not expect me to discuss intimately and familiarly the difficult problems of farm economy. On the other hand, I suppose the average farmer likewise knows quite as little about the many perplexing problems of the New York banker, which largely have to do with the financing of the vast trade and industry of our country; and in these difficult days the even more perplexing task of financing the country's foreign trade.

New York does, however, produce a breed of farmer with which you are little familiar. Many of them are to be found in and about Wall Street. We call them agriculturists. The difference between a farmer and an agriculturist is this: - A farmer works hard on his farm all the year in order to make enough money to enable him to go to the city and have a good time; an agriculturist works hard in the city all the year in order to make enough money to run a farm where he can go and have a good time.

no experience
observations
perplexed
distressed

Having had no experience with either kind of farming, I must content myself with a few observations which have some bearing, I believe, upon the problems with which you are now very much perplexed and by which many farmers are very much distressed. Competition

Japan etc
farm districts
similarity
Consider Java
richest
climate
rainfall
hundreds miles
paddy
irrigation
patches
volcano
banked
basin of mud
water buffalo
bare-foot

A few years ago when poor health ~~necessitated~~ abandoning work for a period, I made a trip through the Far East. During some months of travel in Japan, China, Malaya, Burma, India, and the Dutch Indies, a large part of my time was spent in farming districts. One thing that struck me most, I think, was the great similarity in much that we saw. Consider Java, which is probably the richest of all of the Eastern farming countries, both in fertility of soil and in the natural advantages of an equable climate with abundant rainfall. There for hundreds of miles one sees the Javanese farmer, his wife and his children working in the paddy fields where rice is grown by irrigation. What one describes as a field is really a series of patches of land, frequently but a fraction of the size of this room, often running up the slope of a volcano, each patch carefully banked by hand to retain the water which is supplied by irrigation; - it is little more than a basin of mud. When one sees a plough, it is being drawn with leisurely dignity by a huge water buffalo. The work in fact is done almost entirely by bare-footed Javanese, both men and women, who

ankles in mud	work over their ankles in mud and water with simple
hand tools	hand implements. As you know, their principal cereal
crop rice	crop is rice, which starts its growth in a seed bed and
transplanted	is transplanted from there - every plant - by hand into
operation	the paddy. That operation alone, where for hours on end
bent back	the farmer and his wife and children stand with bentback
poking	in a pool of mud, poking these little sprouts into the
toil	ground, is a species of toil that would try the soul of
hardiest	the hardiest American farmer.
harvest	When the harvest comes, these people go into the
knives	fields with small knives and cut simply the tops of the
sheaves	stalks by hand, bind them up in little sheaves and carry Egypt
	them home on their heads. Their clothing consists of
1 - 2 garments	one or two light cotton garments. The man frequently 6000 yrs
loin cloth	works dressed only in a loin cloth, and the woman dressed
sarong	in a short skirt, or sarong, and loose jacket. The homes
houses	where they raise and support large families of children,
	consist of one or at the most two room huts. The walls
mats	are built of loosely woven mats made of strips of bamboo
thatched	or palm fibre, and the roofs are thatched with palm leaves
doors	or rice straw. The doors and windows are simply openings
no furniture	without glass or shutters. There is no furniture,
	frequently no stove, and no cooking utensils to speak of.
	The family equipment usually consists of but little more
pot	than an earthenware or copper pot in which the food is
cooking	boiled. The cooking is frequently done out in the road

road
meal
pilaf
banana leaf
planting
harvest
travelling
restaurant

in front of the house, where the family gathers around the fire, and the meal, consisting of rice mixed with some vegetables and possibly some chicken and eggs, is prepared in a sort of stew or pilaf. Not infrequently I have seen the family meal served by the simple method of each member pulling a broad leaf from a banana palm, scooping out his share of the meal from the pot and eating it with his fingers, sitting on the ground. During the planting and harvest season when the village is working in the fields, the meal is quite possibly furnished from one or more travelling restaurants, and is cooked alongside of the road, where one sees a good part of the farming community gathered in groups, eating this simple meal such as I have described.

Contribution Shows

100 years
jungle
Daendels
roads
4 million
rice, tea
coffee, sugar
Not unlike India
320 million

About a hundred years ago, this Island of Java was an almost impenetrable jungle. Under one of the early Governors - Daendels - a rather brutal system of enforced native labor brought about the clearing of the jungle and the building of a great system of roads. At that time I believe the Island had a native population in the neighborhood of four millions. To-day, the Island has a population of 36 millions, and practically all are engaged in agriculture, principally the raising of rice, sugar, tea and coffee. Now the conditions are not unlike this in other parts of the East. India with its population of 320 millions is engaged largely in just such agriculture.

Indian peasant
standard living
East irrigated
painstaking toil
draw water
25 3/4 million
vast plains
monsoon
primitive

The life of the Indian peasant farmer so far as I could observe was not unlike that of the Javanese peasant farmer, with possibly a slightly higher standard of living. I have not been in Russia, but from what I have read, one conceives that conditions there are not unlike those in India, China and Java. Practically the whole of the agricultural East is irrigated. With the most painstaking toil the peasant farmer in India irrigates his little farm with water drawn from a deep well in a bucket or the skin of a buffalo, drawn by a windlass operated by a bullock. Although 25 3/4 million acreas of land in the hill country are irrigated by the Indian Government irrigation works, the vast plains of India are cultivated by small peasant farmers, and the success of his crop depends largely upon the seasonal rainfall, called the monsoon, and upon this primitive method of irrigation.

give picture
less fortunate
compete
broadest term
area limited
frontiers
surplus

This I hope will give some picture of those less fortunate farmers in other lands with whom the American farmer does and must compete. When I say compete, I use the word in the broadest term because the work of the farmer is principally to feed the world. The area of distribution of what he produces is limited by a great variety of factors. His frontiers may expand and contract according to relative costs of production and transportation, but broadly speaking, any nation with a surplus of farm production is in competition with every other nation with a

Successfully

Burma

India

Mediterranean

refer later

competition

puzzled

figures

Year Book

surplus of farm production. While the surplus rice of Burma assists in feeding the hundreds of millions in India, the surplus wheat from India and Southern Russia competes in Mediterranean ports with American wheat. Why?

Later on I shall refer to the importance of these competitive markets; but now let us compare what I have described with our own situation. I have been deeply puzzled to explain the meaning of some of the figures published by our Government in regard to our farming industry. According to the Year Book of the Department of Agriculture, I find that the value of all of our farm crops, excluding animal products, in the last two years before the war was as follows:

Use these figures

1913 - $6,133 millions

1914 - $6,112 millions

1911 - 1912

25 billion

1917 - 1920

$55 billions

30 billions

What became

If roughly the same values were produced in 1911 and 1912, the total value of the crops of the four years immediately preceding the war was about 25 billions. From the same source, and again excluding animals, I find that the value of all the crops of the country for the four years 1917 to 1920, inclusive, was in round figures $55 billions; that is to say, in the four years subsequent to our entering the war the total value of all the crops in the United States was 30 billions in excess of the value of all of the crops in the four years immediately prior to the outbreak of the war. What became of this great treasure?

