

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Fiscal Planning for Total War

Volume Author/Editor: William Leonard Crum, John F. Fennelly, and Lawrence Howard Seltzer

Volume Publisher: NBER

Volume ISBN: 0-870-14117-1

Volume URL: <http://www.nber.org/books/crum42-1>

Publication Date: 1942

Chapter Title: Government Borrowing

Chapter Author: William Leonard Crum, John F. Fennelly, Lawrence Howard Seltzer

Chapter URL: <http://www.nber.org/chapters/c4929>

Chapter pages in book: (p. 316 - 336)

CHAPTER 13

Government Borrowing

WE HAVE ALREADY POINTED OUT that in practice the principal sources of government funds are taxes and loans, and whatever portion of total expenditures is not covered by tax revenues must be covered mainly by borrowing. Having analyzed in considerable detail in several preceding chapters the problems of war taxation, we conclude by treating briefly the problems of war borrowing.

In Chapter 4 the general economic implications of taxation and borrowing in a program of war finance were set forth. In Chapter 6 we discussed the factors influencing the desirable amounts of taxation and of borrowing which might take place. In terms of fundamentals, therefore, the remaining aspects of the problem are not especially complex. An adequate treatment of methods and of the many technical details of selling government securities would require a separate volume in itself. We merely round out our study of war finance by discussing the more important issues involved in a borrowing program and highlight some of the technical aspects.

The task with which the federal government must cope in the sale of its securities during the emergency may be visualized by reminding the reader that the revised budget estimates for the fiscal year 1943 contemplate total expenditures of some \$76 billion. In relation to this total, we enumerated several combinations of taxes, each of which might be expected to raise about \$30 billion in the fiscal year

1943. Although Congress may enact more drastic tax legislation than we have indicated, the chances are not great that it will. Present prospects are that the federal government will be forced to raise in the fiscal year 1943, by the sale of its securities, at least \$45 billion. The general implications of this task constitute the theme of this chapter.

I COMPOSITION AND OWNERSHIP OF OUTSTANDING FEDERAL DEBT

An appropriate point of departure for a study of the borrowing program is to examine the composition and distribution of the outstanding government debt. As of June 30, 1942, the gross public debt of the United States government, including debt bearing no interest, was \$72.4 billion.¹ In addition, there were \$4.6 billion of outstanding securities guaranteed principal and interest by the government.²

The total federal debt, both direct and guaranteed, may be grouped conveniently into three categories: special issues, such as those sold directly to governmental agencies and trust funds; public nonmarketable issues, such as savings and war bonds and adjusted service bonds; and public marketable issues.

Table 23 shows the distribution of the federal debt on June 30, 1942 among principal classes of holders. The class 'all other investors', comprising individuals, trusts, fiduciaries, and non-financial corporations, had holdings of about \$25.7 billion, or 34 per cent of the total debt, divided almost equally between marketable and nonmarketable issues. The next largest category was that of commercial banks, with total holdings of \$24.9 billion, of which all except a small fraction were marketable issues. A similar preponderance of marketable issues is shown by the smaller totals for insurance companies, mutual savings banks, and the Federal Reserve Banks, while about 75 per cent of the holdings of federal agencies and trust funds was in special, nonmarketable issues.

TABLE 23

Distribution by Classes of Holders of Interest-Bearing Securities Issued or Guaranteed by the United States, as of June 30, 1942 (millions of dollars)

	U. S. GOV.						TOTAL OUT- STAND- ING
	AGENCIES & TRUST FUNDS	FEDERAL RESERVE BANKS	COM- MER- CIAL BANKS	MUTUAL SAVINGS BANKS	INSUR- ANCE COM- PANIES	ALL OTHER INVES- TORS	
Public marketable issues	2,714	2,645	24,623	3,798	8,822	12,519	55,122
Nonmarketable issues	7,888		251	39	73	13,145	21,395
Total	10,602	2,645	24,874	3,837	8,895	25,664	76,517
% of total out- standing	14	3	32	5	12	34	100

SOURCE: Treasury Department, press release, July 2, 1942.

