WAR FINANCE

By

Mr. Benjamin Strong,
Governor, Federal Reserve Bank.

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In talking over with you the financial side of war, my mind runs inevitably to the financial history of the late war, and the fashion in which this resembled, or differed, from previous wars, of which we have full knowledge. Without particularizing, I have formed a profound impression that from generation to generation, so far as we can discover, the nations, and the financial heads of the nations, learn little, and remember less.

While we are proud of our own achievement in financing this great war, on the other hand, we realize some of our mistakes, and we realize, even more clearly, the mistakes of others, because they happen to have been greater than ours, and we must attribute these mistakes principally to the little that has been learned of the history of war finance of past years. It seems as though that history had been pretty well blotted out in the minds of the present generation.

There is, however, one notable exception in the financial history of warfare, all the more remarkable because it occurred over 100 years ago. Without desiring to contribute to the common tendency of attributing to Napoleon, the qualities of a demigod, I should point out the striking fact that Napoleon fought his great wars, practically fought the civilized world, for 19 years with sound money. In these same wars, England abandoned sound money, issued paper money which became irredeemable, and stayed upon an unsound paper basis for a period of 21 years. France's prompt economic recovery from the effects of the Napoleonic wars is common knowledge.

When we observe the chaos in finance which has paralyzed Russia, and is demoralizing Austria and Poland, and to a somewhat less extent Germany, and then consider that in the Napoleonic wars, France stood out against the rest of Europe for a period five times as long as did Germany in the late war, I think you will agree that a sound financial policy must have had something to do with this remarkable feat.

Commenting upon this period, the late Ex-Ambassador Andrew D. White has the following to say:

"When Bonaparte took the consulship, the condition of fiscal affairs was appalling. The government was bankrupt; an immense debt was unpaid. The further collection of taxes seemed impossible; the assessments were in hopeless confusion. War was going on in the East, on the Rhine, and in Italy, and civil war in La Vendee. All the armies had long been unpaid, and the largest loan that could for the moment be effected was for a sum hardly meeting the expenses of the government for a single day.

"At the first cabinet council, Bonaparte was asked what he intended to do. He replied, 'I will pay cash or pay nothing.' From this time he conducted all his operations on this basis. He arranged
the assessments, funded the debt, and made payments in cash; and from this time - during all the campaigns of Marengo, Austerlitz; Jena, Eylau, Friedland, down to the Peace of Tilsit in 1807 - there was but one suspension of specie payment, and this only for a few days.

"When the first great European coalition was formed against the Empire, Napoleon was hard pressed financially, and it was proposed to resort to paper money; but he wrote to his minister, 'While I live I will never resort to irredeemable paper.' He never did, and France, under this determination, commanded all the gold she needed. When Waterloo came, with the invasion of the Allies; with war on her own soil, with a change of dynasty, and with heavy expenses for war and indemnities, France, on a specie basis, experienced no severe financial distress."

We cannot assume that this policy was distinctly of Napoleon creation. It may have been the product of his time and his personal experience; or on the other hand, experience drawn from the desperate period of the French Revolution. As a young man, and even later as a General, Napoleon had himself received his pay in a depreciated currency of constantly reduced purchasing power, and it may be fair to attribute to his microscopic vision, as a military man, a more just appreciation of the importance which finance plays in successful warfare, than is true of Finance Ministers, who have nothing to do directly with the feeding and maintenance of armies.

Our own history, from the days of the Continental Congress until after the conclusion of the Civil War, contains an unbroken record of unsound finance, in which we experimented with every expedient which has been condemned by history and experience. France, during the Revolutionary period, had suffered from vast issues of paper money, commonly called "assignats." We, during our Revolutionary period issued our famous Continental currency. As Washington phrased it, it took a cartload of the stuff to buy a pair of shoes. You are doubtless familiar with the fact that the worthlessness of this paper money gave rise to the phrase, "not worth a continental." I shall later to our own Civil War experiences in finance in contrast with those of the past war.

