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## WAR FINANCE AND THE FEDERAL RESERVE BANKS

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We are at war and have already taken the first steps in its financing. If all the many succeeding steps that we shall have to take in the field of finance and elsewhere are as successful as this first step in our financiering, we shall find ourselves in fortunate circumstances. Good financiering cannot win a war, but modern wars cannot be won without good finance. No country within so short a time after entering upon war has ever undertaken or succeeded in placing a long-term loan of such magnitude as the first of our war loans, the Liberty Bond Loan of \$2,000,000,000. Not only has the loan been fully subscribed, but the indications are that it is over-subscribed by perhaps as much as \$1,000,000,000. It shows that the country is alive to the heavy responsibility it has assumed in entering the war, and that financially it is in a state of exceptional readiness.

Many factors have contributed to the success of our first war loan, and many more will be necessary to the success of the loans which will follow. The banking power of the country has never been more effectively utilized in a great financial transaction than in connection with the negotiation of the Liberty Loan. Of necessity, and before the development of a more complete and adequate program of war finance, this loan had to be carried through mainly as a banking operation. The banks of the country have performed a great service, not only in facilitating individual subscriptions to the loan and in assuming the function of distributors of government bonds to ultimate investors, but also in offering to take a considerable part of the loan on their own account in anticipation of future sales to their customers, and without thought of advantage or profit to themselves. That the whole process of placing the loan has been carried through so far with such smoothness and ease, and with so little disturbance of the money markets of the country,

is due to the brilliant sagacity of the Secretary of the Treasury in planning the several steps of this colossal operation and to the reassuring presence and ready support, at every stage of the process, of the federal reserve banking system. Effective use has been made of successive issues of short-term certificates of indebtedness. Pending the flotation of the Liberty Loan these certificates were used to provide the Treasury with funds for meeting its current disbursements, particularly in the shape of advances to the Allies. Being issued in an aggregate amount of \$1,000,000,000 and in definite anticipation of replacement by long-term Liberty Bonds, they have done much to mitigate the pressure on the money markets by the shifting of funds incident to the negotiation of a \$2,000,000,000 loan. Indeed, a constant feature of the Treasury's policy has been the vigilant care exercised to see that the funds received by the government in payment of its obligations should be returned as promptly as possible to the money market, in order to minimize, or if possible altogether to avoid, the disturbance ordinarily incident to the transfer of funds on so huge a scale. It is remarkable that the rate for call money, which is a highly sensitive barometer of money conditions in the leading money market of the country, has at no time since the inauguration of the Liberty Loan operation shown any disquieting firmness or alarming increase,  $6\frac{1}{2}$  per cent being the highest rate thus far reached.

The federal reserve banks, the country's foremost and most fundamental banking agency, have naturally had an important part in facilitating the transactions growing out of our first war loan, and it is of course to be expected that they will have much to do with the successive loan issues which will be brought out later. Indeed, it is to be expected that their status and the range and extent of their activities may be profoundly affected by the financing, both of a public and of a private character, which will follow in the train of war conditions, should the war run on for a year or more.

It is two and a half years since the federal reserve banks were set in operation. Their activities, until recently, however, have been of restricted dimensions. Established primarily for the service that they could render to the financing of trade and industry and as

a protection against the vicissitudes of the modern credit system, their chief value thus far has been to give to the country's banking and business affairs an undertone of strength and a feeling of security, and at times to exercise a restraining and prudential effect on the course of the country's banking policies and affairs. Although no such serious responsibility as that which now confronts the nation in the field of public finance could have been foreseen by the framers of the Federal Reserve act, provision was nevertheless made by which the federal reserve banks could be used as instrumentalities in support of government finance, and we may therefore expect to see them becoming more and more, as the war goes on, a powerful auxiliary factor in the financial operations of the nation. How much their position and character may be changed under the weight of the new and varied obligations which may be imposed upon them by reason of the fact that war is to become the principal business of the nation for a year or more is a question that cannot but be viewed with anxiety by those who have believed that these great institutions should always find their primary and normal field of activity in serving the needs of the country's industrial and commercial enterprise. For the war will some day be over. If, therefore, it should result that, as a consequence of undue reliance upon the resources of the federal reserve system in financing the war, the system was transformed and its ability to assist in the recuperation of American industry and its readjustment to the altered conditions of the whole world of commerce, which may safely be predicted to follow the close of the war, impaired, the consequences would be of the most serious character. It should also not be overlooked that there will be many readjustments of our internal trade and industry during the war in the process of adapting our economic organization to the necessities of our new situation. Many industries may be expected to experience a slackening of demand for their output and will need the conserving care of a well-administered credit system to tide them through the period of the war. Many others will be under stiff and urgent pressure rapidly to expand themselves to meet the intensified demands for their output occasioned by the war, and will need the use of the reserve banks' credit facilities. These things may not