During the twelve months ended June 30, 1942, total holdings of 'all other investors' rose from \$14.7 billion to almost \$25.7 billion. Of this gain of about \$11 billion, approximately \$8.8 billion were nonmarketable issues, of which the sale of United States Savings Bonds accounted for \$5.8 billion and Treasury Tax Anticipation Notes for \$3.0 billion. Commercial bank holdings gained about \$5.7 billion, from a total of \$19.2 billion to \$24.9 billion; holdings of federal agencies and trust funds \$2.1 billion, and insurance companies \$2.0 billion.

The trend shown in the fiscal year 1942 toward relatively greater holdings for 'all other investors' is clearly a step in the right direction from the standpoint of inflation control. It is equally clear, however, that one of the chief objectives in marketing government securities during the war must be to bring about vastly greater increases in the holdings of such investors.

2 SOURCES OF FUNDS FOR GOVERNMENT BORROWING

In considering the sources from which the government may borrow during the war, we must apply the test we have used

throughout this study: efficiency in diverting resources from civilian to military use and in preventing inflation. To the extent that the sale of government bonds curtails civilian spending, which otherwise might compete with the government for the limited supply of scarce resources, the war effort will be promoted and the danger of inflation will be lessened.

In Chapter 6 we concluded that an aggregate of some \$20 billion of funds might be borrowed by the government in the fiscal year 1943 without inflationary results; also that, with an effective system of direct controls, considerably larger sums might be borrowed. Thus, there is no reason why the sale of government securities in the amount of \$45 billion should necessarily cause a marked degree of inflation, although obviously the danger of inflation will become more serious as the amount of borrowing rises above \$20 billion or some moderately higher level.

Our earlier analysis also demonstrated that no certainty exists that any particular source of government borrowing will prove inflationary or otherwise. The sale of government bonds to a particular class of purchasers may be inflationary under certain circumstances and non-inflationary under others. The test in each case is: does the transaction actually result in a roughly equivalent curtailment of civilian spending? If it does, the increase in government spending is offset by the decline in civilian spending, and no inflationary tendencies appear. If civilian spending is not curtailed, the amount of money competing for the given supply of goods will increase.

Nevertheless, certain sources of government borrowing are more likely to have inflationary effects than others. We must, therefore, analyze the principal sources in order to determine the most desirable markets for the sale of government securities. From the standpoint of the present analysis, these sources may be classified into three principal categories: current savings, idle balances, and commercial bank credit.

Current Savings

On the whole, the purchase of government bonds from current savings may be considered non-inflationary and provides therefore the most desirable source of wartime borrowing. Accruing week by week and month by month, savings constitute a recurring market for federal securities. Once an organization is set up which can efficiently convert savings into government securities as they accrue, it will be continuously useful so long as the government is faced with deficit financing. Obviously, the larger the amount of such funds that can be absorbed into government bonds the less will be the proportion of current income that may enter the stream of expenditures, forcing up prices.

Current savings, for the purpose of this discussion, are that part of the gross cash receipts of persons, business concerns, and other legal entities not expended in operations or used for consumption, and not paid out as taxes, interest, dividends, and gifts, or withdrawn by owners of unincorporated enterprises. Savings as defined here include sums set aside as reserves for depreciation or other purposes, but not actually expended. If not held as cash balances, savings are used either to acquire new assets, such as buildings, equipment, inventories, savings bank accounts, stocks or bonds, or to repay debts.

Sums deposited in savings accounts or paid as premiums on life or endowment insurance policies are considered savings. A major portion of such funds, as they are paid into savings institutions, become readily available to the government as a market for its obligations. It may be expected that, as the war progresses, other investments available to savings institutions will be reduced, and that an increasing proportion of their funds will be invested in government bonds.