No criticism

We can roughly assume that this enlarged value could principally have been disposed of in three ways:

1. For payment of debts.

2. For increased cost of production and for improvements.

3. In a better standard of living for the farmers.

Now as to payment of debts. I find further in the bulletins of the Department of Agriculture that the total of bank loans to farmers as of December 30, 1920, was estimated at over $3,800 millions, and the total of mortgage loans exceeded $8,500 millions, and that notwithstanding the enormous enhancement in the value of the crops of the four preceding years, these figures represent the largest amount of credit ever employed by the American farmer, and in fact the census shows that between 1910 and 1920, the debts of American farmers were about doubled.

bank loans

$3,800

mortgage $8,500

enormous enhancement

largest amount

doubled
1910 - 1920

As to increased production cost. Our investigations would indicate that only a part of this could have been absorbed in increased cost of labor, fertilizer, and other operating supplies. I shall not attempt to enlarge upon what is not capable of more exact estimate, beyond saying that the experience of each farmer can be relied upon to indicate what his farm and his labor is capable of producing at any given price level.

And finally as to the farmer's standard of living. I cannot help but believe from these figures and from what I have personally observed that for provident farmers it has generally and greatly improved throughout the years.

standard of living

cannot help

provident farmer

Without
statistical
assume
expressive
possibilities
Julius Barnes
20 years
40 per cent.
4 per cent.
corn 35 per cent.
hogs 68 per cent.
smallest per
acre planted
largest per capita
farm population
developing agric.
promote
must be product
efficiency

Without burdening you with a further statistical discussion of this matter, which I confess puzzles me a good deal, may it not be safe to assume that this great value produced from the American farms is, in fact, expressive in large degree of the possibilities of improved standards of living in this country. We note - as Mr. Julius H. Barnes has recently explained - that while in the first 20 years of this century the population of the United States has increased 40 per cent., the number of persons engaged in agriculture has increased only 4 per cent., whereas the farm production during this period increased from 35 per cent. in the case of corn, to as high as 68 per cent. in the case of hogs. In other words, in this country, where we get possibly the smallest production per acre planted, and the largest production per capita of farm population, we are in fact developing agriculture under conditions which do promote the highest standards of living that are possible for farmers in any part of the world. And this standard of living must be the product of a higher efficiency applied to our abundant natural resources.

This is where we can compete

questions
approached
prosperity, wealth
happiness
famine
not uncommon
normal

Some of these questions I think are often approached without an appreciation of the fundamental facts as to what makes prosperity, wealth and happiness. For instance, consider only that such a thing as famine is unknown in this country to-day, nor has it been since our Republic was founded. Yet there was a time when famine was not only not uncommon but was almost the normal condition in North America

200 - 300 years ago
natural resources
drawn heavily
few hundred thousand Indians
died

every winter. Only two or three hundred years ago, our country possessed natural resources vastly in excess of what we now have, because since it has become settled we have drawn heavily upon the stores of our fertile soil, our coal, iron, oil, timber, and other things that we have taken out of the ground; and yet but two or three centuries ago, the few hundred thousand Indians living in this country in the midst of this vast abundance, often suffered and died from lack of food. It is not, therefore, simply the natural resources of a country that make wealth and economic contentment and a high standard of wellbeing.

population alone
densely populated
exhausting back-breaking
natural resources

Nor can it be population alone in conjunction with natural resources which makes wealth, for we have seen in the densely populated regions of the East the farmer extracting by exhausting and back-breaking toil only a miserable and precarious living from lands as rich in natural resources as our own.

What makes wealth
development
exploitation
inventive
increasing production
raises standard
no country
work and save

What makes wealth is the application of the energies and ingenuity of a people of higher intelligence to the development and use of these natural resources, to their exploitation by methods devised by inventive genius and through the conversion of the things produced into the means of again increasing production. That alone is what raises the standard of living, and no country is capable of attaining a high standard of living no matter what its population or its natural resources unless its people are willing to work and to save.

apprehend
precisely
advantages
degree
Be assured
Javanese
banana and cocoanut
couple garments
no shoes
auto, radio
Victrola, phone
movies, education

Now I apprehend that it is precisely this which has provided for the American farmer the advantages of education, and the enjoyment of association with his fellowbeings to a degree unattainable in any other agricultural country in the world. Be assured that the Javanese farmer, like the Chinese or the Hindu, has no automobile; his house garden usually consists of a few banana and cocoanut palms; his clothing a couple of simple linen garments; he wears no shoes; he has no Victrola, no radio equipment, no movies; his opportunities for education are small.

setback
scarcely be
must not
things enjoys
education
entitled
assured
so far

But in this country, and I fear in like degree in the East, agriculture has had a temporary setback. It can scarcely be, it must not be allowed to be, permanent. These things that the American farmer enjoys, including possibly more important than any other, the opportunity to educate his children, are the things to which he is entitled, and in the enjoyment of which he must be assured so far as the laws of nature under which we live in this country are capable of assuring them to him.

momentary
difficulties
speak
quoting

There are momentary difficulties. I would like to speak of one or two of the greatest difficulties with which the farmer has been confronted, by quoting a few very simple figures:

Transportation

In the Survey of Current Business issued by the Department of Commerce for November, you will find on page 111, a tabulation of cereal exports which includes barley, corn, oats, rye and wheat. Flour and meal are converted into equivalent bushels of the grains. The monthly average exports of these grains for the year 1913 was 20 3/4 million bushels. From 1913 to 1921 the monthly average varied from 14 millions in 1914 - the low figure - to 46 millions in 1921 - the high figure - and I imagine the record high figure. In the last three years, the figure has been

1920 - 35 million bushels

1921 - 46 million bushels

and so far for the year 1922 - 43 million bushels. The months of August and September of this year were 60 and 61 million bushels respectively, and those figures have only twice been exceeded in the last three years, being 90 million bushels in August 1921 and 68 million bushels in September 1921. Now compare these monthly average figures of quantities of exports of the five cereals named, with the figures of values of exports of grain and grain products for the same periods as reported by the Department of Commerce. I believe they closely relate to the quantities I have quoted.

1913 - $17 millions

1920 - 90 millions

1921 - 62 millions

1922 - 45 ~~42,500,000~~ millions

To Emphasize importance

obvious

quantity

price

another figure

It is obvious that while exports have been pretty well maintained in quantity, the varying return upon these farm exports has been caused by the price. Now let me refer to another figure. On page six of the same publication, you will find that throughout the years 1916 to 1921, down in fact to February of 1922, the chart of prices shows a very close correspondence in the index numbers of the prices of "all commodities" and of "wholesale food prices". In February of 1922, for the first time, however, a considerable divergence began to appear; the prices of "all commodities" advancing some 15 points in the index number above "wholesale food prices". In other words, prices of articles the farmer had to buy advanced out of proportion to prices of articles he had to sell.