bulk large in our calculations at the moment, when our minds are preoccupied with questions of government finance. But, as the deep disturbance which will be wrought in our whole industrial organization, as the war proceeds, develops, these needs will make themselves felt. Proper concern and provision for the credit needs of our industry and trade both during the war and after the war ought not, therefore, to be prejudiced or foreclosed by undue or improper use of the resources of the federal reserve system—vast and inexhaustible as they may appear to many to be at the moment—in the financing of the war.

When the amendments which have just passed Congress, providing for a greater concentration of the gold holdings of the country in the federal reserve banks, become effective, the twelve federal reserve banks will have a normal credit-lending and note-issuing power in the aggregate of about \$2,000,000,000. Thus far, less than one-fourth of this power has been utilized in extending accommodation to the money markets of the country, whether through the member banks of the federal reserve system or otherwise through open-market operations. The system possesses, therefore, an untouched margin of lending power of some \$1,500,000,000. When it is recalled that a dollar of reserve credit extended to a member bank by a federal reserve bank may multiply itself by fivefold or more in the lending power of the member bank, it is at once apparent that the banks composing the federal reserve system—member banks and federal reserve banks together—have a potential credit capacity for the borrowing community of some \$7,500,000,000. This is an enormous potential credit power. But it is important that we should recognize that such power has its dangers and temptations as well as its protective strength and reassurance. To the expansionist it opens alluring vistas of inflation. By its wise use, however, it is capable of becoming at critical times a factor of decisive importance in the credit operations which will have to be undertaken during the period of the war—a bedrock of strong and wise finance.

What the federal reserve banks *can* do usefully to help the financing of the country in its present crisis is one thing; what they may find it necessary to do against their best judgment and to the

prejudice of the system's healthy development is another. How much the federal reserve system can be the maker of its own destiny during the period of the war is at best uncertain. The federal reserve banks are, after all, but one part, however important a part, of our national machinery of finance, and that machinery will work to poor purpose if any important part of it does not mesh in with other essential parts. The making of a national financial policy for the conduct of the war is not in the hands of the federal reserve system. The system occupies, it is true, by reason of its control of money rates, a position of strategic strength in the general credit affairs of the country. But the extent to which the federal reserve system will feel justified in using its powers of control to affect the direction or alter the course of the nation's financial policy will almost of necessity depend upon the extent to which its advice is sought in the shaping of our national financial policies and upon the degree of support accorded its judgment and action by the country at large. It may well be that our experience in this respect will repeat that of the leading European belligerents, and that the banking policy of the federal reserve system, like that of the English, French, and German banking systems, will be what the general financial policy of the government and nation makes it. If our general policy of finance is courageous, sound, and strong, our banking policy can be sound and strong. But if our general financial policies are weak or vacillating, our general banking policy, and that of the federal reserve system in particular, is likely of necessity to be weak.

As yet the general plan of finance for conducting the war has not been determined. There is still much discussion in and out of Congress as to the relative parts of the burden of war outlay to be assumed by taxation and by loans, and, the more discussion proceeds, the more apparent it is also becoming that no plan for mobilizing the financial resources of the nation on the scale of magnitude in contemplation will be adequate which is not buttressed at every critical point by an effective mobilization of the country's economic resources. Of necessity the first steps in providing for government outlays and the immediate advances needed by our Allies will have to be furnished by loans. The first of these,