With this brief suggestion, indicating my belief that a finance policy in war is too important to be overlooked as an essential part of a well planned military program, I want to ask you to revise what may have been your previous ideas of the position of a Finance Minister in time of war. Look at war finance as a problem in production of goods and employment of labor, and consider that the Finance Minister, and those serving him are simply the bookkeepers who are charged with the responsibility of making bookkeeping records of transactions in goods and labor. At the risk of going over elementary ground, with which you are thoroughly familiar, permit me to summarize by illustration, the great problem of the
production of goods, and the mobilization of labor for the purpose of conducting war. In a rather narrow sense, and for the purpose of this argument, I would like to divide all goods produced by labor into three general classes. The classification is narrow and not very exact, but useful for purpose of illustration. The classes, I will call:

1. Productive.
2. Useful.
3. Wasteful and Useless.

The illustration will be in the employment of, say, 1,000 tons of ore, which is taken from the ground, goes through all of the processes of smelting and fabrication, and erection in the form of a Corliss engine, which is operated in furnishing power for the manufacture of sewing machines, or for the spinning of cotton fabric. Here we have one illustration of the most productive employment of a product of labor and of the material employed. Falling within the second class, useful but not productive, let us suppose that this 1,000 tons of ore is converted into a beautiful monument, illustrating some important event in the history of the nation. It is not productive, but it is distinctly useful, in that it is, to some extent, educational; it has an aesthetic value, and gives enjoyment to those who look at it. The economist recognizes that the employment of labor and material in ways which provide simply healthy aesthetic enjoyment, is useful, although it may not be distinctly productive. As illustrating the third class, let us suppose that this monument proved to be an ugly, grotesque affair, which people went out of their way to avoid seeing. Certainly, this would be neither a productive nor useful employment of material and labor. In the narrow classification, which I am employing, it would be wasteful and useless. But, here we come to the fallacy so frequently deluding to even thoughtful people, in regard to this form of production. They say at once that those who are employed in producing this ugly monstrosity, nevertheless earn wages which enable them to support themselves and their families. That argument is wholly fallacious, and is demonstrated to be so, by reduction and absurdum. Suppose all of the people of the world became infected with some strange madness, which led men to lay down their tools, and devote their energies solely to the production of useless and ugly articles of ornament? The world would shortly starve, there would be no food, clothing or housing for anybody.

This rather fantastic illustration is intended to lead me to the point of stating, definitely, that in a narrow economic sense, the labor employed and the goods produced in waging war serve just as wasteful and useless a purpose as was the case with this ugly monument. To be sure, in a political and social sense, warfare may be useful and necessary for the protection of people in the enjoyment of their liberty, and even in their freedom to produce useful and productive things, but in a narrow economic sense, I think we must accept the doctrine that the goods produced and consumed in warfare are in the main, and at the moment of use, sheer waste. But it goes even further than that; warfare not only destroys things, but it calls for the production of an
increased quantity of goods in order that they may be destroyed. Simple
illustrations are in clothes, food, fuel, etc. Men taken from sedentary
employment and put into the field for drilling, maneuvering and fighting,
wear out clothes and shoes faster, and actually eat more food, than when
employed in peaceful occupations. A great war fleet patrolling the oceans
at high speed consumes more fuel in time of war than in time of peace
when anchored in port, or proceeding leisurely from one port to another.
no, so it goes through much of the actual operation of armies, that not only
must goods be destroyed, without productive results, but an increased
quantity of goods must be produced for this destructive occupation.
Theoretically, this demand for war supplies in larger quantity, and of
different kinds, than that required in peace time could be met were
society so highly organized that the civil population could be promptly
induced, or required, to go reduce their demands for goods and for ser-
cves of labor, that a sufficient volume of goods and a sufficient
supply of labor, would released to support the operations of armies.

No system of government, in fact no economic system, has yet been
devised which would cause a civil population of the country to immediately
reduce demands for goods to the point where armies could be adequately
supplied without some increase in production. Were that so, war finance
would be no problem. Look at this from another point of view. Were it
possible for a government at war to levy contribution from labor and pro-
ducers, so equitably and justly, that each would contribute his fair share
of the goods to be consumed by armies in time of war, again, war loans
and war taxes would disappear. The manufacturer of spades, for example,
would turn over, without pay, 10% or some percentage, of his production.
The same with the farmer and the spinner, each turning out so much in
goods in lieu of the payment of taxes, or the purchase of war loans. Nor
is this suggestion so fantastic as it appears, when it is recalled that
in the Middle Ages, under despotic forms of government, or more recently,
in the days of the feudal system, warfare was conducted almost exactly
by this method. The King called his knights and serfs to arms, each
bringing with him so many men-at-arms, and each furnishing so much of the
required supplies.

Under our modern economic system, however, man's labor, and the
product of his labor, belongs to himself. What war destroys in goods,
or wastes in labor, must be furnished during the war period, and the only
way in which the government can get control of this product is by process
of law, that is, by conscription in the case of labor, and by taxation
or borrowing in the case of goods or materials. What cannot be paid for
at once out of taxes collected during the war period, must be paid for
out of the fruits of the energy of labor and out of the profits on goods,
produced by later generations. We are approaching the point in this
argument where the Finance Minister is called upon to keep the books.