Poor chart - Older one I had - "Statistics"

But this is a situation which never has, and I believe inherently cannot long continue. We now have in this country a tremendous urban and industrial population - twice that now of the farm population. It seems to me inconceivable that this vast army of urban and factory workers can be prosperous and the farmer not share this prosperity in the fullest degree.

Labor dollar

Now to sum up, it seems clear that:

FIRST - We seem able to compete with farmers in other countries where standards of living are far below our own.

SECOND - The quantities of our food exports are not declining. Last year, one of great depression, they were, I believe, the highest on record.

THIRD - The enormous increase in the crop values of recent years has been unprecedented and could scarcely long continue.

FOURTH - That increase did not result in a reduction of the total of the farm debt.

Increase crop - debt - since 1920

FIFTH - That the farmer needs stable prices and a proper relation of prices between what he consumes and what he produces.

The farmer
two individuals
consumer
producer
planting
current phrase
deflationist
prices low
harvest
inflationist
prices high
System
futile
fantastic
farmer needs
capitalist
laborer

The farmer like every other member of our industrial organization is, in an economic sense, two individuals. As a consumer he is interested in having prices low; as a producer he is interested in having prices high. During the planting season when the farmer is employing labor to plough and plant his fields, when he is buying fertilizer, repairing his fences and his buildings, then he is, in current phrase, a deflationist; that is, he would like to see prices low. In the fall when his crop is harvested and moving to the elevator or the concentration point, he is an inflationist; he would like to see prices high. Now obviously any system which attempted to insure that the farmer or any other man in his capacity as a consumer should get the advantage of low prices, while at the same time in his capacity as a producer getting the advantage of high prices, would be futile and fantastic. No such system is possible. I think you will agree with me without the slightest reservation that what the farmer needs as well as every other business man, whether he be a capitalist or a common

largest attainable
stable prices
violent fluctuation
relation
reasonable certainty
labor etc
reasonably
violent fall
bring into play two elements
incentive
intelligence
kind crop due regard

laborer, is the largest attainable measure of stable prices. When I say this I mean not only that, in general, prices shall not be subject to violent fluctuation but that the prices of different things so far as is possible in this imperfect world, run in their normal and natural relation with each other. If the farmer knows with reasonable certainty what his cost for the season is to be in labor and fertilizer, in supplies, in the gasoline for his tractor or car, in the wire for his fences, in the cattle that he may buy to fatten, and he can be reasonably assured also that there will be no violent fall in the price of the crop that he produces, whether it be cattle, hogs, corn, wheat or cotton, he can then bring into play the two elements which are essential to success in business, whether farming or manufacturing or what not. He can work with the incentive of a reasonably certain reward,—that is, margin of profit,— and he can apply his intelligence to the determination of what kind of a crop to grow with due regard to the advantages or limitations of the soil, the climate, of accessibility to market, and all of the other factors which should influence his judgment on this important point. It is a reasonable assurance as to stability of prices in both of his capacities as a consumer and producer which he requires in order to be assured of just reward for his toil and for the ingenuity with which he plans his work.

great problem
approached fairly
many elements

Now this great problem of prices must be approached fairly if we are to discuss it with any profit, with a clear understanding that there are many elements which enter into the making of the prices of things. Obviously, one of the

quantity
demand
state of mind
seller's buyer's
changing cost
transportation
what influences

most important is the quantity of a crop in relation to the demand. Hardly less in importance is the state of mind of the public generally, whether it is in the mood to buy, so to speak, or whether in a mood to sell; or as the economists describe it, whether it is a seller's market, or a buyer's market; and changing cost of production, changing rates of transportation cost, and a great number of other factors must be taken into account in arriving at a judgment as to what it is that influences prices to move either upward or downward.

Read

You will, however, agree with me that one of the important elements, although far from being the only controlling element, is credit, which can be expressed in various ways, but let us call it the purchasing power of money. By the purchasing power of money I include of course the relation between the quantity of money and the quantity of goods, which influences the purchasing power. By money I mean not only metal coins and paper currency which pass from hand to hand, but principally bank deposits upon which checks may be drawn; in other words, bank credit. If, therefore, stable prices are desirable and if the quantity of credit exerts any influence upon prices, as I believe it does, what should be the ~~objectives~~ objective of a banking policy? It seems to me that it should be about as follows:

On the one hand, it should insure that there is sufficient money and credit available to conduct the business of the nation and to finance not only the seasonal increases in demand but the annual or normal increase in volume which throughout long periods is fairly constant.

On the other hand, there should be no such excessive or artificial supplies of money and credit as will simply permit the marking up of prices when there is no increase in business or production to warrant an increase in the volume of money and credit. On this point I think I should state to you without reservation the views that I personally hold in regard to this important matter, and while I cannot speak for any member of the Federal Reserve System except the New York Reserve Bank, I may say that I have never heard views expressed that differ greatly from those which I now desire to express as my own.

I believe that it should be the policy of the Federal Reserve System, by the employment of the various means at its command, to maintain the volume of credit and currency in this country at such a level so that, to the extent that the volume has any influence upon prices, it can not possibly become the means for either promoting speculative advances in prices, or of a depression of prices. You must not understand from what I say that I assume that the power of price fixing rests or should rest with any one. It does not. Price changes result from a combination of many influences. So far as the influence of credit is a factor in prices, I am frank to say that I think our policy should be to avoid any development which would promote or encourage simply price expansion or price contraction. We should aim to keep the credit volume equal to the country's needs, and not in excess of its needs, and then price readjustments, as between the various classes of commodities, will take place with the least possible disturbance to agriculture or to any other industry. It seems to me that some such policy will permit of that readjustment of the values of the various classes of commodities to which we must look in order that the farmer may again enjoy that proper balance between the cost of what he consumes and the price he realizes for what he produces. When that happy time comes, and I believe confidently that it is coming, and when that margin of profit presents the opportunity of doing so, I sincerely trust that the American farmer, as a class, will need to feel less anxiety as to borrowing money, and better able to direct his efforts toward repaying what he owes.

Now as to credit and the influences which directly bear upon its administration by the Federal Reserve System. One especial reason at this time why the relationship of credit and prices must be particularly considered or is extremely important, is that one of the most important influences that normally restrains undue fluctuation of prices is not now in operation. Before the war when the credit machinery of the world was working normally, if the price level of any country got out of line with world prices, in other words, if for one or another reason prices advanced to a point where that country became a good selling market, the balance of trade turned against it; its exchange became depressed, and if the development went far enough, that country would have heavy payments to make abroad and would likely lose gold. This loss of gold impaired bank reserves. The banks of the country then were naturally forced to raise their discount rates to protect their remaining reserves. The advance in the discount rate usually brought about two developments; it attracted funds to that market and it induced people who were carrying goods, possibly for speculation, or people who had swollen inventories, to sell them. This reduced the prices of goods, enabled the country to resume exports in competition with the rest of the world, checked excessive imports, arrested the outflow of gold, and frequently caused gold to flow in.