the Liberty Loan, is now being carried to completion, and in its negotiation the federal reserve banks have had their necessary and important part to play. A loan of \$2,000,000,000, even in a country as rich as ours and as prosperous in a pecuniary sense as ours has been during the past two years, is probably to be regarded as in excess of the current funds of the country immediately available for investment. Extensive banking accommodation was therefore to be presumed to be necessary, at least in the first steps of its placement. How much of the \$2,000,000,000 loan is being taken by the ultimate investor, and how much by the banks and other intermediate agencies, is not yet known. It may be assumed, however, that a considerable part of it will be some time in finding lodgment in the hands of the permanent investor, and that this amount, together with much that has nominally been taken by investors, will have required the extension of some temporary banking assistance. In these circumstances it has been the policy of the federal reserve banks to give to their members and to the banks of the country generally, and through them to their customers who were subscribing to the Liberty Loan, credit facilities on liberal terms. The federal reserve banks have been authorized to make preferential rates of 3 per cent upon 15-day paper of member banks, and  $3\frac{1}{2}$  per cent (the rate carried by Liberty Loan bonds) to the banks—member, non-member, and savings—and to their customers, who are borrowing on their 90-day notes for the purpose of effecting payment of their bond subscriptions. The Federal Reserve Board has also authorized a special one-day rate, as low as 2 per cent, in order to enable the banks in the country's greatest financial centers to prevent undesirable disturbances in the market for call money. For, under conditions like the present, the state of the call money market has a very definite influence upon the general financial situation.

The marked effect which these policies have had in promoting a spirit of confidence among the banks of the country and the people generally in taking hold of the Liberty Loan cannot be doubted, in view of the unprecedented success of this whole vast operation. Whether these liberal policies will beget a false sense of security and excessive reliance upon banking credit, and especially upon the

resources of the federal reserve system, to finance the war loans of the government, it is too early to say. Banks can, perhaps, safely undertake the financing of wars of ordinary financial magnitude, but a war calling for expenditures and advances estimated, as they are by the Secretary of the Treasury, at \$10,000,000,000 for the first year clearly calls for more fundamental financial provision than can be provided by the banks of this or any other country. Indeed, rich and powerful both in a financial and in an economic sense as the United States is, it cannot but awaken earnest solicitude how we should best proceed in undertaking to finance a war that is to cost \$10,000,000,000 a year.

The wealth of the United States was estimated before the war at about \$180,000,000,000. It is now estimated as high as \$225,000,000,000, and some even venture to place it as high as \$250,000,000,000. If we take the last-named figure it is three times the estimated wealth of Great Britain or Germany, and the inference has been hastily drawn by some that we, therefore, as a people possess three times the contributive capacity of Great Britain or Germany, who have been the heaviest spenders among the European belligerents. Such comparisons, however, are likely to be misleading. It is not so much the assessed wealth of a country, but its realizable wealth, that counts in war time as an index of financing capacity, and there are great differences between countries with regard to the proportions of their total wealth on which they can realize for the purposes of war financing—England, among the present belligerents, being manifestly far the most fortunately circumstanced in this respect. But of far more importance even than realizable wealth as an index of a nation's financial or contributive capacity is current income or the current product of industry, especially for a country which has to be taken by itself and do all its financing from within—for such is the position of the United States. We shall have to pay as we go, out of our own unaided resources—that is, out of current income or the current product of industry. How much of our current income and product is to be regarded as *effective income*—that is, as made up of things available for government use—is the question that must be answered in attempting to estimate the financial and contributive capacity of

the nation for war purposes. By effective income is meant that portion of the total gross income of the nation which is in excess of a reasonable and proper provision for the living requirements of the people. It is that excess which, in war time, is to be regarded as the nation's available or spare income—that is, the income that can be spared or withheld from individual consumption and turned over for the use of the government. Obviously, the wider this margin of surplus or disposable income, the greater the effective financial strength of a country.

What, then, is our effective income?

Our gross annual income was estimated before the war at \$30,000,000,000. The growth of our industrial and productive power and the rise of prices which have gone on apace during the past two years are estimated to have carried our gross national income up to \$35,000,000,000 or \$40,000,000,000. If the latter figure may be taken as approximately correct, it is clear that the expenditures in contemplation for the war (\$10,000,000,000) will absorb about one-fourth of our gross national income and call for a considerable addition to the annual savings of the nation. How much this amount is in excess of the present annual savings or investment fund of the American people—that is, the proportion of its income annually set aside and withheld from consumption—can only be conjectured; but our present actual savings fund is almost certainly less by one-half than the amount which it is proposed to raise for the purposes of the war. It was competently estimated that the annual savings fund of Great Britain before the war amounted to \$2,000,000,000. It is doubtful whether ours amounts to more than twice as much as Great Britain's, but, even if we take an optimistic view of the situation and allow that ours may amount to as much as \$5,000,000,000, it is clear that the financing of the war confronts us with the problem of converting an additional \$5,000,000,000 of the gross income of the American people into savings to be turned over for the use of the government.