As of June 30, 1942, insurance companies in the United States held \$8.9 billion of federal obligations, and, during the preceding twelve months, had increased their holdings

by slightly more than \$2 billion compared with an average annual increase of \$600 million for the five preceding years; mutual savings banks owned some \$3.8 billion of government securities, and, during the preceding twelve months had increased their holdings about \$470 million, against an average annual rate of \$250 million for the five preceding years.³

The dollar volume of individuals' savings tends to increase as the national income rises. In Chapter 3 we estimated that, *in an ordinary peacetime expansion*, and with no shortages of wanted goods, the excess of total consumer incomes over expenditures would amount to some \$31 billion when aggregate money incomes reached a level of \$109 billion. These \$31 billion represent, therefore, an estimate of what would be available for taxes and savings, and compare with the \$18 billion that might be expected at a level of \$81 billion for total money incomes.

Our analysis in Chapter 3 also showed that the sums available for taxes and savings will increase proportionately to the curtailment of civilian spending caused by shortages of consumer goods in a war. If half of the gross national product should be diverted to military uses in the fiscal year 1943, without any advance in prices from the levels of March 1942, the aggregate sums in the hands of individuals available for savings and taxes would amount to about \$48 billion. This figure compares with our estimate of \$31 billion that might be expected under ordinary peacetime conditions at a total money income level of \$109 billion. Of these \$48 billion, we estimated roughly that some \$14 billion would accrue to the income group above \$10,000, about \$31 billion to the \$1,750-10,000 group, and some \$3 billion to individuals receiving less than \$1,750.

There is no method of determining *a priori* what proportion of such sums will go for taxes and what will remain as savings, because we do not know in advance the structure and incidence of the tax program. About all we can say with

certainty is that whatever portions of the above aggregates are not taken by taxation should be available directly or indirectly for the purchase of government obligations. We can also be sure that all except a small percentage of such savings will accrue to the income groups above \$1,750, and that, in all probability, some two-thirds to three-quarters of total individual savings will lodge in the hands of the \$1,750-10,000 group.

As noted in Chapter 3, the figures cited above for the excess of incomes above expenditures rest upon a series of assumptions which may prove widely in error unless anti-inflationary measures are vigorous and effective. These measures must include fiscal controls as well as direct controls, and one of the main purposes of the war finance program should be to induce and enforce a contraction of civilian spending. If appropriate financial measures are not adopted, the estimated excesses of incomes above expenditures may not be realized, and therefore taxes and borrowing should not be designed merely to absorb expected excesses of incomes over expenditures as though those excesses would inevitably develop in the amounts estimated.

From the standpoint of financial policy, it is very important to observe that the savings remaining in the hands of individuals may be further increased by the extent to which the government is successful in inducing individuals to purchase Savings Bonds and to reduce consumption which would be detrimental to the war effort. Thus, individual savings, particularly in wartime, cannot be considered a static and rigid total. The actual aggregate of savings will vary directly with the effectiveness of the system of direct controls and of fiscal measures, including the success with which the government promotes the sale of its obligations, in reducing consumer expenditures. It will vary inversely with the amounts taken from individuals in the form of taxes.

The borrowing problem of the government in relation to individuals may be defined as one of absorbing as large as

possible a percentage of individual incomes through the sale of its obligations. These funds may be absorbed by sales directly to individuals and by sales to institutions in which part of such savings will lodge. The sales to savings institutions do not present a difficult problem provided that alternative investment opportunities have been substantially curtailed as a result of the system of direct controls. The promotion of direct sales to individuals is much more difficult, largely because such savings will accrue in comparatively small amounts to a vast number of individuals.

In times of peace a relatively high percentage of total savings accrues to the relatively few individuals in the upper income groups. These groups also constitute the great bulk of the individuals who ordinarily are direct purchasers of investment securities. They are easy to reach because they are relatively few and have large individual spending power. In a war they should continue to furnish a substantial market for government obligations, although higher income taxes are certain to absorb a larger proportion of their incomes which might otherwise be saved. From the standpoint of inflation control, however, the purchase of government bonds by the upper income groups is not especially important. As we have seen in Chapter 3, aggregate consumption expenditures by the group with incomes above \$10,000 would amount to only about \$6.6 billion if all wanted goods were forthcoming at a total money income level of \$109 billion, or about 8 per cent of total expenditures. A reduction of expenditures by this upper group through the purchase of government obligations, therefore, can be merely a minor factor in diverting scarce resources from civilian to military uses.