Under the conditions of to-day, caused entirely by the war, dollars are at a premium the world around. We could indulge in a riot of speculation in this country which would put prices to very high levels, and with a few exceptions, hardly any nation in the world would be in position to withdraw large amounts of our gold. And even then our gold holdings are so great that we could still lost a large amount without suffering serious impairment of reserves. With this situation as it is, and having regard to the interests of the whole country, there is every possible inducement for the Federal Reserve System to adopt and to execute, so far as it may, a policy of stabilization in every direction; to avoid encouragement to unhealthy speculation, on the one hand, and to encourage the return of stable values, on the other hand. There may indeed be little that we can do beyond what I have described and that is to keep the credit volume at a reasonably steady level, but sufficient to meet the seasonal needs of business, and its normal annual growth.

Just good enough

specifically
farm credit
various projects
production marketing
variety proposals
familiar
3 or 4 points
candidly

Now more specifically, as to farm credit, I would like to refer in a very general way to various projects which are designed to assist the farming community in the production and orderly marketing of the crops. A great variety of measures have been proposed to the Congress, and I have no doubt that they have been carefully examined by your organization and that you are fully familiar with all of their details. There are three or four points in connection with these proposals that I would like to discuss with you quite candidly and I shall ask you to give them special consideration.

First
enlarged membership
first essential
conserving reservoir
water or fertilizer
pile in corner
even distribution
look at conditions

FIRST - In my opinion, any new legislation should be designed to very greatly enlarge the membership of the banks of the country in the Federal Reserve System. Let me say earnestly that I believe this to be a first essential to the administration of credit in the interest of agriculture. The Reserve System is the conserving reservoir of credit. That credit must be applied throughout the various sections of the country exactly as water or fertilizer, is applied to the soil. No farmer can expect to make a crop if his land is fertilized by piling a heap of fertilizer on one corner of his field. It must have a fairly even distribution, and so too with water. Now look at the conditions as to membership in the System which exist to-day. In the great area known as the Mississippi Basin, with the exception of the States of Iowa, Illinois, Indiana, Alabama, Oklahoma and Texas, and extending east, south of the Mason-Dixon line to the Atlantic Seaboard, there is no State where more than

25 per cent. of the banks are members of the Reserve System. Missouri and Mississippi have only 10 per cent. and the percentages vary as follows:

North and South Dakota	22	per cent.
Minnesota	24	" "
Wisconsin	19	" "
Nebraska	17	" "
Kansas	20	" "
Missouri	10	" "
Arkansas	24	" "
Louisiana	19	" "
Mississippi	10	" "
Tennessee	20	" "
Kentucky	24	" "
North Carolina	16	" "
South Carolina	22	" "
Georgia	23	" "
Florida	25	" "

16

The exceptions that I mention have the following percentages:

Iowa	27	per cent.
Illinois	30	" "
Indiana	30	" "
Alabama	35	" "
Oklahoma	39	" "
Texas	49	" "

6

West of this section there is only one State which has more than 50 per cent. of its banks members of the System, and that is Idaho which has 60 per cent. The percentage of membership in these western States varies from 50 per cent. in the case of California to 30 per cent. in the case of Arizona. Broadly speaking, therefore, in about one-half of the agricultural sections of this country, less than 25 per cent. of the banks are members of the Federal Reserve System, and as to the other one-half, between 25 and 50 per cent. are members. Now in the East, there is a very different situation. In my own State, New York, 72 per cent. of the banks are members of the Reserve System, and from this percentage, it runs to

51	per	cent	in	Connecticut
62	"	"	"	Pennsylvania
70	"	"	"	New Jersey
42	"	"	"	Delaware
71	"	"	"	Massachusetts
61	"	"	"	Rhode Island
55	"	"	"	Maine
56	"	"	"	Vermont
69	"	"	"	New Hampshire

If distributing liquid fertilizer 5p to 90 per cent.

If you were distributing liquid fertilizer on your farm, you would not consider that you were doing a very effective operation if from 50 to 90 per cent. of the outlets of your sprinkler were clogged. One of the particular

influence noticeable

influences of the Federal Reserve System is noticeable to us now in this way. Since last year the great bulk of the loans of the Federal reserve banks have been repaid by their

City banks

members. Most of the banks of the large cities which were at one time heavy borrowers have almost entirely paid off what they owe. But do you realize that not many months ago

2300 country banks

there were still 2300 banks - nearly 25 per cent. of our members - which were borrowing from the Reserve banks, and these were almost entirely banks in the rural communities? It has been so right in New York State.

N. Y. State 4th or 5th

You may not realize that New York is the fourth or fifth largest agricultural producer of all the States.

city repaid

The banks in our large cities have repaid most of what they owed to the Federal reserve bank. Until within the last month or two almost all that we were lending was to the country bankers and largely to those in the farming communities.

situation different
twice as many

Might not the situation have been very different indeed had there been twice as many country banks in direct contact with the Federal reserve banks and thereby enjoying the security and protection they afford, not only for themselves, but for the farmers and business men they serve?

difficulty
insufficient
contact
elements
branch banking
network
default
larger membership
two-thirds
effective

One of the difficulties of our banking system, and one which I apprehend there will be great difficulty in remedying, is that there is not a sufficiently direct contact between the different elements in the banking system, so that the capital supplies in the richer communities can be drawn upon for credit by the less developed communities where credit is needed. Of course, a system of branch banking might accomplish this, but a system of branch banking extending over an area so wide as that of our country would be most difficult to manage and would hardly be adaptable to our conditions. No one wishes to see a comparatively small number of banks extending a network of branches throughout the entire United States. In default of that possibility is it not reasonable to take some steps to bring a larger number of the country banks into the Federal Reserve System, and in part to remedy the difficulty by that means? But one-third of the banks of the country are now members of the System. If we had two-thirds of the banks in the System, I believe this distribution of credit would be sufficiently effective to meet all reasonable needs.