The undertaking may well seem stupendous and to involve for many classes of the consuming public very drastic revisions of their customary modes of living. The more the situation is pondered, however, the clearer it becomes that we cannot successfully under-

take the financing of the war except by putting it on a foundation of economic concrete by the practice of thrift on a scale which has not been our national habit for many decades. There are no mysteries in sound finance—no short-cut and easy methods by which we can make something out of nothing. We shall be dealing in self-deception, therefore, if we attempt to avoid facing the fact that the war, on the scale which is projected, will call for a diversion of about one-fourth of the annual income—or, let it be stated more fundamentally, one-fourth of the productive power of the nation—from individual use to government use. Thus stated, it is clear that saving on a scale of unprecedented intensity will be an essential preliminary under any effective scheme of national finance we may adopt, and the question, which is much discussed, as to whether taxation or loans should be our chief reliance, or the proportions in which the two should be combined, gets its chief meaning from the effect that the one or the other, or any given combination of the two, may be expected to have either in *stimulating* or in *forcing* national thrift and the growth of our annual savings.

The danger of the loan policy is that, by deluding itself with a notion that it is putting the burden onto the future, it will, through resort to fatuous and easy expedients, put the burden both on the present and on the future. This will happen if the loan policy, failing to induce a commensurate increase in the savings fund of the nation, degenerates, through the abuse of banking credit, into inflation—raising prices against the great body of consumers as well as against the government, thus needlessly augmenting the public debt, and increasing the cost of living just as taxes would. The policy of financing war by loans, therefore, will be but a fragile and deceptive and costly support unless every dollar obtained by the government is matched by a dollar of spending power relinquished by the community—in other words, will fail and develop into inflation unless the dollars which are subscribed to the bonds of the government are real dollars, the result of real savings and of real retrenchment. The danger to be feared in undertaking to finance our war by credit is that sophistry and financial legerdemain may lead us to attempt to carry the operation through as an operation in banking finance instead of as an operation in saving

and investment. The doctrine is already current in the country, with the sanction of some leading bankers, that our war cannot be financed except by credit expansion running to the limits of inflation. Being dealers in banking credit, they naturally take the view that the expansion of credit in question will properly have to be an inflation of banking credit; for this is the new and most recent form of inflation which the gigantic war in Europe has been bringing to the front as a device in war finance.

Inflation as an expedient of public finance has long been practiced, although it has never had the sanction and approval of those whose business it has been to lay down canons of finance rather than to engage in the practice of finance. The record of our own great wars and the records of the great wars of other nations in modern times show pretty uniformly that timidity in facing the serious realities of war finance has usually developed a situation from which escape was finally sought through the desperate and costly expedient of government currency inflation. Such was our disastrous experience in the Civil War, when resort was taken to the greenback currency, which was nothing but a device of inflationism, and some \$500,000,000 was thereby added to the cost of the war—which might have been avoided had the government's financial operation been maintained on a strong and healthy basis—to say nothing of the demoralization wrought in business and the hardships and iniquities inflicted upon the great body of defenseless workingmen and consumers. Clear and specific as the teachings of that experience are to those who can learn from history, it will remain for this war to demonstrate whether or not the lesson has been fully taken to heart. Inflation still has seductive potentialities for the pundits of paper finance. Even if we do not avowedly repeat the costly mistakes of our Civil War by ventures in the field of government currency inflation, we may yet reach a similar result and land the community in a similar plight through the more subtle and less vulgar process of banking inflation.

The average business man, and even the majority of bankers, have been very slow to appreciate the fact that in such a country as ours, with a highly organized system of mobile banking credits, banking credit is the most common form of purchasing medium used by the business community. When an ordinary commercial

bank opens a credit on behalf of any of its customers for \$10,000, it creates by a stroke of the pen an addition to the supply of the purchasing media of the country of \$10,000 less discount, just as unmistakably as if it had issued \$10,000 in bank notes or had paid out any of the other forms of conventionally recognized currency or money.