If you agree with me that economy by the civil population of the
nation at war will not certainly at once be adequate to release the
required labor and goods for war purposes, we must then assume that the
nation at war becomes a bidder for goods in competition with the civil
population. Military necessity recognizes no economic laws when the
winning or losing of battles depends upon the speed with which production of war material in adequate quantity can be effected. The war organization not only bids for goods and labor in competition with its own civil population, but in competition with other governments that are at war, and even with other departments of its own government. We know that is is the 5 or 10% surplus or 5 or 10% shortage of any kind of production which determines the price for the entire amount produced. So when the war demand for goods arises, failing a system of direct confiscation and conscription of goods and labor, which is adequate and just, and is distributed fairly, failing a system which induces or requires economy by the civil population, we find the old rules of competition engaged in marking up prices. As prices advance, the cost of labor advances. The Finance Minister, being the bookkeeper, is engaged in raising taxes and placing loans to meet demands for goods, at a constantly increasing level of cost, and as payments are made for these goods, extravagance and waste develop. The classical theory of the influence upon prices exerted by the quantity of money, or of purchasing medium in circulation, begins to operate. We shortly get into the position where the "dog is chasing his tail." Higher prices induce higher wages, which cause expansion in credit and currency, which again raise prices and wages, and so this endless circle is gradually being enlarged with all of the consequent evils of inflation, expansion, extravagance and waste. One may well ask; how can this all be avoided? It is, unfortunately, necessary to admit that the experience of the last war demonstrates that these evils are not to be wholly escaped; that in war the choice of a policy by the Finance Minister is usually a choice of evils, rather than the selection of an ideal policy; and that the best that he can do is to mitigate a situation which cannot be fully controlled. Admitting, therefore, that production must be somewhat increased, and that some bidding up of prices of goods, and wages of labor, is unescapable, the question is, how this increase can be best financed, first, out of the savings of the present, and second, by anticipating the savings of the future. I think I can best illustrate how these difficulties of production of goods and employment of labor may be dealt with in a financial sense, by specific reference to the policy of our government in this war, in contrast with the experiences of the Civil War. When the Civil War started in April 1861, the finances of the United States Government were in excellent condition, its bonds were in keen demand, it had a very small funded debt, and ample revenues. Within eight months, specie payments had been suspended, the country was in the throes of financial disorder, and Secretary Chase had paid as high as 12% per annum for temporary loans. Before long, the expedient of printing fiat money was resorted to, I think, reluctantly, on his part, but with that curious complacency on the part of Congress in financial matters, which has characterized the acts of legislative bodies in time of war, for generations. It seems as though legislators regarded paper money as a species of "painless denistry" in war finance, which might be employed without fear of serious consequence. We paid a penalty for unsound Civil War finance which it took 15 years from which to recover. We saw gold selling in terms of paper money at 280%, prices
Referring first to methods of taxation, the subject is so involved, opinions upon taxation differ so widely, and have produced so much controversy, that it would take too long in the present discussion to refer to that matter beyond the briefest outline. The important principles to be borne in mind are; first, that tax revenues, in order to avoid the imposition of hardship upon the poor, must be collected by direct taxation measured in proportion to the means of the tax-payer, and second, that the amount to be collected by taxes should not exceed that sum which the nation can pay, without crippling industry, and stifling enterprise. In other words, without curtailing production. As to the first principle it is easily illustrated; if a tax were imposed upon bread, meat and other essential foods, and upon simple articles of clothing, and upon house rents, the burden imposed upon the working class would be outrageously unjust. The proportion of earnings of the laboring man expended on these necessities of life is very great; with a man of large income, the proportion is trifling. It is a form of direct taxation, with all the evils of indirect taxation, which disregards the capacity of the individual to pay the taxes. This same objection exists in most forms of indirect taxation, including the much discussed "tax upon sales." Probably the most just method of levying a direct tax is that found in the graduated income tax. One of the defects of the scheme of taxation devised by Congress in the early days of the war, was the fact that it was overlapping, or duplicating, that it had a cumulative effect. It taxed the profits of capital where engaged in industry and commerce, and then taxed the income of those who received the residue of profits of commerce and industry, after the original war and excess profits taxes had been collected. In some cases, but not in all cases, these taxes probably did have some effect toward restraining enterprise and production, but not nearly so great, in my opinion, as had frequently been claimed. With these few words on the tremendously important subject of taxation, let us turn to the question of loans.