The \$1,750-10,000 group affords the most important market for the sale of government securities from the standpoint of both size and the successful promotion of the war effort. It will probably receive in the fiscal year 1943 aggregate money incomes of \$73 billion. Over half of all consumer units will fall within this group, and their expenditures, even

if restrained by effective direct controls, will amount to approximately two-thirds of total consumer expenditures.

To the extent that the excess money incomes of this group are not absorbed by taxation, great importance attaches to the desirability of absorbing such funds through the sale of government securities. To reach the individuals within this group effectively, however, is not easy. In the first place, average savings after paying taxes will be less than \$1,000 per economic unit and will be spread over the 20 to 25 million economic units which constitute this group. They are so numerous and their income margins above accustomed living standards so small that the technical problem of assembling these small rivulets of savings is extremely difficult.

Furthermore, most of the individuals in this middle income group have not previously acquired the habit of purchasing securities directly. In ordinary times the great bulk of their savings flows into savings banks, building and loan associations, and life insurance companies. These savings habits are likely to continue in wartime but the increased volume of savings it will be necessary to obtain if inflation is to be checked can probably be achieved only by a very effective direct selling campaign. The measures taken so far by the Treasury in marketing Savings Bonds are clearly framed to aid in solving this problem, but considerably greater vigor, and perhaps new methods, are likely to be needed.

An important source of individual current savings for the purchase of government obligations is provided by governmental agencies and trust funds. As of June 30, 1942, United States governmental agencies and trust funds, excluding the Exchange Stabilization Fund, held about \$10.6 billion of federal securities. As already indicated, these holdings gained \$2.1 billion for the twelve months ended June 30, 1942, compared with an average annual increase of approximately \$1.2 billion for the preceding five years.⁴ About two-thirds of such holdings in recent years have been concentrated in the hands of three agencies: in the Federal Old-Age and Survivors In-

urance Trust Fund, the Postal Savings System, and the Unemployment Trust Fund.

As the national product expands with war production the funds at the disposal of many governmental trust funds and agencies may be expected to increase, even in the absence of any advance in social security rates and other types of payments. Consequently these federal agencies will continue to provide an important and steady market for government bonds. Since a large if not a major portion of the funds received by these agencies are savings, purchases of securities by them may be considered non-inflationary. Both as a method of reducing purchasing power and of expanding the market for government bonds, an increase in such payments as those required under the Social Security Acts will provide a valuable check against inflationary tendencies.

As pointed out in Chapter 12, social security payments are clearly a form of forced savings. Forced savings devices involve all the compulsion of taxation and, therefore, eliminate the problem of selling securities; and we have chosen to discuss this subject in an earlier part of our analysis rather than as part of the borrowing problem as such. Nevertheless, because of the technical difficulties involved in selling government obligations to the vast number of smaller income recipients, a substantial increase in social security payments, or some other form of forced savings, may well become a desirable supplement to voluntary purchases of government securities by these income groups.

The savings of business concerns, trust funds, eleemosynary institutions, and other legal entities, *including as savings the unexpended portion of the reserves such entities set up for depreciation and other purposes*, provide an important market for government bonds. Estimates of business savings, and of reserves set aside by business concerns and other types of institution, in past years are available,⁵ but three difficulties impede appraisal of these magnitudes as a potential recurring

market for federal securities. First, the forces which affect the fortunes of enterprise vary widely as between types of business, and the impacts of war will be quite different on one industry from what they will be on another. Second, it is by no means clear that business savings rise and fall with the national product in the way that the savings of individuals tend to do. Third, although charge-offs to reserve accounts and business savings pass through the cash account as sums come into and are paid out of a going concern, there is no close and immediate connection at any given moment in the life of a concern between the amount of cash on hand or quickly available and the book value of its various reserve accounts.

