

March 11, 1942.

Mr. Piser

"United States Annuity Bonds" -

Mr. Thurston

a proposal from Winthrop W. Aldrich.

I would like to have your opinion of the attached suggestion. Offhand, the first objection to it that I see is that it contemplates amortization that might fall in a period when it would be undesirable. In other words, it is a commitment to retire debt, though it might be untimely or unwise to do so.

Attachment

ET:b

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date March 13, 1942To Mr. Thurston

Subject: _____

From Mr. Kennedy

In Mr. Piser's absence I am sending along a few comments on United States annuity bonds, a new security issue proposed by Winthrop W. Aldrich.

While the proposed new securities have a number of features that are favorable, it does not seem that they are needed, particularly if the Treasury will adopt the financing program recommended by the Federal Reserve System. The present savings bonds, together with the short and long non-negotiable issues proposed by the Chairman, pretty well cover the field and there appears to be no need for the proposed annuity bonds. I do not believe that they would take the place of Series E, F, and G savings bonds, as Mr. Aldrich indicates. They would probably not be attractive to the small investor, since the amortization payments, interest and principal, would be very small. The Treasury's administrative costs in bookkeeping, the mailing of checks, etc., on small denomination bonds would be prohibitive. The large denomination bonds might be attractive to wealthy individuals or large corporations but funds from this source should find their way into the present savings bonds and proposed new short and long non-negotiable issues.

There appears to be no serious objection to the amortization of the interest and principal over a period of time. The bonds would be dated at monthly intervals and consequently the payments would be spread month by month over the years. This is essentially what will take place with respect to defense savings bonds when they begin to mature. The only difference in this connection is that payments on the proposed securities start earlier than the maturity of defense savings bonds. The three-year accrual period might not be long enough to cover the war in which case, as you suggest, the amortization feature might cause hardship on the Treasury.

Mr. Aldrich's memorandum speaks of the demand liability of the Treasury on the large volume of outstanding defense savings bonds. The proposed securities, however, also in a sense would be a demand liability after three years from issuance, and there is no limitation proposed on the amount any one subscriber is permitted to purchase, whereas there is such a limit on defense savings bonds. The fact that the proposed securities in case of redemption would require a larger discount than do savings bonds may not be effective in preventing cancellation if the funds are needed by the investor.



UNITED STATES ANNUITY BONDS

A Proposal

from

Winthrop W. Aldrich, Chairman Board of Directors

of the

Chase National Bank of the City of New York

Introduction Any proposal, worthy of serious consideration at this time, must recognize the magnitude and complexity of the Treasury's task in providing funds for the war effort. The proposal must go further and look to the nature of the Treasury's responsibilities in the transition from war to a peace economy. The bond issue herein described is designed to appeal to the public and at the same time regularize the Treasury's financing without increasing its immediate cash outlay. It is adapted to the basic economics of the present and future situation of the nation, in so far as that situation can be appraised. It is believed that the bond would utilize the present needs of the Treasury for new money to furnish a bridge into the post-war reconstruction of the nation by providing purchasing power to the nation when it will be needed.

Briefly, the form of the proposed bond is patterned on the characteristics of term loans as developed in recent years by commercial banks. After a three and one half year grace period, during which interest accumulates, principal and interest would be returned to the purchaser in equal instalments so as to retire the bond at its maturity. Purchases would not be limited to any fixed amount. It is believed that the bond would appeal to large purchasers, as well as to those with medium or small resources. It should attract those whose income during the war will exceed their prospective post-war income, and those who, by reason of age, would be interested in annuities.

The introduction of such a bond would give added strength and security to the fiscal position of the Treasury. For, to the extent that the Annuity Bond finds favor with investors, the short-term indebtedness of the Treasury would be thereby reduced. The fact that the principal repayments are spread over a period of time would, in itself, ease the burden of debt retirement in the post-war period.

Although tax revenues will increase, the projected war expenditures of the federal government will be financed, for the most part, by the sale of its obligations. Estimates contained in the President's budget message of January 7 indicate the sale of over \$19,000,000,000 of obligations in the fiscal year 1941-42, and \$34,000,000,000 to \$35,000,000,000 of obligations in 1942-43. These are sales that must be made in addition to those government issues placed with trust funds under the Social Security and other legislation.