SECOND - Now as to another point which I believe
carefully consider — you should consider with care. It is frequently proposed
that the Federal Reserve Act be amended so that agricultural
longer maturity — paper of longer maturity than six months might be eligible
sure — for rediscount at Reserve banks. I would ask you to be sure
accomplish — that this proposal if adopted would accomplish what is desired.
Personally, I cannot see that any very great injury, in
probably no injury — fact possibly no injury at all, would result to the Reserve
System from extending the maturity of eligible agricultural
paper say from six months to nine months; but I believe
overlooks influences — this proposal overlooks some important influences which
control this type of credit. I must ask you to review such
personal experience — personal experience as you may have had in borrowing money
so as to judge whether there is not considerable basis for
the following statement:

two reasons — There are two reasons why the president or cashier
of a country bank does not like to lend money for nine months
or a year or longer to his farmer customer or for even two
or three years to a cattle breeder. One reason is that he
middleman — is simply the agent or middleman for receiving deposits
from one class of customers and lending them to another
class. Most of those deposits can be withdrawn by check
check 30 days — or upon thirty days notice. No prudent banker likes to
commit himself beyond a moderate amount for loans that run
6 mos. 3 years — from six months to as long as three years, when his own
demand deposits — obligations are payable upon demand. It is not prudent

other simple | banking. The other influence is a simple one, known to every banker. Farming is an industry in which certain

hazards inherent | hazards are inherent which are possibly greater than applying to many other industries. The cashier of the bank wishes

mature | to have the farmer's note mature at sufficiently frequent intervals so that he may be in position to meet changing

do not believe | conditions. Now personally I do not believe that simply a provision which will give the member bank the right to discount paper at the Reserve bank which has a maturity of

inducement | more than six months will be a sufficient inducement to him to make the longer time bank loans that the farmers, possibly

justified expecting | with every justification, believe that they are entitled to receive.

Practically all commercial banks have the right

no legal | to make loans now for any length of time that good judgment

reasons stated | permits. The reasons why they do not do so are those that I have stated. But even if the country banker were induced to make longer time loans simply because he gained greater

protection not induce. | protection in doing so in the event of heavy deposit withdrawals because he is able to discount this paper at the Reserve Bank, he would not want to discount long time paper

borrow profit | anyway. Banks as a rule do not borrow money nor should they be induced to borrow money from the Reserve bank simply

increase business | for profit or to permanently enlarge their business. The inducement to borrow is to take care of the needs of their

customers' needs | customers, and when they do borrow they prefer to borrow for the shortest possible time. To discount a note running for commit borrowing — nine months or more commits the borrowing bank to a long time borrowing which it would prefer as a rule not to make. And furthermore, you must bear in mind that this remedy, even if it were effective, would apply to only one-third of the banks of the country. My suggestion is that a certain proportion of these farm credits, especially those relating to the business of the stock men, should be furnished by attracting investment funds. You know that banks throughout the United States generally, and in the East particularly, are large investors in securities. They often prefer to hold securities of reasonably short maturity, and it is wise that they should. They are purchased by those banks which always have a surplus of funds over what their borrowing customers require. If by some method, the long time credit requirements of the farmer, and especially of the cattle man, can be met by some such method as this, it will in a measure avoid the difficulty which I have described as inherent in many country banks.

only 1/3 anyway

investment funds

banks buy securities

short maturity

always surplus

read this

Third

familiar

THIRD - The third point is one with which every one of you is familiar. To the extent that it is possible, it seems to me that the credit needs of the farmers should be met by the employment of existing agencies rather than by creating new agencies which for many years would be too remote from the actual borrower to afford him the immediate facilities and the close contact which present organizations can afford if properly organized. One of the principal elements in credit is the character of the borrower. A mortgage loan of course requires time for negotiation and

existing agencies

close contact

character

mortgage loans

time
inspection
title
turnover credit
promptly
character, farm record

the borrower is allowed a long time for repayment. He can make an application and send it a considerable distance to some lending office, such as a Farm Loan Bank; it can then be investigated and after a lapse of time, after the farm is inspected and the title examined, the loan may be made. But when the farmer needs credit for his turnover, he cannot wait in order to go through this elaborate operation. He should be able to go to the local institution where his character and credit and the general record of his farm is known.

intermediate
bank credit
farm loan
investment market
sympathy
commercial banks
farm loan system
read

In a word, the farmer, and especially the stock man, needs a type of credit which in maturity is intermediate between the loan which he now gets at his local bank and the long time mortgage loan which he obtains possibly through the farm loan system. For this type of credit I believe his interests will be better served by appealing to the investment market. I am wholly in sympathy with efforts towards making this possible, but the point I wish to make is that existing agencies, - the commercial banks and the farm loan system, - should be used so far as practicable but facilities provided which will enable them to furnish services which heretofore have not been possible for them to afford.

finally
cost
familiar

FOURTH - And finally there comes the question of the cost of this credit. I am perfectly aware that in some sections of the country where the usury laws permit, and possibly in some cases where the laws do not permit, the farmers are charged 8, 10 and 12 per cent. and sometimes

conception — even more. My conception of a proper system of
agricultural credit is that two elements are essential.
sufficient and reasonable — One is that a sufficient and reasonable amount of credit
should be available when needed, and the other that the
not excessive cost — cost of the credit should not be excessive. . But, on the
not fair — other hand, I do not think that it is always fair to charge
country banks — the country banks with too much responsibility for these
lack credit — interest rates. Primarily they arise from the lack of
demand — adequate credit and a demand in excess of the supply. The
best opinion — best opinion I can express upon this subject is that any
means employed for developing agricultural credit facilities
read — will go a long way gradually to eliminate some of these very
high interest rates, if the three points I have mentioned are
adequately dealt with. Membership by more banks in the
Federal Reserve System will help more than anything else to
do it.

point out — But let me point out what would be the effect of
effect — drawing upon investment funds for these loans with intermediate
drawing investment — maturity. Every million dollars of such loans negotiated
$1,000,000 — in the form of debentures or other obligations running for a
year or more which found lodgment with Eastern investors or
banks which had surplus funds to invest, would place a fund of
investment money at the disposal of the community where the
relieve burden — original loan was made, and would relieve the local banks of
the burden of a million dollars of loans which they are now
release — carrying and would release that amount of credit for other
West and South — employment. It would draw to the West and South the type

lower rates
discussing
general
informal
reconcile
foolish things
transform
Joint Comm.
War Finance
Senators
machinery
Fed. appropriation
Dept.Agriculture.
if a member
President Harding
representatives

of investment money which is needed for this intermediate agricultural financing; gradually this would effect a reduction of local rates.