Assuming that a sound and adequate system of taxation, which provides the maximum revenue, without unjustified burden upon any class of people, and without restraining production, is adopted, there will nevertheless, and inevitably, in such a war as we have just experienced, arise the need for borrowing to meet war expenses in excess of what can be provided from taxes. The effect of a loan under these circumstances is simply to postpone the levying of taxes to a later date, rather than to impose them during the war period. It is anticipating the profits of future production in order that the government may obtain from people of means the necessary purchasing power whereby to pay for the services of labor and to acquire the goods required for war. It is taking a share of the profits realized from future production and spending them immediately. It would be unprofitable here to discuss the various theories as to the kind of borrowing which should be employed, that is to say, whether long or short time bonds, or perpetual annuities, or otherwise, and what the various terms of such borrowings should be, except as to a few of the most essential points; first, as to tax exemption. Herein lies an evil, unfortunately, not wholly escaped in our own recent record, which is almost as dangerous in its social effects as is the "painless dentistry" of fiat money in its
economic effects. A government which borrows money for war purposes is asking those of large means to give up nothing, but rather to lend their credit to the government in the expectation of full repayment with reasonable interest. It is not such an act of confiscation as is taxation. If, in addition, that man of large means is given exemption from taxation upon the income from the bonds which he purchases, the opportunity is afforded to him, and to all those of his class, to escape the real financial burden of the war, by enabling him to convert a large part of his property into wholly tax exempt securities, and so escape his just burden of taxes. It is distinctly class legislation which tends to throw the greater share of the burden of war costs upon the poor. It gives an advantage to those who enjoy incomes which they do not earn over those who get their incomes from gainful occupations, and, in my opinion, is wholly vicious and unsound. The next principle to observe, is to avoid employing bank credit for war loans, and seek to place all bond issues in the hands of the investing public, in bonds of as long maturity as may be justified by the circumstances of the war, and the government’s existing debt and revenues. The employment of bank credit, that is, either direct borrowings, or indirect borrowings by the government from banks, is a form of inflation second only in its inflationary effects to the printing of fiat money. I do not wish to be dogmatic in this statement, and will only point out that to the extent that bank loans are expanded through these war borrowings, just to that extent prices have risen or will rise, the cost of living increase, and the whole economic situation become disordered and disequilibrated. One of the misfortunes of our financial program during this war lay in the fact that we were called upon to finance not only our own war effort, but a considerable share of that of our associates. It meant borrowing money by our Treasury in amounts far in excess of the saving capacity of the country, even after a maximum of revenue had been realized from taxes. On that account, after people had invested the wealth of their current savings in war loans, we had to ask them to anticipate the savings of the future by subscribing for loans which they could not at once pay for in full. We even exhausted this resource and it became necessary for the Treasury to borrow money directly from the commercial banks of the country upon its own short notes. It was in this latter particular that the economists of the country attacked the Treasury program, not realizing in most cases, that the policy of the Treasury was one of the consequences of the competition to which I have earlier referred, which had the effect of raising prices, rather than being the cause of an increase in prices, as argued by those who adhere too slavishly to the quantity theory of money. In general terms, what happened with us during the war was that the Treasury was chasing rising prices by raising increasing amounts of taxes, adding constantly increasing amounts of bonds, and finally under the pressure of necessity, borrowing increasing amounts from the banks. Had the goods required been forthcoming, without competition, either as the result of voluntary economy, or as the result of some form of conscription of material and labor, prices would not have risen, and the materials required for war would have been furnished, and the amount of borrowings would have been moderate and within the capacity of the investing public to absorb without so greatly anticipating future savings. To the extent that the goods to be
purchased and destroyed in the war effort cannot be met out of current savings, we must, inevitably, in some form suffer inflation of the currency and thereby add to the tendency of rising prices. I wish I might illustrate with exactness this insidious and dangerous process of inflation. It is almost impossible to express it in words and figures without a chart to illustrate the process, and I shall ask you to accept my statement, unsupported by a mathematical illustration, that inflation, and all its evils, is the invariable accompaniment of a war which cannot be wholly conducted without increased production and competitive buying. I do not wish to burden you with a mass of figures relating to the financing of the war, save for the purpose of illustrating the points which I have tried to make clear. The Federal Reserve Bank of New York, which had to carry the heaviest part of the burden of raising this money, actually sold $6,234,000,000 of war bonds of the five loans, which was nearly 30% of the total, and which represented 12,373,672 separate subscriptions. It also raised in the short loans, to which I have referred $2,500,000,000 to $3,000,000,000 principally through the sale of certificates to the banks of the Second Federal Reserve District; this being, in fact, a revival of a credit of constantly increasing volume. But, our effort was directed, from the beginning, toward effecting the widest possible distribution of the long-time loans to actual investors and only where imperative that we should do so, did we invite investors to borrow money in order to subscribe. Of the money raised on short certificates in the early days of the war, no less than 80% of the amount outstanding was at times owned by the commercial banks. The efforts which we have continuously made to secure a distribution of these certificates to the investing public has now reduced the percentage to very small proportions in our district; probably not more than 4% to 10% of the certificates outstanding are owned by banks. The amount of bonds and certificates held by the banks is constantly being reduced. It is a part of the process of deflation now in full swing.

