Refinancing file

STRICTLY CONFIDENTIAL

November 12, 1948

The attached memorandum presents the results of some explorations by members of the staff into the question of a conversion operation for restricted bonds. Its circulation to Members of the Board has been authorized by the Chairman. These studies have made no attempt to reach definite conclusions or recommendations but the results will provide such background material as we are now able to furnish in case this subject should come up for discussion at the meeting of the Open Market Committee on Monday.

C.M.
W.W.R.
W.T.
R.A.Y.

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November 12, 1948 **STRICTLY CONFIDENTIAL**

A CONVERSION OPERATION FOR RESTRICTED BONDS

Essential Facts

The amount and ownership location of outstanding restricted Treasury bonds (estimated as of October 31, 1948) is shown in the following tabulation:

		(In billions of dollars)
Total amount outstanding		49.6
Held by Treasury and Federal Reserve		11.1
Federal Reserve System	6.7	
Treasury Trust Funds and Agencies	4.4	
Held by the market		38.5
Insurance companies	15.4	
Mutual savings banks and savings and loan associations	9.0	
Other investors	14.1	

The annual interest cost to the Treasury of the approximately 39 billion dollars of restricted issues currently held by the market amounts to about 940 millions. If this entire volume of debt were converted from present coupon rate basis of 2.25 to 2.5 per cent to a basis of 3 per cent, the interest cost of the market held restricted bonds would rise to 1,155 million dollars--an increase of 215 millions.

Objective

The objective of a conversion operation would be to reduce market holdings of long-term restricted bonds and in this way to help solve the problem of bond market support. From the standpoint of this objective, a conversion operation would be successful (1) if the market accepts a significant amount of new issues offered in exchange for outstanding restricted bonds, (2) if the new issues are of a type not requiring market support or unrestricted cash redemption, and (3) if unexchanged restricted bonds remain firmly in the hands of willing holders.

The Problem

The problem of a successful conversion operation is immediately one of designing an exchange program sufficiently attractive to the market at the time conversion is undertaken. Several types of bonds can be suggested that might find adequate market acceptance. The types that appear to offer greatest promise under present conditions are:

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(1) a very long-term restricted and temporarily non-negotiable bond,
(2) a fully negotiable but unsupported consol type bond (without maturity),
(3) a nonnegotiable, long-term instalment retirement bond,
(4) a modified nonnegotiable but redeemable G-type bond.

The following sections analyze in detail these possible exchange issues.

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(1) A Long-Term Restricted and Temporarily Nonnegotiable Bond

(a) Features.--

Maturity--35 years, due July 1, 1984.

Call feature--Callable (in whole or part) on or after July 1, 1954.

Coupon Rate--2-3/4 per cent.

Negotiability--Nonnegotiable until after July 1, 1954.

Restriction as to ownership--Not eligible for commercial bank or Federal Reserve ownership until July 1, 1974.

Redeemability--Through July 1, 1954, cash redemption by Treasury at par in case of death of individual holder or dissolution of corporate holder.

Denomination--Same as for restricted bonds.

Limitation on exchange offering--Exchangeable only against restricted bonds in amounts equal to par value of restricted bonds offered in exchange.

Amount of exchange issue--Limited to amount of restricted issues outstanding in the market at time of offering, or to such smaller amount as the Treasury may determine.

Offering period--Indefinite but subject to termination on Treasury notice.

Subsequent offerings--None.

(b) General comment.--Except for three major features--(1) length of maturity, (2) temporary nonnegotiability, and (3) coupon rate--this bond would copy outstanding restricted issues. The coupon rate of 2-3/4 per cent would fall on the top side of a 35-year projection of the present yield curve for market issues and would represent a small investor premium for length of maturity plus compensation for withdrawal of negotiability during the first five years. Cash redemption in case of death of individual holder or dissolution of corporate holder is to meet investor emergencies arising during nonnegotiability.

(c) Advantages.--The appeal of the bond would be to institutional investors who hold securities for income. For example, the 2-3/4 per cent coupon rate would about cover the basic legal reserve requirements of insurance companies and comparable funds. Potential absorption of this issue is difficult to estimate but it might amount to as much as 15 billion dollars, or two-fifths of the present volume of outstanding restricted issues. This figure allows for substantial retention by institutional investors of existing restricted bonds.

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Similarity of the bond to existing restricted issues would facilitate acceptability.

The lengthening of the average maturity of Federal debt resulting from the issue would be favorably viewed by the market.

(d) Disadvantages.--Temporary loss of negotiability might prove a serious deterrent to exchange by institutional investors, and for this reason it is uncertain how much of their present holdings of marketable restricted bonds would be exchanged for the new issue.