Now I have been discussing in a very general and informal way some of the things which it seems to me to be more important in dealing with this matter of farm credit. The question is how to reconcile all the various views, how to prevent foolish things being done and at the same time to transform the various discussions which you and others are having into some concrete action. Let me take the liberty of making a suggestion entirely upon my own responsibility. You know that as a result of the Hearings of the Joint Commission of Agricultural Inquiry last summer, certain legislation is proposed. I have been told that the officers of the War Finance Corporation are advocating certain measures. I believe that more than one Senator has introduced or is proposing to introduce bills in the Senate to deal with this subject. The measures with which I am familiar bring into play by one or another method, the machinery and resources of the Federal Reserve System and Farm Loan system. In one or two cases they provide for Federal appropriations. They have a direct bearing upon work and investigations of great importance being conducted by the Department of Agriculture. It seems to me, if I were a member of your organization, that I would be inclined to take steps, possibly even going to President Harding with the proposal, to bring together the representatives of these various interests, including representatives of your own organization and other similar

discuss
competent men
wisdom
sound judgment
once prepared

organizations, have all of these plans examined and discussed by competent men who are able to put forward each his own point of view and that these men, all of whom in my opinion are honestly seeking a wise solution of these matters, should in their wisdom be able to reconcile differences of view and produce a plan which will meet the need of the occasion and meet the views of people of sound judgment in the country. Once that plan is prepared then let's all get behind it, ask Congress to put it through and ask the President to approve it.

after informal
what do
my own opinion
Some less important -
read

After this most informal talk you may wish to ask me with every justification in what way the Federal Reserve System proposes to assist in the solution of the problem of agricultural credit. I can express only my own opinion and that of my associates in New York. I think there are two principal things that we can do. We can endeavor by our policies, as I have already described, to maintain as stable credit conditions in this country as are possible, by employing such means as we command. Further than that we can, if means can be found to do so, enlarge the membership of the Federal Reserve System, as it should be, to cover all parts of this country with the facilities of the System and bring about a more even and equable distribution of the credit which we furnish. We can serve all of the banks of the country that are entitled to membership just as readily and efficiently as we can serve one-third of the banks of the country which are now members.

In conclusion, I must again thank you for your courtesy in inviting me to this meeting and for the patience with which you have listened to this talk. I can assure you that the members of this organization will always be welcome at our office in New York. We will be glad to tell you all that we know about the operation of the Federal Reserve Bank and of the System, and we will esteem it a privilege to make any contribution that will promote a sound solution of the problems with which you are now dealing and the successful treatment of which are essential to the welfare of the most responsible and important element in the economic life of this country.

thanks

welcome

tell about

privilege

contribution

PRICES

Opinions upon the important subject of prices and price movements too frequently arise from the personal experiences or selfish interests of the individual.

Laboring men, salaried clerks, teachers, all those in fact having small incomes, think of prices in terms of the cost of the necessities of life, - food, clothes, lodging, etc; the manufacturer in terms of market prices for the materials he buys and the goods he sells; the speculator in terms of fluctuating prices of stocks, bonds and commodities that are actively dealt in; the farmer in terms of prices he may realize for what he grows; the banker, these days, in terms of index numbers of price changes which are variously built up from price averages of from, say, twenty to possibly two hundred or three hundred important articles.

But after all this is a narrow view of "prices". It only comprehends limited and specially selected subjects of experience or inquiry and exposition. The general price level is a much more comprehensive and complicated affair, some elements of which reach our pocket books by courses so devious as not to be directly felt, nor, in fact, to influence our views very much.

There are, of course, rents and interest, the prices of such services as insurance, transportation, lighting and heating, education, medical and dental treatment, lawyers fees, license fees and all sorts of brokerage charges; then we have taxes, and the cost of support of public institutions in great variety, - churches, hospitals, libraries and the like; even club dues, theatre and circus tickets. All these march up to the price bookkeeper and demand their respective places in the sum total of the general price level.

The extent to which all these and many other things and services are within the reach of people generally, the extent to which the incomes of the greater number of all the people make the enjoyment of all these things possible, is in fact quite largely the measure of what we call the standard of living, or, as I would prefer to express it, is one of the important measures of the moral~~s~~, intellectual and physical well-being of the people of a country.

There are however two distinct points of outstanding importance to keep in mind in considering prices; one is this general price level and its changes; the other is the variation in the relative prices of different things or different classes of things, which may take place at the same time, including wages and salaries. This discussion has mostly to do with the general price level.

The movement of the general price level is a composition of all price changes which in total elevates or lowers prices as a whole, but as prices nowadays are all measured by a common standard, - "money" - it has seemed to some convenient to speak of changes in the general price level as a change in the purchasing power of money, and those folks, I fear, at times cause confusion in the discussion. On the other hand, there must be considered those puzzling and annoying changes in the prices of a few or even many things ~~which~~, while not materially changing the general level of prices, do, however, fluctuate widely and often thereby cause hardships to many people.

Only now, or quite recently, we have been hearing the bitter and quite natural complaint of the wheat growers that their crop is being sold at so low a price as to cause actual loss, and, at identically the same time, all the executive and legal majesty of this great Government of ours ~~is~~ was being addressed to learning why raw sugar, another farm produce, was selling at so high a price, and hunting for a culprit, if there ~~be~~ were one, in order to punish him.

Few indeed stop to consider that the human race is economically divided into two parts, - producers and consumers - and that the division extends into the individual himself. The wheat farmer now complains as a producer that his wheat sells at a loss, and as a consumer he growls that his sugar, and other things as well, cost~~s~~ him too much. While this may be offset as to a whole nation by the profit and consequent satisfaction of the sugar grower who gets a big price for his sugar and buys his flower cheap, of course it does the individual wheat farmer no good whatever.

It is our habit in this country to hunt for the guilty party when things like this occur that harm or annoy us, punish him if we can, and, in any event, to pass a law at once to prevent the injury occurring again. For centuries the world has been puzzling over this price affair and trying to "fix it" by laws and by economic systems and even by changes of political systems; often with clash of arms and blood shed. "Fixing prices" has always failed in the end, just as fixing the blame usually fails, because such events are so much beyond complete control, however they may <u>seem</u> to be quite easy enough to "fix."

In the first place, before we come to "fixing" prices, we must first decide what prices are to be fixed; next, in the interest of which of our individual capacities and of what classes of our population are they to be "fixed" - consumer or producer - in other words are prices to be put down or up; and last, how are we going to do it. To arrive at any policy we must first consider causes of price changes to see whether they are by their very nature capable of being wholly or partly controlled. We may find that they may be somewhat influenced, but not wholly controlled, and that what we really need and want is a reasonably stable general price level.

9 Viewing price changes in the light of recent occurrences, few will disagree that some of the most important and fundamental causes are the following -

1. War and political disturbances

(Supply & demand)

2. Inflated issues of all forms of money and credit instruments

3. Increased or diminished crops by reason of weather and of social and political conditions ~~and~~ which impair the efficiency of transportation systems

4. Crop destroying parasites and insects

5. Epidemic and pestilence

6. Conflagrations, earthquakes, and like unavoidable calamities

7. New gold and silver discoveries or mine exhaustion, and consequent enlarged or reduced production

8. The state of mind of the public - whether in the mood to buy or to sell, to go "long" of goods or "short" of goods; to "stock up" or "sell out" ; to "spend" or to "save"; to "strike" or to "work".

9. Government fiscal policy

10. And many others of less importance in effect upon general price movements.

Now let us be honest with each other and ourselves and admit that of all the causes listed, only the second and ninth are really capable of any prompt and real control, and even those are too frequently subject to those varying moods or waves of public opinion which so regularly find expression also as in number eight.