A most interesting feature of the financing of the war was the machinery employed to raise the money. Few people realize that an organization was created which meant that for every soldier in France, even at the maximum strength of our army, there was one person in the war loan organization raising money at home. It is estimated that over two million people were mobilized in this great effort, and the organization of which I was the head in New York, was estimated to comprise about 200,000 people, operating under the direction of about 3,500 committees, created and organized very much along the lines of the organization of a great army. The whole was presided over by a committee of 14 men, who did no more than to direct policies through a staff of officers assigned to duties just as specific as those applying to a military organization. To illustrate the exactness with which this work was performed; out of the expenses and disbursements aggregating about $12,000,000, when the accounts were wound up, it was found that only $2,700 had been spent in such a way that it could not be reimbursed under the rather exacting requirements of the Treasury Department, and of the Federal audit. The entire expense of sale and administration of the

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debt, both long and short-time, amounted to something like 1/20th of 1% of the amount of money raised. To illustrate the efforts to observe sound procedure in distributing bonds to investors, our organization in New York devised a plan for selling bonds by installments to poor people and wage earners, which was operated during the last three loans, and which resulted in no less than 2,500,000 subscriptions, of which 90% were paid in full by the subscribers. It necessitated the employment of an organization at one time of 450 people to run these 2,500,000 accounts, and strange to say, it resulted in a profit through interest and other adjustments, of something like $350,000 to the Federal Treasury after allowing for all expenses.

This discussion would not be complete without a few words upon the relation which should be sustained between the army organization and the finance organization. Summarizing the lessons in finance in the last war; as to the relations between the two branches of the government, it should be definitely understood as an established fact in connection with war, that no sound system of war finance in possible, unless the methods of mobilizing industry, of conscripting labor, and of purchasing materials required for war, are based upon a sound understanding of war finance, and of the dangers of unregulated competitive buying, without regard to the effect of that policy upon the financial program. With all due respect to the ability of the personnel of the army, they should not be concerned with the financing of war, but they should be profoundly impressed with the difficulties of financing the war unless the program for producing the instruments of war are based upon sound principles. Without that, this bookkeeper, whom we call the Finance Minister, is helplessly engaged in making entries upon the books of the nation, which are simply a record of bad judgment and bad methods. This applies in so many directions, with which you are familiar, that I shall not enlarge upon the subject in any detail. It applies to the restraint by rationing, or otherwise, upon civil consumption of goods. It applies to the operation of practically the entire system of transportation and communication of the country, both land and water. It applies, particularly, to the means employed in converting existing plants into war industry, rather than doubling plants, to become useless after the war ends. It applies to the method of selection of men for the army, with a view to maintaining production, without impairment of efficiency. It applies to limiting the use of bank credit only to those purposes which are essential to maintain the health and energy of the people, and the prosecution of the war, and no other purpose. As to the distinctly financial program, we have learned that the direct taxes, graduated according to the ability of the citizen to pay taxes, is the soundest and fairest method raising war revenue. We have learned that government borrowings should seek to impound the savings of the people and not to employ bank credit. We have learned that economy in interest rates is a false economy, which makes it necessary to look to bank loans rather than to investment funds, for needed borrowings. We have learned that short loans must only be employed where the market for long loans is actually exhausted. We have learned that tax exempt bonds cost the government more in revenue than it can save in interest, and place an unjust burden on the poor. Possibly more important than any other lesson,
we have learned that a sound system of banking and finance in time
of war necessitates a non-political banking system, which will respond
to the needs of war finance, without being subservient to those who
advocate unsound financial policies.