The market might be seriously shaken when this issue would become negotiable on a restricted basis in 1954. If the interest rate structure were at that time such that long-term Government issues were selling on a 3-1/2 per cent basis, these bonds would become negotiable at 86. The monetary authorities might suddenly face a critical problem of market support. This issue would not remove the problem of support but would only postpone it and raise slightly the rate level for support.

The exchange offer would not meet the needs of important groups of investors. Substantial amounts of restricted bonds are held against liabilities of uncertain maturity or against capital expenditures planned for the future. If these holders interpreted the exchange offering as presaging modification in or withdrawal from the program of support for restricted issues, they might rush in to sell their holdings of existing issues while there was yet time to get out of these holdings.

The exchange issue would leave the Treasury with a huge refunding problem concentrated in the five-year period 1979-1984. This disadvantage, of course, could be moderated with a wider call period or by limiting the amount of the exchange.

(e) Cost to the Treasury.--If as much as 15 billion dollars of restricted bonds were exchanged for the new issue, the annual interest cost to the Treasury would be increased by about 40 to 60 million dollars.

(f) Variations in the bond's features.--Bond features, of course, could be modified to meet some disadvantages mentioned above. Several series of these bonds could be included in the exchange offerings, e.g., a 30-year 2-5/8 per cent bond negotiable after 1954, a 35-year 2-3/4 per cent bond negotiable after 1959, and a 40-year 2-7/8 per cent bond negotiable after 1964. It is doubtful, however, whether variation along these lines would greatly enhance market acceptability, because of the feature of non-negotiability. A somewhat higher rate than 2-3/4 per cent may be necessary for even a 35-year maturity to assure success of an exchange operation based on this type of bond.

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(2) A Consol Type Bond

(a) Features.--

Maturity--No maturity.

Call feature--Callable in whole or part on six months' notice after 20 years from date of issue. Call price to be 5 per cent above the average market price during the 12 months preceding call date, but in no event less than 90 per cent or more than 110 per cent of the original exchange value.

Principal value--The bond would have no obligation to pay a principal sum at any time, but a specified principal value of 100 dollars would be fixed for exchange against an equal par value of restricted bonds at the time of issue.

Coupon--3 dollars per 100 dollars of exchange value.

Negotiability--Fully negotiable.

Restrictions as to ownership--Not eligible for ownership by commercial banks or Federal Reserve Banks.

Redeemability--Cash redemption by the Treasury in case of death of individual holder or dissolution of corporate holder. Redemption value would be set at 5 per cent above the average market price during the preceding 12 months, but in no event would it be less than 90 per cent or more than 110 per cent of the original exchange value.

Denominations--Issued in units bearing coupons of 3 dollars or multiples of 3 dollars corresponding to denominations of restricted bonds with a par value of 100 dollars or multiples of 100 dollars.

Limitation on exchange offering--Exchangeable only against restricted bonds in amounts equal to the par value of such bonds offered for the new issue.

Amount of exchange issue--Limited to amount of restricted issues outstanding in the market at time of offering, or to such smaller amount as the Treasury may determine.

Offering period--Indefinite but subject to termination by Treasury notice.

Subsequent offerings--Dependent on market acceptance of the consol type bond and Treasury debt management needs.

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(b) General comment.--The consol type security, while unfamiliar in the American market, is well known as an established instrument of British and European finance. The feature of no principal value except at time of issue would help to avoid any future par support problem, while ineligibility for Federal Reserve purchase is to assure that investor supply and demand factors will always determine the market price and yield. At present interest levels, a coupon of 3 dollars per consol unit should be sufficient to compensate long-term holders for price, redemption and call risk. Because market prices of consol bonds would be highly sensitive to changes in long-term interest levels, the bond would not be appropriate for holding by commercial banks.

(c) Advantages.--The suggested issue, which would be fully negotiable, would represent a decisive step in the direction of a free market for Government credit, and as such would meet with strong favor among important elements in the financial community.

A consol should have broader investor appeal than a new long-term restricted and temporarily nonnegotiable bond. The potential market would include wealthy individuals, pension funds, trusts, estates, foundations, etc., as well as institutional investors. Because of the higher interest yield of the suggested consols, perhaps a potential market as large as 20 billion dollars can be envisaged for an exchange issue.

An issue of this type would afford a definitive test of the market's preference for a liquidity feature in Government bonds. If unsuccessful, the case for a free market price for Government credit would lose much of its strength, at least for the time being.

(d) Disadvantages.--The unfamiliarity of this type of bond to American investors would be an obstacle to market acceptance, even at the higher interest yield which the issue would carry. The price risk might prove to be an especially serious deterrent to offering success.