On the other hand, so far as savings and charge-offs for depreciation and other purposes are not converted into tangible assets, either because the necessary commodities are in short supply or for other reasons, these sums constitute a potential market for government bonds. Furthermore, the current assets of concerns that experience difficulty in obtaining raw materials and other inventories will more and more be converted into cash, and no valid reason appears why a substantial portion should not be invested in federal obligations, even though such securities are bought through a liquidation of assets rather than through the accumulation of savings.

Unpublished estimates by members of the National Bureau of Economic Research staff indicate that during 1942 nonfinancial business enterprises might be able to lend the federal government some \$5.7 billion derived from the liquidation of inventories, undistributed earnings, and from depreciation accruals in excess of capital expenditures.⁶ While those funds made available from the liquidation of inventories would not constitute a recurring market, much if not all of the unexpended depreciation reserves and undistributed earnings would. It is estimated that roughly two-thirds of these sums would be in the hands of business concerns with total assets of \$1 million or more, and certainly almost all

would be in the hands of the 50,000 corporations with assets in excess of \$500 thousand.⁷

Idle Balances

Idle balances are cash holdings or bank accounts in the possession of individuals, business concerns, or other legal entities, which the owners do not expect to spend, at least immediately, for living or operating expenses. They are pools of funds, accumulated from past savings, that can be invested.

Since idle balances are accumulations already in existence, as distinct from savings which accrue from current income, they constitute a ready if not an immediate market for federal securities. On the other hand, since they are a reservoir, not a stream, they are not a recurring market for bond purchases.

J. W. Angell has estimated that idle balances owned by individuals and business concerns in 1939 amounted to \$13.4 billion.⁸ His definition of idle balances differs slightly from ours and his estimates are somewhat larger than ours would be. But there is little doubt that in recent years idle balances have grown substantially. Unpublished estimates by the National Bureau of Economic Research indicate that during 1942 business concerns may hold approximately \$1.4 billion of excess cash balances which they could lend to the federal government.⁹ These two estimates lead to the conclusion that much the larger portion of idle balances is held by individuals, trust funds, and nonbusiness organizations, and it is not unreasonable to assume that the portion that could be borrowed by the government may amount to as much as \$8 billion.

By far the major part of idle balances is in the possession of families and individuals whose incomes exceed \$5,000, and business concerns or other legal entities whose assets exceed \$500,000. Since such families or consumer units number about 950,000,¹⁰ and since there are roughly 50,000 such business concerns, these funds are concentrated in relatively few

hands; hence to absorb them through the sale of securities is relatively simple. They can most effectively be made available to the government by utilizing the forms of securities and merchandising methods by which the savings of the middle and upper income brackets are reached.

Exchanging idle balances for government obligations tends to be inflationary, unless offset by increased savings accrued in an effort to rebuild such balances or by a reduction in commercial bank credit. As soon as the government receives these monies it spends them, whereas as long as the balances were kept idle they did not enter the stream of expenditures, except to the extent that they created additional bank credit, and they therefore influenced prices little. Thus, the activation of idle balances by government security purchases has usually an expansionary effect similar to any tendency that accelerates the velocity of circulation.

Commercial Bank Credit

The sale of government bonds to commercial banks does not necessarily create an inflationary influence. So far as current savings, either individual or corporate, are left on deposit with commercial banks, the effect of converting them into government bond purchases will not be inflationary. On the other hand, the purchase of such bonds directly by an individual may create bank credit. During the first World War the sale of Liberty Bonds was greatly stimulated by the slogan, 'Borrow and Buy'. Individuals were persuaded to borrow funds from banks and give government obligations as security. In this manner, practically the same additional credit was created as if the bonds had been purchased directly by the banks themselves.