And can it be matter for surprise that price derangements arose when the three greatest of all causes for price changes developed all at the same time, ~~arose at once in~~ the world's greatest and most devastating war, - the greatest flood of credit instruments ever known, and the greatest disturbances to crop production and distribution ever recorded.

So when the banker is charged with all responsibility for price changes, let us also recall that weather and the crops, war and politics, the humor of the public and other things also exert important and frequently uncontrollable ~~controlling~~ impulses upon prices. Laws cannot be passed to control the weather, or the boll wevil, or earthquakes, and, while some day a league, or a world court, or disarmament, or higher intelligence and morality generally may eliminate war, so far it has not been done.

It would exceed the limits of space in this article to consider price regulation beyond what is suggested in number two, which means credit control, and there is little need for wasting space upon a discussion of the other influences listed, as none of them, excepting number nine, is capable of much, if any, control. Nor need space be devoted to discussing price changes other than the "general price level" for to select any particular class to benefit and possibly ~~likewise~~ to injure by a selective price control would be abhorrent to our American ideas of justice and equity, - at least some of us like to think so.

Many people have recently stated that as prices are affected by the volume of money and credit, just let us regulate that and then the job is done. They turn to the Federal Reserve System to do it, and overlook that the banking system can do but a part of the job and at times possibly only a minor part.

It has seemed to the writer, although realizing that others differ from this view, (and they are personal and quite unofficial anyway) that when Congress created the Reserve Banks it intended that they should influence, and to some limited extent actually regulate, the volume of credit. The powers to do so and the means provided are reasonably clear and explicit in the Act. But nowhere from the caption to the repeal clause does one discover any purpose in the mind of Congress that a group of men, or of banks, or both, were to be clothed with the power and responsibility of fixing prices, - either of any specific thing or group of things, or even the general level of prices.

Such a power of attorney never has and I hope never will be granted to boards or to banks in this country. Human beings, even Americans, have not yet been elevated, intellectually or morally, to that God-like perfection of infallability of wisdom and goodness, so as to stand the strain and perform the duties of such a position.

But there are possibilities of throwing some light upon that part of the price problem which is involved with the credit policy of a banking system, and the views here expressed, which, as stated, are purely personal, may be worth passing thought, especially as they distinctly disclaim any hope or expectation or fear that the responsibility for fixing prices can or will be placed upon the Reserve System.

If, as is now universally admitted, prices are influenced to advance or to decline by increases or decreases in the total of "money" in circulation, - and as money I include coins and paper money which pass from hand to hand and bank deposits which pass by checks, - then that part of our price problem involved with credit or money is comprehended within the terms of the Federal Reserve Act, which created the means of regulating credit volume, within certain limitations. That being so, as the writer personally maintains, then the task of the system is to maintain a reasonably stable volume of money and credit, with due allowances for seasonal fluctuations in demand, for normal annual growth in the contry's development, business and population, and with such allowance as may be imposed by those great cycles of prosperity and depression which we would all like to see "squared" but which never yet have been.

First let us see what has been done in that respect by the FederalReserve System. The total volume of credit, supplied to the banks of the country and through them to the public, is found by taking the total earning assets of all the Reserve Banks combined. Since the conclusion of the liquidation which started in 1920, it will be found that the earning assets have varied from the (Earlier figure) low point of $1,024,679,000 on August 9, 1922, to a maximum of $1,339,420,000 on January 3, 1923, and at the present time (April 18, 1923) amount to $1,158,957,000. The average for the whole period has been $1,165,782,000 and the highest monthly average has been $1,286,464,000 in December and the lowest has been $1,040,860,000 in August, 1922. This is a remarkable record of credit stability, so far as the bank of reserve deposit and currency issue is concerned, and would leave little to be desired were it not for two other important factors. Those are gold imports, and the conversion of demand into time deposits.

The former requires considerable space, but the latter can be dispatched with the bare assertion that the present inducement to convert demand into time deposits, arising from a reserve of only 3% required for time deposits, whereas demand deposits require 7%, 10% and 13% according to the location of the bank, has already caused and will continue t o cause a certain amount of inflation of bank loans and deposits. The amount cannot be accurately stated.

Gold imports and our large gold reserves on the other hand are an imposing problem, and one which must be faced. From the end of 1920 to the present time, we have imported $942,543,000 net of gold and our domestic production has been $111,500,000; and out of this arts and manufacturers have consumed and devitalized perhaps half of this latter. The net addition to our gold stock regularly goes into the banking system by one or another channel, and the amount of this addition would be theoretically capable of producing an increase of bank deposits generally of around $10,000,000,000. In this period the actual net increase of bank deposits has in fact been much less than half of this amount.

That is one aspect of the gold problem, and one in which the means of offsetting and controlling expansion and price changes are not as effective as some people may mistakenly think. To a limited extent they can be offset by a reduction of Reserve Bank earning assets, which has the effect of reducing the reserves of member banks, exactly as gold imports increase them.

Then the gold problem has another side. This gold either goes into the reserves of the Reserve Banks or goes into circulation as gold certificates and by the same amount displaces reserve notes. In both cases the Reserve percentages of the Reserve Banks are enlarged. Some may ask "What harm does that do?" and the reply is that it need do no harm if a misguided public opinion does not force the Reserve Banks to permit these large reserves to be the foundation for credit expansion, which simply is another way of saying for a larger volume of money, which in turn means more changes in the general price level, so far as increased volume of money and credit influences prices.

This is really the story in a nut shell, and possibly needs further elaboration on one point only. It is not quite so simple a point as one would like it to be when trying to elucidate it.

Before the war, the gold banking reserves of the world were in what might be termed a state of equipoise. They had become distributed among banks throughout the world as the result of natural and quite free exchanges of goods, services, credits and other like transactions, and the ultimate settlement of the net differences in debits and credits between countries by actual shipments of gold coin and bars.

When war came, embargoes were laid upon gold shipments; trade became deranged and all sorts of disorders arose in the exchanges, currency systems and Government loan operations of the nations. The significant thing for us was a huge increase in our exports, so great as to enable us as a nation to pay what we owed abroad, lend large sums in addition, and even then it was necessary for these foreign countries to ship us a billion of gold besides. The equipoise was destroyed. We received and hold more gold than we need; more than is good for us; and more than we can expect always to keep. In fact, over a third of the world's known supply of monetary gold is now in our hands.

Before the war one of the chief guides and influences in moving the banks of issue to raise and lower their discount rates was the state of their gold reserves, - whether they were a large or small percentage of their note issues and deposits. Here are we with a mass of gold in the Reserve Banks so vast that it amounts to 75% of all the deposits and outstanding notes of the twelve Reserve Banks. The notes could be wholly paid off in gold and still leave enough to serve as about 42% reserve for the deposits of the Reserve Banks; a reserve percentage even then larger than they had for both notes and deposits at the peak of expansion in 1920. But as to prices, which is the subject we are discussing, the important thing to observe is that if the Reserve Banks should expand their loans to a point where the reserves stood at 40%, - about the legal minimum, - instead of 75% as at present, we would lend three and three-quarters billions in excess of what we are now loaning, and this addition to banking reserves of all the banks of the country would enable them in turn to expand loans and deposits by something like fifteen or sixteen billions.