Restricted bond investors, whose holdings are subject to future contingencies or expenditure plans, would be unwilling to assume the price risk inherent in consols, and might interpret the offering to be a signal that the current bond market support program was to be significantly modified or abandoned. The result might be a flood of selling by these holders, which would spread to the whole market. Other holders of restricted bonds might refuse to exchange any part of their holdings until the trend of interest rates became clearer.

The noneligibility of a consol bond for Federal Reserve ownership, should the market interpret the offering as a portent of higher long-term interest rates, might result in complete market rejection of the issue. Under this interpretation of interest rate trends, the market price of the consols would have only one probable future course and that would be downward. Hence, few investors would accept the exchange offer. On the contrary, many investors might sell their restricted bonds and hold cash to see what would happen to consol prices.

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(e) Cost to Treasury.--If as many as 20 billion dollars of restricted bonds should be exchanged for consols paying a 3 dollar coupon, the annual interest cost to the Treasury would be increased by about 100 to 125 million.

(f) Variations.--A consol type bond is subject to variations only as to amount of annual income payment or callable features. There may be some question as to whether a 3 dollar payment would be attractive enough to command a current price of 100 dollars under all of the conditions which the investor might consider in connection with the exchange.

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(1) Long-Term Instalment Retirement Bond

(a) Features.--

Maturity--Semi-annual instalment repayment of principal. Final maturity in 30 years.

Call feature--Noncallable.

Interest rate--2-3/4 per cent.

Annual payment to holder--5 dollars per 100, including interest and instalment repayment of principal.

Negotiability--Nonnegotiable.

Restriction as to ownership--Not eligible for Federal Reserve Bank purchase and restricted to some small percentage of time deposits for commercial banks.

Redeemability--Unpaid principal redeemable by Treasury on death of individual holder or dissolution of corporate holder.

Denomination--Same as for restricted bonds.

Limitation on exchange offering--Exchangeable only against restricted issues in amounts equal to par value of amounts exchanged.

Amount of exchange issue--Limited to amount of restricted issues outstanding in the market at time of issue, or to such smaller amount as the Treasury may determine.

Offering period--Indefinite but subject to termination on Treasury notice.

Subsequent offerings--Dependent on market acceptance of the instalment type bond and on Treasury debt management needs. Because of the instalment retirement feature, this bond might become established as a tap issue.

(b) General comment.--This bond is patterned after the amortized mortgage which has developed such extensive acceptance in real estate financing market since the early thirties. This type of investment is now widely held by institutional investors. In effect, the investor is offered both a higher shorter-term and a higher long-term yield on his investment. About one-tenth of the principal would be returned at the end of 5 years, a quarter at the end of 10 years, and over one-half at the end of 20 years. This return of principal would mean a substantial higher return on shorter-term maturities than these maturities yield in the market.

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(c) Advantages.--This type of bond would have appeal to all classes of investors--individual, pension, endowment, trust fund, and institutional--with its higher short- and long-term yields and partial liquidity features. Instalment retirement would provide large wealthy investors and institutional investors with automatic investment flexibility which some strongly favor. It would also provide many individual investors with a means of meeting their annuity needs. The potential market for the bond might prove to be as large as 25 billion dollars.

With its instalment retirement feature, the bond would conform to conservative standards of finance, and would signify to the market adoption by the Treasury of a program to repay or refund systematically an important segment of the public debt.

The relatively even distribution of maturities of long-term debt which would result from this type of issue would introduce further flexibility in the Treasury's debt management operations.

Once accepted by the market, the Treasury would find additional uses for the bond in its debt management program.

(d) Disadvantages.--Despite the use of instalment retirement in the mortgage market, this feature is entirely unfamiliar in the Government bond market. Consequently, there may be some doubt as to ready market acceptance of this type of bond. The nonnegotiable feature of the bond, however, would probably constitute the principal obstacle to market acceptance.

The issue would subject the Treasury to a regular cash drain to meet maturing principal. It would thus add to the Treasury's short-run financing problem.

(e) Cost to Treasury.--Assuming an aggregate exchange of instalment retirement type bonds for restricted bonds of 25 billion dollars, the annual interest cost to the Treasury would be immediately increased by about 65 to 85 million dollars. Over a period of time the annual interest cost of this volume of debt would depend on how the Treasury refunded maturing principal.

(f) Variations.--This type of bond could easily be varied as to maturity, interest rate, amount of annual payment, call feature, and other features. From this standpoint, it can be a highly flexible instrument of debt management policy.

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(4) Series G-Type Conversion Bonds

(a) Features

Maturity--12 years from date of issue.

Call feature--Noncallable.

Coupon rate--2-1/2 per cent.

Negotiability -- Nonnegotiable.

Restriction as to ownership--Not eligible for ownership by Federal Reserve Banks.