Nevertheless, so far as bonds are not absorbed by current savings or idle balances they will of necessity be absorbed through the creation of deposits by commercial banks; that is, by an expansion of bank credit. Commercial banks can and

do acquire government obligations through various transactions. They purchase bonds from individuals and bankers, from the Federal Reserve Banks, and directly from the Treasury, paying in cash, from excess reserves, with the proceeds received from liquidation of an asset or by borrowing from the Reserve Banks, and with newly created deposits credited to the Treasury. Each type of transaction affects the credit structure somewhat differently. But the type used in the great majority of purchases during wartime is the purchase by the banks of new debt directly from the Treasury through the creation of bank credit. Such credit is new purchasing power, additional to what existed before the transaction, and when it is spent by the government, with the consequent stimulating effects on prices, it is redeposited by the recipients in the banking system and remains outstanding, available for further spending by the owners.

New bank credit is the ultimate market for new federal debt, though not in the sense of time. Since the Treasury, as it were, can easily 'find' the banks, since the banks can buy government bonds simply by crediting the Treasury with the purchase price, and since, ordinarily, this process can be repeated with considerable facility, the banking system is the readiest market for federal obligations, and it takes off the market a larger or smaller proportion of all new issues legally available to it.

In ordinary times the extent to which the commercial banking system can absorb government bonds is looked upon as being limited by the reserve position of the banks and the ratio of their capital funds to their total assets. However, these are not ordinary times. The reserve position of the banks can be altered by governmental regulation, as can, in less degree, their capital ratios, through the values placed by the examining authorities on the government bonds in their portfolios and in other ways. Hence it may not be realistic to view these factors, ordinarily of great importance, as of much significance in wartime.

When the government sells a bond to any given purchaser, it cannot be certain that the purchase funds have stemmed from current savings, from idle balances, or from the creation of commercial bank credit. In other words, it cannot be sure whether the effect of any particular purchase will be inflationary or non-inflationary. Under certain circumstances, sales to a commercial bank may be non-inflationary, while sales to individuals may be inflationary. Nevertheless, we know that purchases of government securities by commercial banks are much more likely to have inflationary effects than purchases by individuals. Furthermore, we know that, if bond purchases by commercial banks are sufficiently large, the effects are certain to be inflationary. A sound borrowing program for wartime must be constructed around this basic fact.

If inflationary tendencies are to be avoided, the Treasury's objective must be to maximize bond sales to individuals and nonfinancial institutions, and to minimize sales to commercial banks. No inflationary dangers exist in selling to commercial banks government obligations in an amount that does not exceed deposits created by current savings. The danger arises largely because of the ease and cheapness with which commercial banks can absorb an almost unlimited volume of government obligations by creating additional bank credit.

Theoretically, the current savings, to say nothing of idle balances, owned by individuals and institutions should be sufficient to meet all the borrowing requirements of the government. Actually, the government will have great difficulty in tapping even a major part of the very large surplus spending power owned by the middle and lower income groups. The expense and difficulty of absorbing such funds contrast with the ease and cheapness of borrowing directly from commercial banks. Unless resort is had to compulsory savings schemes, a primary consideration of the government must be to develop adequate technical and organizational plans to cope with the problem of reaching these two groups.

3 TECHNICAL ASPECTS OF GOVERNMENT BORROWING

Such technical matters as the forms and methods used by the Treasury in borrowing the money necessary for the prosecution of the war, and the timing and sequence of the methods, especially if some prove to be such as may be described as innovations, will very greatly influence the amount the government can borrow from each source. Moreover, the economic consequences, and the form and magnitude of the administrative problems which during and after the war will bulk large both in the management of the public debt and in the broader field of fiscal policy will be intimately affected by the method. In short, not only the amount borrowed and the sources tapped, but also the way in which the money is borrowed, is of great economic and social consequence.

Shall the maturities of the issues be short, as is the case with Treasury Bills, or long, as is the case with the longest bonds? Shall the government rely on the interest rate as the chief inducement, or on the form of selling campaign? Shall the interest be paid periodically in cash, as is the case with most of the issues comprising the 'public marketable supply' of debt, or accrued during the life of the obligation, as is the case with Treasury Bills and War Savings Bonds? Shall the bonds be freely transferable, or redeemable by the holder on demand? If so, what shall be the schedule of redemption values? Shall the bonds be sold through competitive bidding, as are Treasury Bills; shall they be sold at regular or irregular intervals, as are most issues of Treasury Bonds and Notes, or shall they be 'on tap', as are War Savings Bonds? What shall be the denominations for each issue?