Banking credits which originate in connection with actual operations in industry or commerce, and which are protected against overextension by effective reserve requirements, are of course a highly desirable substitute for currency in a community which is habituated to modern banking practices. The superior convenience of the check as against the bank note as a form of remittance and payment is altogether obvious and explains the well-established preference of the American business community for it. Nor is it liable to the abuse of inflation as long as the banking credit which is circulated by means of the check is bottomed upon genuine—that is to say, productive—operations in industry and trade, resulting in an increased supply of goods. Inflation takes place whenever the supply of purchasing media is increased more rapidly than is the supply of goods produced and to be exchanged. Prices then rise. Their rise is inevitable under the operation of the general law of demand and supply, to which the value of money is no exception but rather the most exact case. The power to purchase and pay is the power to bid, and when the supply of the means of purchase and payment—no matter what their forms, whether gold certificates, bank notes, federal reserve notes, or bank deposit-credits circulated by means of checks—outruns the increase in the supply of goods available for purchase, there will be increased bidding for the goods, with the inevitable resultant of increased prices. The evidence and the measure of a state of inflation proceeding from inflation of money, currency, or credit is the rise of prices. When, therefore, banking credits are opened for any other purpose than to facilitate transactions which result in an increase in the production and supply of goods, banking credit is being used to lay the foundation of inflation.

We have had a marked advance of retail prices in this country since the beginning of the European war. The rise is estimated at 45 per cent. We have also had in the same time an increase in

the supply of the country's purchasing media, consisting of money, currency, and, most of all, banking credits, of some \$5,500,000,000, or 45 per cent. An examination of the resources of the banks of the country so far as that is possible, indicates moreover, that a very considerable volume (45 per cent) of the banking credits created since the beginning of the European war in 1914 is offset by securities of an investment, not a commercial character, consisting largely of government obligations. That is to say, a large part of the new banking credit which has been created in the past two and a half years has not been used to finance the increased production of goods, but to finance the transfer of ownership and use of a part of the existing production to the hands of borrowing governments. The conclusion is irresistible that inflation has been in progress to a marked degree in this country during the past two years and a half, and that the steady forward march of prices which has cramped and pinched the average consumer has been caused, for the most part, by the rapid expansion of banking credit and currency without a commensurate expansion of productive industry.

The same process, only in a vastly intensified degree, has been going on in the belligerent countries of Europe and has given rise repeatedly to the gravest expressions of solicitude by those who are engaged in looking through the tissues of paper finance to the inexorable economic facts. All of the belligerent countries of Europe, in one degree or another, have undertaken to finance the war by bank borrowing, with inflation results that, for the most of them, make a tragic record of hardship for the masses and needless augmentations of the nations' debts, and will leave behind, at the close of the war and for the next generation, a heritage of unspeakable financial confusion.

Inflationism may not be the ultimate term in weak or bad finance, and situations and conditions may from time to time present themselves to us which will make a degree of temporary inflation unavoidable. But inflation is so nearly always bad and so nearly always avoidable—if there be but will and courage enough on the part of the community and its governors—that it is pretty nearly an ultimate test of the character and workings of a country's credit and financial system. I repeat, therefore, that, if our loan policy,

through an undue reliance upon banking credit, degenerates into inflationism, it means that the loan policy is failing, and therefore that the system of undertaking to *induce* the people to save for the use of the government—in brief, the *voluntary system* of finance—must give way to some other more rigorous method or system—the *system of compulsion* or *financial draft*. That may mean either (1) taxation carried to the limit, that is, conscriptive taxation, as some already propose, or (2) conscriptive borrowing—a less drastic form of financial draft—as the only acceptable alternatives to inflation.

For let it not for a moment be overlooked that inflation, in its effects, amounts to conscriptive taxation of the masses. It is, indeed, one of the worst and the most unequal forms of taxation, because it taxes men, not upon what they have or earn, but upon what they need or consume. The only difference for the masses between this kind of disguised and concealed taxation and taxes which are levied and collected openly is that in the case of the latter the government gets the revenue, while in the former case it borrows it, and those to whom it is eventually repaid are not those, for the most part, who have been mulcted for it. Inflation, therefore, produces a situation akin to double taxation in that the great mass of the consuming public is hard-hit by the rise of prices induced by the degenerated borrowing policy, and later has to be taxed in order to produce the revenue requisite to sustain the interest charge on the debt contracted and to repay the principal. The active business and speculative classes can usually take care of themselves in the midst of the confusion produced by inflation and recoup themselves for their increasing outlays. Indeed, inflation frequently makes for an artificial condition of business prosperity. That is why war times are frequently spoken of in terms of enthusiasm by the class of business adventurers. But it is a prosperity that is dear-bought and at the expense of the great body of plain-living people. It would be a monstrous wrong if, in financing our present war, we should pursue methods that would land us in a sea of inflation in which the great body of the American people, who are called upon to contribute the blood of their sons to the war, were made the victims of a careless or iniquitous financial policy.