In conclusion, I venture, with some hesitation, to express the
opinion that preparation for war by this country can be made more
effective by the preparation of plans for organizing for war than by
training and maintaining a large army in anticipation of war. By this
I mean a well-studied program of conscription based upon past experience,
a well-studied program of production and transportation based upon past
experience, and as a complement to such preparation, a well-studied pro-
gram of finance worked out in such detail, and upon such sound lines,
that the machinery for financing these strictly war efforts can be
set up immediately that the menace of war arises.

I am informed that at the conclusion of such a talk as this, it
sometimes becomes profitable to address questions to the speaker. I
am in a frame of mind to answer any questions that I can, and to tell you
frankly in case you ask me questions that I am unable to answer.

**QUESTION:**

I should like to ask the question in the matter of financing
a great war, is it fixed in the mind of financiers as to anything like
the definite proportion, say in the beginning of a war, which should be
raised first by taxation, second by loans?

**ANSWER:**

I can only answer by referring to the experience in this last
war and particularly the experience in Great Britain. You know the
care and precision with which the budget is prepared by the Parliament
in Great Britain in time of peace. When this war started there was no
possibility of preparing a budget. Mr. McKenna was Chancellor, I think,
in 1915, two years after the war started, when the first budget in terms
of money was submitted to the Parliament, so that at the outset, for
both the war and navy departments a budget bill passed with the provision
that there was appropriated for the purpose of war, the sum of one
hundred pounds and such further amount as might be required — this was
the famous blank check drawn in favor of the Chancellor of the Exchequer.
I really feel that the program of division between these two sources
of revenue, that is taxation and loans, has to be determined by some under-
standing of the magnitude of the war at its outset and whether it is to
be a naval war or a land war. Our experience would indicate that the
sound program would be to raise every dollar that the nation can pay by
taxation rather than by loans. I do not think a general proportion
could be fixed. The war with Spain was financed largely by taxation and
we had, as I recall, only one loan of £200,000,000.

**QUESTION:**

Would the Finance Minister need from the Army an estimate, in
dollars and cents as to what might be needed, in say the first twelve
months? That would be necessarily inaccurate.

**ANSWER:**

I suppose such an estimate could not be made. Certainly it could not have been made in the last war. It would be desirable if it could be made and would be a great help to the Minister of Finance in laying out his program. I may throw a little light on that by telling what was done during the last war. It was found that the appropriations made by Congress were no guide, since they represented simply the curve of the rate at which the money was authorized to be spent. After some months' experience it was shown that the rate of expenditure was constantly increasing, that is, the machinery of the country was being speeded up to provide the goods and men for the war effort and it was found that the rate of increase was approximately $100,000,000 a month. I think it was in February or March, 1918 that it was estimated that during the summer of 1918 it would be necessary to raise loans at the rate of $750,000,000 a month, and it worked out almost exactly at that figure but it did not last at that rate as long as we expected. I think that after six weeks at that rate, the program was reduced to $500,000,000. I very much doubt whether the Army could so organize its scheme of purchasing and of mobilization and transportation as to know at what rate the money would actually be required.

**QUESTION:**

May I ask to what extent do you consider that price-fixing in the beginning of war would be feasible and to what extent would it remove the difficulty of financing the war?

**ANSWER:**

That is a matter which has been investigated a little at the bank and while I have not the figures in mind, I think it is shown that, in general, the production of those articles on which prices were not fixed increased in volume more than those for which the prices were fixed. I think experience shows that it did not work very well during the war.

**QUESTION:**

Would it be too much to ask you to give your opinion of the present financial problem of paying our short time notes, the Victory notes, and raising the $7,000,000,000 we need, in the next few years; should that be done by taxation or by new loans?

**ANSWER:**

That is a subject which is now being studied. We have maturing between the present time and May 20, 1923, in round figures, seven and one-half billion dollars, which includes the Victory Loan. That comprises, roughly, between two and two and one-half billions of floating debt, something over $250,000,000 of notes issued under the Pittman Act, as well as War Saving Certificates and the Victory Notes. During the war, with this organization to which I have referred and with the war enthusiasm at fever heat, almost impossible things could be done in raising money.
We raised over $6,000,000,000 in one loan but I think it is of very
doubtful wisdom to expect that the people of this country would refund
in one operation as vast an issue as four and one quarter billion, which
was the amount of the Victory issue. I should hope that Congress, under
the leadership of the Secretary of Treasury, would be disposed to look
at that subject conservatively and begin soon to redeem the Victory Loan
in small amounts and so spread the maturity over the period between
1923 and 1927. Ultimately, these note issues must be refunded, they
cannot be kept outstanding forever. Again, if the nation's finances are to
be kept in a defensive condition with regard to the possibility of a
future war, my own belief is that a certain amount of refunding could be
conducted during the next three, four or five years and as much as
possible of the floating debt should be paid off out of taxes.