Shall some of the offerings be restricted to certain types of buyer, as are some issues now? What privileges with respect to conversion, callability, and other features shall be attached to some of or all the offerings? To what extent shall the provisions of one issue be designed to appeal to one type of buyer rather than another, and how often shall the same type of

buyer be relied upon as the chief purchaser? To what extent shall the purchase of the bonds be voluntary, to what extent shall highly organized sales campaigns put pressure upon individuals to buy, and by what steps shall 'compulsory saving', either of the type now required by the Social Security Acts or of other types, be expanded or initiated? These are the technical questions which confront the Treasury and Congress. The answers will not only largely determine the character of the borrowing program during hostilities, but will also greatly affect fiscal problems for at least a generation after the war.

One of the most important questions is: To what extent shall long term obligations, obligations with maturities of five years or more, be utilized, and to what extent short term debt?

Long term bonds lessen the need for frequent refunding of maturing issues. So far as the money borrowed during the war is borrowed on such terms as not to require its repayment or refunding until after the cessation of hostilities, the wartime financing task of the Treasury will be reduced. And so far as such bonds are sold to buyers who will not resell during hostilities, or are sold in such a way that the purchaser's ability to resell is restricted or eliminated, the maintenance of an orderly market for government debt, free from disturbing fluctuations, whether occasioned by military or other developments, is easier. Purchases from idle balances and some portion of the purchases from savings of persons and institutions and by commercial banks are less likely to be resold than purchases from other sources, even in the absence of restrictions on negotiability. At present War Savings Bonds are redeemable but not negotiable; tax certificates are not negotiable, but can be used to pay federal income taxes; and as the war progresses, it may well prove desirable to restrict the negotiability of other issues, or to devise new types of non-negotiable issues possessing special qualities.

At present, long term borrowing requires a higher interest

rate than short term. In a period of unusually low interest rates, this disparity may reflect the greater risk purchasers are thought to incur mainly through the possibility of a rise in interest rates during the life of the bond, and the consequent depreciation in its value. Under existing conditions, however, the disparity may also reflect the exceptional desire for liquidity and the fear of inflationary effects upon long term contracts. From the viewpoint of the government, the greater interest cost is the chief disadvantage to long term borrowing. Against the greater ease and lower interest rates of short term borrowing must be set the fact that in a period of deficit financing short term obligations must continually be refunded. In the event that the government adopts or is forced into a policy of short term borrowing its refunding problem cumulates rapidly.

In handling a series of refundings the government incurs two types of risk. First, interest rates may rise and it may be necessary to refund the debt at a higher rate of interest. Conceivably, it may even become necessary to refund at continually rising rates. Second, as noted earlier, to be able to borrow new money the government must always satisfy existing creditors as their debts fall due; consequently, the larger the volume of short dated debt and the more often maturities fall due, the more the financial stability of the government depends upon the satisfaction of its creditors. Each refunding affords an opportunity to creditors to request new terms, and as refundings become larger and more frequent, satisfaction of creditors becomes a matter of great consequence. For if even one refunding fails, the borrowing of additional new money becomes difficult. Hence, in order to minimize an important hazard of war finance continuous effort should be made to borrow as much money on long term as is conveniently possible, and short term debt, which as a matter of expediency must be incurred to some extent, should be refunded into long term obligations sufficiently often to keep the refunding task within manageable proportions.

The particular provisions attached to government loans, such as the denominations of the bonds, their degree of negotiability, the method of interest payment, the call and conversion provisions, and even in considerable degree the interest paid and the length of maturity, are in many ways analogous to the problems of *packaging*, and are to be appraised in much the same way as the packaging of any other product, such as soap or breakfast food. Packaging and other merchandising methods are among the main aids to the seller in making his product acceptable to the buying public; and their importance is all the greater when, as in the case of government bonds, the quality of the merchandise is beyond question. Since in selling its bonds the government must appeal to types of investors very different in respect of their economic status, buying habits, and motives, there are sound reasons, on the grounds of both economic theory and sales technique, for the government to differentiate among purchasers. The forms of individual bond issues, and the sales methods used for each, must be appraised with reference to the type of investors the government is seeking to induce to purchase federal securities.