In warning thus emphatically against the dangers to our whole economy that will follow the financing of our war by an inflation of banking credit, I would not for a moment wish to be understood as implying that the war could be financed without the extensive co-operation of banking institutions and our system of banking credit. Loans in such amounts as the government will place cannot be raised to any important extent out of past savings, for those have already been crystallized into fixed forms of investment. Nor can they come entirely out of immediately present savings. They must in some degree anticipate future savings. We have just completed the negotiation of our first war loan of \$2,000,000,000. Our ordinary savings may be at the rate of \$400,000,000 a month, and if this has already been increased by one-half (it will have to be doubled in order properly to finance the war) it will have yielded, in the months during which the negotiation of the Liberty Loan is being carried to completion, barely enough to effect the payment of the loan. In these circumstances it was clearly necessary that the great financial institutions of the country should make advances, either to their customers in aid of the payment of their subscriptions to Liberty bonds or directly to the government in payment of their own subscriptions, in the expectation that they could subsequently place the bonds so acquired with the investing public.

How long a time might reasonably be allowed Liberty Loan subscribers who have sought accommodation from their banks with which to complete their subscriptions, to take up these loans, or how long a time should be allowed the banks which have made direct subscriptions to work off their bonds on the saving and investing public—in other words, how far we might safely go in anticipating future savings—is a question upon which opinions may well differ. Competent opinion in England, where a similar problem has had to be faced in connection with their great \$5,000,000,000 war loan, has assumed that a year is the normal limit beyond which banking accommodation should not be extended in carrying buyers of government loans. Our situation and circumstances are probably more favorable to a shortening of this process. England's trade and industry have been seriously dislocated by the war. Her producing power has been much impaired, and therefore

the source on which her saving power has to operate has been much diminished. Ours is a contrary situation. We have, as a nation, never come so near realizing our full productive capacity; our potential savings fund, therefore, has never been so large; and the circumstances have seldom been so favorable for the rapid conversion of potential savings into actual savings. Moreover, the stream of wealth out of which savings are to be made is a pretty continuous flow in this country. A much shorter period of time than what has been thought necessary in England in order to assist the anticipation of future savings would, therefore, seem to be necessary in this country, and it seems doubtful to me whether, as a statement of the normal situation, more than six months should, on the average, be allowed in which to take up credit extended to individuals in order to enable them to buy government bonds, and they should be pressed hard to complete their repayments of borrowed funds in four months, if we are to avoid the danger of inflation. The banks ought to be put under pressure to work off their own bonds, that they do not as a matter of banking policy mean to hold as a part of their permanent investments, within a period of not more than from four to six months. Otherwise they will not be in a position satisfactorily to assume their obligations in connection with the subsequent loans which will be placed by the government under a program providing \$10,000,000,000 a year, or over \$800,000,000 a month.

But, when all is said, and every reasonable and proper provision for the legitimate use of the banking and credit machinery of the country is made, in order to mobilize the nation's money savings, let us not make the mistake of supposing that the saving which is called for in the present exigency is merely a saving of dollars. It is a saving of the productive power of the community from the service of private consumption for the service of public needs which is called for, and the saving of money is of consequence only so far as it results both in a transfer and in an increase of the effective industrial power of the nation for government use.

Taxation, and even loans which are bottomed upon real money savings, can at best only provide the government with buying power. But the government will need more than buying power

in order properly to finance the war. As the war goes on, it will become clearer that this is a war of economic strength and resources and that victory will lie with the nations which are best able to diminish the processes of economic waste and best able to resist the processes of economic exhaustion. More than buying power will, therefore, be needed for the effective prosecution of the war and its successful issue, no matter how orthodox and carefully guarded, in a financial sense, the methods of providing the government with the needed buying power are. Napoleon summed up his experience as the greatest soldier of his age in the statement: "An army marches on its belly." The experience of the present war is every day reinforcing the doctrine that a successful army is carried on the back of industry. It cannot therefore be too much emphasized, in the discussion of plans for the mobilization of the financial resources of the country, that, much as the government will need buying power, it will need something far more potent and fundamental than buying power. It will need arm power, tool power, nature power—and brain power and will power to organize and vitalize and direct these. Nature power we have in unlimited abundance. Our present problem is to combine with it the undeveloped potentialities of our arm power, our brain power, our saving power, and our will power; the power to do, and the power to do without—the power to do, that means producing more, and the power to do without, that means saving more.