So the reserve percentage is a bad and dangerous guide to a lending policy. But it will then be asked, "What shall be the guide if not the reserve percentage" and a chorus of answers will come back, - "Prices," or "An index number," and we again get around to the point where, for the moment, some people think that prices should be <u>the</u> guide, which comes close indeed to thinking that the Reserve System can and should fix prices.

Here is a way to distinguish. Just as credit is <u>one</u> of the influences upon the price level, so the price level should be <u>one</u> of the influences in guiding a credit policy. There are other influences which affect prices, and so must there be other influences which affect a credit policy. Here are a few briefly suggested -

Is labor fully employed

Are stocks of goods increasing or decreasing

Is production up to the country's capacity

Are transportation facilities fully taxed

Is speculation creeping into the productive and distributive processes

Are orders and repeat orders being booked much ahead

Are bills being promptly paid

Are people spending wastefully

Is credit expanding

Are market rates above or below Reserve Bank rates.

What this country and the world needs is stability, - social, political and economic; stable thoughts, habits and methods. The contribution to be made by our banking system just now can be but a part, though a helpful one, toward stability. Its best policy is to supply enough credit and not too much, - enough for legitimate enterprise, but not enough to satisfy those who want simply cheap and limitless supplies of credit regardless of the consequences they are too blind to perceive.

How much that supply should be will be vastly difficult to determine until the free play of international markets and exchanges and credit and gold payment is restored. It is slowly but surely coming and meantime it will be well for us to avoid those rushes to extremes, - such as price control itself is, - and, at least in our banking policy, just do the best we can to avoid excesses.

Economics stupid subject

Bagehot - Withers - Speakers

"Just good Enough"

Opportunities multiplied

Literature re policies and reasons

Know we hold reserves, discount,
issue currency, collect checks,
settle exchanges, Fiscal Agents.

Few stop to think position in
economic machine

Most important function - Regulate

volume money

Chief influence upon prices of goods, Real Estate,

wages, salaries, rents, etc.

Example by equation -

Quantity goods X Prices = Total money

All money, currency, bank credit.

Increase goods, same prices = More credit

Same quantity goods & higher prices = More credit

<u>But</u> Increase credit, no increase goods =

Higher prices

Beer story

Economic well being

requires stability

Violent price changes

do injustice

See Europe - Germany

Inflation causes speculation

extravagance - waste

Economic waste possibly

principle product of inflation

Iron ore illustration

Long introduction to the point

Reserve Act has produced wholly

new system as to money

a. Efficiency (Reserve reduced)

b. Velocity (Collections, wires,

currency efficiency)

c. Credit operations

Last is most important - because

Possibility of inflation

Conditions prior to war -

World's gold reserves in balance

Prices advance in any gold country

Selling market

Balance of trade adverse

Gold be exported

Reserves impaired

Loans called

Interest rates advane

Goods be sold

Prices fall - Exports resumed

Trade again in balance

Equilibrium restored

Now conditions wholly different

Gold payments suspended

Half monetary gold here

More coming

All exchanges discount with ours

If we inflate prices advance

Exchange discount prevents loss of gold

Huge reserves would remain undistrubed

Anyway until price advance was unheard of

Prior to war gold exports were convincing

Now without gold exports

with huge reserves

with prices advancing

with business booming

No automatic check operates

Inflation is only too simple and easy

But inflation does injustice

Best human wisdom required

Outcry likely

Banking opinion among stockholders

Business men

Outside is the danger

Sound Money

June 11, 1924. 70

(For the Twenty-fifth Anniversary Issue of the Japanese-American)

Your anniversary is an appropriate time for recalling the remarkable changes which have taken place during the past quarter century in the internal affairs of Japan and in her relations to other countries. This brief period has seen the completion of the process, begun only half a century earlier, of transforming Japan from a feudal state into a modern world power. Perhaps no other country has seen such far-reaching political and economic changes in so short a time.

In the field of government, the formal abolition of the feudal system in 1871 was followed by the adoption of a constitution in many ways resembling those of Western Europe. Along with this has come an extension of the franchise and an advance toward responsible parliamentary government. Progress in intellectual and educational affairs has followed the introduction of a complete system of public instruction on Occidental lines, with universal compulsory primary education as a foundation, and culminating in the universities which have been under great pressure to accommodate the numbers who apply for admission.

Japanese scholarship has revealed great power of assimilation and is already making contributions of importance in many fields.

Changes in economic organization have been equally important. In the old order, the country was chiefly self-sufficient and there was little foreign trade. Its main industries were agriculture and fishing. The opening of Japan to world commerce through the visit of Commodore Perry introduced a new era. The insular character of the country, the nearness to the Asiatic continent, and the limited area of tillable land were all factors impelling it towards development into a great industrial and commercial nation, exchanging its manufactured products abroad for raw materials.

The growth of manufacturing and trade has been reflected in the rise of great industrial centers and the creation of a remarkable system of transportation, including railways, ports, and a mercantile marine. Banking, currency, insurance, and other parts of the financial structure have been greatly strengthened. Modernizing of the economic structure has made possible a rapid increase in the country's wealth, and a general gain in the standard of living.

While the accomplishments of the people of Japan have been unique in history, there remains one field of endeavor in which much can still be accomplished to make modern Japan a well balanced organization for economic and social well being. The transformation of the nation from so largely agricultural to equally important industrial development should not neglect the need for corresponding social readjustments suitable to the needs and happiness of an industrial population gathered in large cities, as distinguished from an agricultural population scattered throughout the islands. The social life of city dwellers depends just as greatly for happiness and health upon sound social institutions as does industrial welfare upon the development of well organized industrial plants. The enlargement of opportunity for the people of Japan to enjoy healthy, stimulating social intercourse through religious, athletic, musical, educational and other organizations is a necessary accompaniment of the creation of city life. Possibly here is where the giant strides of Japan towards world success have outdistanced the collateral development towards social and community advancement.

In the rise of Japan to her position as a world power, her relations with the United States have been particularly close. America's early part in opening Japan to world commerce, her traditionally friendly attitude which must not be impaired, the interchange of tourists and students, and the uniform courtesy with which American visitors are treated by the Japanese, have all made for friendship and understanding. For many years the United States have been Japan's best customer, buying chiefly its silk and selling in return large quantities of raw cotton, iron and steel, and machinery. An increasing proportion of Japan's foreign financing has been supplied by the United States, and the two countries have undoubtedly been drawn closer together by the assistance given at the time of the recent earthquake.

Notwithstanding some occasions making for misunderstanding in recent years, responsible opinion in both nations desires mutual understanding and adjustment of differences, and hopes heartily for a continuation of the friendship between the two countries.

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