The sale of federal bonds to governmental agencies and trust funds of course presents no problem. For the most part these agencies are required by law to invest their funds in government securities, and suitable terms can be and largely are agreed upon by the Treasury and the agency in question.

Current savings of persons and business concerns and the liquidation of assets by business firms constitute a large and recurring market for federal obligations, and one that can be expanded through patriotic appeals. Every effort should be made to exploit this market to the full, and the organizations and types of securities used to tap these funds can also be used to absorb idle balances.

In the conversion of savings, idle balances, and the proceeds of liquidated business assets into federal debt, the selling methods and organization may be more important than

the interest rate. For the sale of small denomination bonds the methods currently being developed by the Treasury are well devised. The use of department stores, post offices, and commercial and savings banks as outlets for government bonds is an effort in the right direction but much more vigorous and direct selling methods are likely to be necessary in order to raise the needed funds from individuals.

Idle balances and current savings may best be exchanged for securities essentially similar to War Savings Bonds; namely, into bonds of at least five years' maturity, into bonds possessing either deferred negotiability, or redeemability but not negotiability, and into bonds that do not yield any income through redeemable coupons, but accrue their interest.¹¹ Such bonds could be placed 'on tap,' and their denominations range from 25 cents to \$1,000.

Commercial banks, on the other hand, are typically buyers of short term government securities, chiefly with maturities of less than five years. This particular situation must be recognized by the Treasury in the type of security it offers for purchase by these institutions. Nevertheless, some fair balance should be struck between the desire of the banks to minimize their capital risks and the need of the Treasury to avoid an unmanageable refunding task which could follow the creation of too large a volume of short dated maturities.

Recognition of the special problems of the banks serves to emphasize the basic objective of war borrowing: that as much money as possible should be borrowed outside the banks on longer term maturities, not only to keep the refunding task within manageable proportions, but also and more fundamentally in order to avoid an inflationary expansion of bank deposits.

NOTES

¹ Outstanding Public Debt of the United States Government as of June 30, 1942:

	MILLIONS OF DOLLARS
Public marketable issues	50,574
Nonmarketable issues	13,511
Special issues	7,885
Matured debt on which interest has ceased	98
Debt bearing no interest	356
Total	72,424

SOURCE: Treasury Department, press release, July 2, 1942.

² Treasury Department, press release, July 2, 1942.

³ *Ibid.*, Secretary of the Treasury, *Annual Report, 1940*, pp. 95, 99.

⁴ *Ibid.*, p. 107.

⁵ See Simon Kuznets, *National Income and Its Composition, 1919-1938* (National Bureau of Economic Research, 1941), particularly Ch. 4, 7, 10.

⁶ These estimates, prepared by S. S. Alexander, A. R. Koch, and Carl Kaysen of the Financial Research Staff of the National Bureau of Economic Research in connection with the investigation of Changes in the Financial Requirements of Business Enterprises, are in detail:

	BILLIONS OF DOLLARS
From liquidation of inventories minus the retirement of notes payable	2.7
From undistributed earnings	1.1
From depreciation accruals in excess of capital expenditures	1.9
Total	5.7

⁷ Estimate based on data in Economic Prologue, *T.N.E.C. Hearings*, pp. 229-30.

⁸ *Investment and Business Cycles* (McGraw-Hill, 1941), Appendix II, pp. 337-40.

⁹ Also prepared by S. S. Alexander, A. R. Koch, and Carl Kaysen.

¹⁰ *Who Pays the Taxes, T.N.E.C. Monograph 3*, p. 42.

¹¹ By deferred negotiability is meant a security non-negotiable for some period such as five years subsequent to the purchase date, but redeemable during this interval.