Can we, then, reorganize our life during the period of the war so as to increase the productive power of the nation and so to increase our savings as to provide a quarter of this productive power for the use of the government? We can if we will, but only by a heroic exercise of our national will to enforce the necessary economic sacrifices and saving. To make our saving effective, we must find and impose upon ourselves a substitute for the English blockade of Germany and the German submarine blockade of England in forcing economy and saving. I have been told upon trustworthy authority that when the policy of the submarine warfare against England was under discussion in Berlin one of the most eminent of Germany's economic strategists argued vigorously against it, not on the ground of its violation of the established rules of inter-

national practice, but on the ground that it would help England more than it would hurt her. "Keep the submarine away from England's shores and England will eat herself into bankruptcy quicker than the submarine can bring her to starvation."

So I believe it is coming to be recognized, by those who appreciate that this war is an economic endurance contest, that England's blockade of Germany has been one of Germany's greatest aids in the financing of her war. It has forced the most rigid sort of economy and, through bringing the whole nation appreciably near the point of starvation, has led them to accept the most drastic control of living that the world has ever seen, and so has measurably offset for the great mass of the people the terrible and iniquitous injuries that would otherwise have been inflicted upon them by the financial policy of inflation which Germany has followed in this war. Those who are puzzled because of the scanty use that has been made in Germany of war taxation to finance the war—her whole reliance being placed substantially upon loans—have here, I believe, the explanation of this strange phenomenon. It shows that inflation can be absorbed only on an empty stomach and where "rationing" is established as a supplementary process of public finance.

We must of our own choice impose a blockade upon ourselves against the seductions of luxury and the temptations to waste. That means we must save, save, save. More than this, we must study how to make our saving most effective.

Effective saving in war time means much more than simply cutting down the number of dollars which we spend and turning them over to the government as taxes or lendings for its use. Saving of dollars is good as far as it goes, but it is a mere beginning and does not go far enough. Much, in many instances very much, depends upon how I economize in the process of making my savings. Some economies are much more effective than others, and the test of effective saving must be whether that which I refrain from consuming, in the process of saving dollars, results in leaving unused an equivalent value of the kinds of commodities which the government needs. Suppose my income is \$10,000 a year and that my family and myself have been in the habit of spending all

of it. We now decide to economize to the extent of \$1,000 in order to subscribe to the bonds of the government. How can we make that saving most effective—that is, most effective when tested by what it enables the government to get in the way of needed articles and service? If my family cuts down its consumption of plain food—beef, bacon, beans, potatoes, etc.—plain clothing, gasoline, fuel, transportation, domestic service, etc.—all of these, things that the government needs for the war—my family's saving is very much more effective than if it simply cuts down the purchase of expensive dress, a box at the opera, an annuity to an aged relative, a contribution to a school or club, etc. In either case I am putting the government in possession of the buying power of a thousand dollars which I had previously been accustomed to spend. But in the former, in addition to handing over to the government one thousand of dollars, I am leaving on the shelves of shopkeepers, etc., one thousand dollars worth of goods and services of the kind which the government wants and needs and which it can buy with the \$1,000 I have turned over to it. My saving has been effective because I have gone without the use of goods and services which it is important for the government to have and have turned over to the government \$1,000 with which it can buy them. In the second case, where my family economizes on costly dress, fancy foods, and other products of the luxury trades which get their value not so much from the quantity of labor it takes to produce them as from the rarity of skill, my saving of a thousand dollars is not nearly so effective as in the former case in turning over to the government a commensurate value of the kind of commodities or the kind of labor it requires.

Saving on luxuries doubtless accomplishes something, but much less than is frequently supposed. If I am in the habit of spending \$100 a year for a suit of evening clothes and decide, in view of the war, to forego that expenditure and turn over the \$100 to the government in payment of a subscription for a bond, what have I turned over in the way of effective industrial power? The \$100 which the suit of evening clothes costs represents, after all, a comparatively moderate amount of labor and a comparatively moderate amount of material. The high cost of the suit to me is mainly for the skill,

the taste, and the workmanship of the designer. Perhaps I pay a great deal for the fashionable label that goes under the collar or the magnificent rooms into which I am ushered in the process of being relieved of \$100 for a suit of clothes. In brief, the price which I pay is made up largely of what the economists call "prestige value"; that is to say, in the instance chosen, I am paying the extravagant price for dress rather than for clothing, paying the high price, not to get necessary protection for my body in the cold winter evenings, but to get something which gives me a feeling of correctness—style, fit, fashion, etc.