Redeemability--Redeemable at option of holder, 6 months from issue date on one month's notice at stated redemption values of ordinary G bonds, or in case of death of individual holder or dissolution of corporate holder.

Denominations--Same as for restricted bonds.

Exchange offering--Exchangeable only for restricted bonds in amounts equal to the par amount of such bonds offered for the new issue. If the long-term 2-1/2 per cent rate is supported during the exchange operation period, the date of issue of the G-type conversion bond would correspond to the date of exchange; otherwise, the date of issue of the G-type conversion bond would correspond to that of the restricted bond being exchanged.

Amount of exchange issue--Limited to amount of restricted issues outstanding in the market at time of issue, or to such other amount as the Treasury may determine.

Offering period--Indefinite but subject to termination on Treasury notice.

Subsequent offerings--None.

(b) General comment.--The G-type conversion bond and the present G bond are identical except for denominations and restrictions as to ownership attached to the exchange.

(c) Advantages.--The G-type conversion bonds, because of their familiarity to investors, liquidity feature, and high intermediate-term yields (6 to 12 years) as compared with yields on marketable bonds, would be very attractive to all classes of investors. The G bond yield of 2 1/2 per cent, if held 12 years, is consistent with 2 3/4 per cent on an 18-year bond, and compares with yields of 2 1/4 per cent on marketable bonds callable

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in 12 years. Possibly a potential absorption of 20 billion dollars could be expected.

Redemption at small discount affords a degree of protection to the Treasury against undue liquidity demands.

(d) Disadvantages.--The liquidity of the G-type conversion bond (redeemable 6 months from issue date on 1 month's notice) would be its greatest disadvantage from the point of view of the Treasury. Exchange of restricted bonds for G conversion bonds would increase potential cash claims on the Treasury.

The narrow range of maturities of a G conversion bond offering in exchange for outstanding restricted bonds would present the Treasury with a difficult refunding problem at the end of 12 years. If the issuance dates correspond to those of the restricted bonds exchanged, the bulk of the G conversion bonds would mature between 6 and 9 years after the exchange.

The shorter maturities of the G conversion bond issue in comparison with outstanding restricted issues would reduce the average maturity of public debt, which would be regarded unfavorably in some sections of the market.

Unless accompanied by discontinuance of support prices for existing restricted bonds, holders of these issues might prefer to sell them rather than exchange them for a series G bond. The offering would then induce a flood of selling of restricted bonds to the Federal Reserve.

(e) Cost to Treasury.--Conversion of all 9 billion dollars of 2 1/4 per cent restricted bonds to G bonds would increase coupon interest payments by the Treasury 20 to 25 million dollars. The conversion of 2 1/2 per cent restricted bonds would not affect the annual interest burden on the Treasury.

(f) Variations.--Some limit on the amount of the exchange might be imposed to avoid a concentration of Treasury maturities in a limited period or to avoid large cash redemptions in case market interest rates rose sufficiently to induce redemptions before maturity. To make this type of bond even more attractive to very long-term investors, an issue with a coupon rate of 2 5/8 per cent and maturing in 20 or 25 years might be offered. The yield to redemption would rise to 2 1/2 per cent if held 12 years, matching the present G bond schedule, but would rise to 2 5/8 per cent if held to maturity.

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A Combination of Several Issues or "Package" Conversion Offering

With respect to any one of the foregoing conversion issue possibilities, serious uncertainties would exist as to actual success of an exchange operation. In view of the importance of assuring success for the conversion operation, if undertaken, it might be desirable to employ a "package" of issues rather than relying entirely on one type of bond. This would appeal to the market as equitable to all holders. Any holder could choose the type of issue best suited to his investment needs or take some combination of offerings. To some extent, the different offerings would reinforce one another. Thus, an investor who would reject a consol offering because of price risk if that were his only choice might be willing to exchange his restricted bonds for some series G conversion bonds and some consols.

If the "package" idea were adopted for an exchange operation, definite limitations on the amounts of the several types of securities issued might be desirable. Such limitations would be particularly helpful in accelerating investor decisions on the offerings and thus would work to shorten the period of the entire operation. If a particular issue, say the new long-term restricted and temporarily nonnegotiable bond, proved to be unpopular, its offering could be terminated by the Treasury after a brief period, while the offering of the other issues could be kept open.

There are no factual materials on which we can base a reasonable estimate of final outcome of a conversion operation using the package method. A target goal of 25 billion dollars would not seem unattainable. If such a target should be reached, and the restricted bonds remaining in the market were in the hands of willing holders who had chosen to retain ownership in view of their own investment needs, then the problem of the support program for the 2-1/2 long-term rate and of commitments for its perpetuation would be far along the road towards solution. At least, the task of managing the market for restricted bonds would have been reduced to more manageable proportions than at present.

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