QUESTION:

We have now something like $2,200,000,000 in gold reserve. The
policy has been defined as to extending foreign credit. The nations
have not the purchasing power now and therefore it must be done on credit.
Would it be a sound business policy for the government to finance credit
or corporations extending credit with the idea of releasing our products
and getting the profit on them or would it be a better policy to allow that
to take the natural trend of the commercial process?

ANSWER:

I expect that is a question which we are going to hear discussed up
at the Capitol pretty soon. I would like to answer that generally if I
may. We all have our theories about trade and in this country we have
a particular theory about trade which I believe is a product of the
many years during which our trade was developed under the protective
tariff. It has led to a delusion. People seem to feel that a nation gets
rich out of its export trade. That is not a fact; a nation does not get
rich out of its export trade alone; it gets rich out of trade, by exchanging
the products of the soil and of the labor of its people for products which
other nations produce. If we expect to continue any such foreign trade as
we built up during the war, which created debts that have not been paid
yet and won't be paid for generations, it seems that this country would
be taking a position similar to that of the country storekeeper who invited
people of the village to come and buy from him without limit and pay when
they pleased. He would last as long as his bank account lasted and at the
end of that time he would probably be bankrupt and would bankrupt many
of his customers.

Consider the trade of nations as the trade of one business establish-
ment. Rules that apply to that storekeeper's business are no different from
the rules which must apply to the nations as a whole. I should look with
regret upon a policy by this country of exchanging our commodities for
pieces of paper of uncertain payment. I fear there are a great many
people who think we are going to get rich by exchanging these good things
that we produced in the United States for paper. What we want to get in
exchange for what we export are two things—one, I believe in the long run
it will be the principal thing we will get, will be goods and, failing
the goods, we want to get good pieces of paper. We have so much gold now
upon which we are advancing money in New York that it cannot be assayed as fast as we take it in. It would appear that those who are buying goods from us in Europe have reached the limit under the present economic and political conditions of what they can buy and pay for with pieces of paper alone. I should suppose that within a reasonable period now we will discover that trade arrangements cannot be effected with nations that are not solvent even to enable them to buy goods that are essential, with the expectation that ultimately we will be able to collect the debt. How is the existing debt to be paid except by goods? The Allied nations owe us $10,000,000,000 which is more than all the monetary gold that exists in the world. And besides, we have more than one-quarter of the monetary gold of the world right now. I cannot for the life of me see how we may expect them to pay what they already owe and make a still greater debt for further goods unless we admit we must get something in exchange, that is, something they can produce to a better advantage than we can and which we need in the development of our own country.

When I was recently traveling by steamer from the Island of Kin Shu a Japanese boy came up to me on the deck, said he assumed I was an American and wanted to know whether I would talk with him a little while. When I expressed a willingness, with a certain Oriental shrewdness, he said he had four companions and would like to bring them up for a chat also. After talking for an hour or more, he asked me if I would express an opinion of the Japanese policy in China. I said I might be able to do so but I had been very hospitably received in Japan and it might necessitate my saying unkind things about their policy in China which I did not want to do, but would try and answer by asking them some questions. I asked him what Japan wanted in China. He gave the perfectly correct answer that Japan was over-populated and now had to build up industry in Japan in order to create things for export so as to extend their foreign trade and support their growing population. I asked him how they were going to pay for the things they wanted from China and he said they would probably pay money. I then pointed out that all the money in Japan would be exhausted in a short time by that plan and suggested to him that possibly a way to pay for those things was to ship them other things in exchange. He saw that right away. I explained that what Japan needs is the friendship of China so that they can trade with them, whereas China was now boycotting Japanese goods so making it impossible for Japan to trade with China. That is exactly what we need today - the friendship of the nations of the world so that we can trade with them. At the present time we need about ten or twelve billion more of their goods than they need of ours.

QUESTION: I am getting worried about this gold. Some lecturers say that we want to get all the gold of the world and about the time I think we are doing pretty well, I read the papers and see that too much gold is being imported and that there should be some scheme for stopping it. I am up in the air as to whether we should have gold or not.