If these illustrations are suggestive, they point to the conclusion that we must put intelligence and discrimination into our economies if they are to be made effective savings. The test we must apply is not merely, How many dollars have we saved? but, How much productive power and material have we released for the use of the government and those industries which are producing the kinds of things the government requires? Indeed, not only must we put intelligence and discrimination into our economies and saving, but we must do it with something of a religious zeal. The man who saves most effectively for his government will be the man who, in the course of his daily life, says, "Here is something the government can use as well if not better than I can. Ordinarily I would have bought it and consumed it. I am not going to buy it now. I am going to leave it for the use of my government. The government's needs are more important than my desires." Thus, while we must press our economies in all directions, we must recognize that it is not the man who saves merely upon his costly extravagances, but the man who, in addition, saves upon the basic materials or necessities of life, whose dollars count most when they reach the hands of the government.

It is no part of my present purpose to discuss the economic value in war time of the doctrine of "Business as usual," but I believe certain inferences are clear from the preceding analysis. Much business will be speeded up during the war, and its condition will be one of unusual activity. Other business cannot be as usual, if we are to pursue a program of effective national thrift, and public opinion should not permit it to be so. As we go along, and the

necessities of the war become more exacting, we shall learn how to reorganize the industrial and consumptive economy of the whole nation and every class in the nation, so as to make it contribute most to the efficiency of the nation, as a nation that is organized for the business of conducting the war. The health and working efficiency of the nation must not be allowed to suffer impairment; but, when a reasonable allowance is made for these ends, the nation's needs must take the right of way as against the desires and wants of its individual members, even though some business languishes here and there, and is not "as usual." In brief, economic and industrial principles rather than "business" or "money making" principles must be our guide in reshaping our economic organization for the business of war. No plan of finance, therefore, which is conceived simply in terms of dollars, however real the dollars be, unless also conceived in terms of the goods and productive power thereby set free for public use, can hope to succeed in the face of the present national exigency. How much more serious, therefore, will be our national self-deception if, by a process of credit-mongering, the dollars which are turned over to the government are not real dollars, the results of acts of saving, but more or less fictitious dollars, created by acts of inflation.

Saving, moreover, will never be as easy for the nation as during the period of this war, if we know why we are in this war. The war and all that it implies in the way of high and chivalrous national endeavor should be our substitute for our customary luxuries and individual indulgences during the war. This is a time for national, not individual, indulgence. We can afford to be generous in a national indulgence of the character which has carried us into this war. Indeed, when we consider the vast consequences for civilization and the democratic principle that hang on the issue of the war, we cannot afford to be other than generous in support of the cause which we hold true and vital, even though it involves the severest self-denial for us as individuals.

Wars, it has been said, except those waged in national defense, are luxuries. If ours is such a war, it represents a luxury that has become an imperative necessity. We are not fighting a war of defense, but, unless we put into the prosecution of our war a will

that is ablaze with passion, it may become a war of defense. We are fighting a war in defense of principles—the same principles for which the fathers gave their blood. From one point of view such a fight may be a luxury; from the other point of view it is a necessity. But, whether it be regarded as the one or the other, it means that for the time being we must give generously of our substance and devotion as well as of our lives, as for a thing that we cherish as more than life.

War against the imperial German government “to make the world safe for democracy” means to me, primarily, war to break the stubborn will of the most stiff-necked, iron-blooded oligarchy that, since the breakdown of feudalism in Europe, has ever taken possession of the life and destiny of a powerful and docile people and sought to impose its will upon them and through them upon the world. Drunk with power, and with a will that is mad with lust for dominion, the will of the Junker oligarchy of Prussia must be broken. But it will not be, unless we match its will with a will of our own as strong for the things we know to be right as theirs is for the things we know to be wrong. It is a big and difficult, but heroic and noble, enterprise on which we have entered. It calls for men, it calls for munitions, it calls for money. But, more than these, it calls for will power, for this is a war of wills.