ANSWER: Before the war broke out we had about $1,800,000,000 of monetary gold in the United States which acted as a reserve for bank credit. We increased that by many hundreds of millions before our declaration of war.
The effect of that accession of gold in the United States was to create an immense expansion in currency and bank credit. As I stated before, it is impossible to explain that process of expansion satisfactorily without a chart, but the consequence of the increase was an increase of about 70% in prices. That is the penalty we pay for importing gold unless we have a policy to offset the importing of gold. The effect I refer to is the increasing of bank loans and the raising of prices. It is shown by the fact that commercial banks which make loans for the support of the country's business may increase their loans, say in the ratio of three, four, five or six times the amount that their reserve is increased by gold imports. Every time we import a million dollars of gold we lay the foundation for building up a pyramid of credit of some millions and with that we stimulate trade and increase prices. We have, since the first part of January, received at the port of New York about $150,000,000 to $200,000,000 in gold. It goes to our bank and is then gradually distributed throughout the country to the other reserve banks. It also increases the capacity of the member banks of the country to increase their loan accounts unless that is regulated or controlled by the Reserve Bank. We regulate it principally by the rate we charge for credit which at present is pretty high - seven per cent. Gold is like a thermometer. As you see the amount of gold increase you see the delicate instrument which we call the reserve ratio rise in the reserve banks.

Your particular attention is directed to the fact that conditions have now arisen in which men are led to believe that they can make money easily if they are allowed to engage in speculations which they could not in fact engage in were the credit not available to enable them to do so. The existence of the gold in the country has some effect in increasing prices because that gold is paid for by the Reserve Bank by a check which is the same as credit. It increases the credit fund of the country by 100% of the gold imported. But if we also reduce our rates, then the amount of credit might expand 2, 3, 4 or 5 times in volume, compared to the volume of gold imported because it would be profitable for people to do more business on credit.

QUESTION: You use the expression "Minister of Finance". Do you have in mind the Secretary of Treasury?

ANSWER: Yes, I use the "Minister of Finance" because it is in more common use.

QUESTION: Then you believe that he is the one that should start in now to prepare plans for financing possible wars that you spoke of in your paper.

ANSWER: I would feel so if the Secretary of the Treasury under this administration had had the experience of previous Secretaries of the Treasury; but under our government, with the changes taking place as a result of the election, we get an almost completely new personnel and the men who now hold or will hold responsible positions in the Treasury have not had the experiences
of the years 1917-1918 to enable them prepare a program. My thought would be that those who directed the operation of raising money during the war and those who studied and laid out the program for taxation and loans should be called upon while their memories are fresh to lay out and prepare a theoretical program in which we would take advantage of our experience and particularly, take advantage of our mistakes, which are quite obvious. I suppose there are a dozen, fifteen or twenty men who know the subject from the ground up now as we have never known it before. We should take the opportunity to get their experience reduced to a program, from a military point of view.

QUESTION:
When you were speaking that thought occurred to me. The railroad man comes in and says we should take advantage of the experiences of the war; the Council of National Defense man and the finance man say the same thing. Can you tell us how we can go to work to bring this about? I see it is very important, a national thing. Could you offer some suggestion by which the military man might be able to produce some results in that line?

ANSWER:
It seems to me there are two ways. One is to get the President to see the Secretary of War and Secretary of the Treasury and request those two cabinet officers to see that the heads of the War Loan organizations prepare such a program. Another way would be to cut out all red tape and go right to the men who raised the money and get them to do it. I can tell you now that in the bank in New York - and I think in apple-pie order as far as I can discover - we have an account in the most accurate detail of every dollar that was raised and of every penny that was spent to raise it. We have bound copies of our records and skeletons of the organization of the district. We have what we call a "plan book" which describes how towns were to be organized; we have the maps that were used. Finance is a rather hazy sort of thing to the ordinary person and you would be surprised to learn of the exacting details of organization which were required in organizing for this effort. We took the military maps, prepared by the Army, of our district on which we had every house noted, a red line put around to show the geographical limits of a given committee and they were required to see every person within that limitation. In a vast country like this it required a big effort which had to be done scientifically or there would have been a great waste of effort. That has all been done once and generally with every success. I feel it is a loss to the nation to have these men pass out and die or disappear with knowledge such as this in their heads without putting it in a document of some kind with exhibits attached, telling the story of their experience, their successes and failures. I think if it were submitted to the right people, as though this nation might become involved in war say in six months, the whole scheme and principles and outline of procedure relating to the financing of the war could be laid out in three or four months very effectively.