The Status of Defense Bonds With such requirements confronting it, the Treasury must exercise the utmost skill in handling its finances. The security issues most importantly used in the financing of the Treasury are of two types, the general money market bonds issued under the Second Liberty Loan Act (together with Treasury notes and bills) and the "defense bonds" issued in Series "E", "F" and "G". ^{1/} It has been estimated that of total borrowings, exclusive of trust fund borrowings, approximately \$9,000,000,000 to \$10,000,000,000 annually will be realized from the sale of defense bonds. These issues are not negotiable but are redeemable. The Series "E" and "F" bonds are purchased at a discount of par and are redeemable at successively higher

^{1/} Series "E" bonds are designed for smaller purchasers and the Series "F" and "G" for those with larger resources.

percentages of par value. The Series "G" bonds are purchased at par and redemption value varies between 94.7 per cent of par and par during the life of the bond. For the most part, defense bonds are sold to individuals, institutions, and other non-banking purchasers. It is highly desirable that a still larger part of the Treasury's borrowing be done in this manner.

The sale of these defense bonds began last May. In the final eight months of 1941, a total of \$2,538,000,000 was sold. Of this total, 45 per cent went to smaller purchasers in the form of Series "E" bonds, and 55 per cent to larger purchasers in the form of Series "F" and "G" bonds. Interestingly enough, December sales reversed these percentages, 65 per cent consisting of Series "E" bonds and but 35 per cent Series "F" and "G" bonds. Series "F" and "G" bonds contributed about 45 per cent of total defense bond sales in the Second Federal Reserve District from January 1 to January 23, inclusive. The present series of defense bonds appear to be of limited suitability for purchases in substantial amounts by those with large resources. For this and other reasons, it is proposed to supplement and, perhaps, replace the Series "F" and "G" bonds by an issue of United States Annuity Bonds.

In addition, the Series "F" and "G" bonds have another objectionable characteristic from the standpoint of the Treasury. After six months, they become redeemable on the first day of any calendar month, on one month's notice in writing. The Series "E" and "F" bonds are redeemable at not less than the cost price. The Series "G" bonds are redeemable at moderate discounts of the cost price but at not less than cost price when interest payments are included. Heavy demands on the Treasury in the future might occur under unfavorable circumstances should the sale of defense bonds reach large levels. The one month's grace period would not provide the same relief for the Treasury that it provides in the case of a bank. In so far as redemption might be demanded by the

public in successive months, the defense bonds constitute a liability on the Treasury's books of uncertain nature, but one more akin to a demand than to a time obligation with a fixed maturity.

Requirements of a Desirable Issue Three important requirements occur in considering the most desirable type of obligation for the Treasury to issue. The bond should appeal more strongly than the Series "F" and "G" bonds to potential purchasers who possess large idle balances. The demand liability position of the Treasury should be prevented from increasing in so far as possible. There should be no unnecessary addition made to the cash demands on the Treasury in the immediate future. If a bond can be devised to accomplish these objectives, a highly desirable revision will result in the Treasury's financing program.

The United States Annuity Bond It is hoped that the United States Annuity Bond herein described may accomplish these purposes. The form of the bond, in substance, constitutes a term annuity. The issue would be dated as of the first of the month in which purchase is made, and would be extinguished 25 years after the issue date. It would be purchased at a discount and interest would accrue at 2 1/2 per cent compounded semi-annually for three years from the issue date. The 2 1/2 per cent rate is used for illustration; it is not put forward as a recommendation. By setting a purchase price of \$928.17 a/ per \$1,000, the 2 1/2 per cent rate enhances the purchase price to \$1,000 principal amount after the three-year period has elapsed.

a/ If desired, this figure could be rounded out by accruing interest for three years at a slight variation of the 2 1/2 per cent rate.

Semi-annual payments of principal and interest begin 3 1/2 years from the issue date. These semi-annual amortization and interest payments are made in equal aggregate amounts, \$30 each six months on a \$1,000 bond. The interest paid progressively decreases, while the principal reduction payments progressively increase until maturity when the total principal will have been returned to the purchaser. The net yield, if held to maturity, is 2 1/2 per cent. The return to the holder after three years is 6 per cent per annum, including both interest and return of capital.

The Treasury would mail checks on a single bond each six months. Since bonds would be sold in each month, different bonds would be dated differently and the Treasury would mail checks to various holders on the first day of each month in the calendar year. Each check would carry a notation of the amount to be credited to interest and the amount to be credited to return of principal. The interest accrued during the first three years would be paid out with other payments of interest and principal, beginning 3 1/2 years from the issue date.

The schedule which follows shows the semi-annual return of principal with semi-annual interest payments computed at 2 1/2 per cent per annum on the respective unpaid balances of principal at successive intervals of time. These combined payments amount to \$30 per \$1,000 bond every six months over a period of 22 years, after the lapse of the three and one half year grace period during which interest accumulates on the original purchase price at the rate of 2 1/2 per cent compounded semi-annually.

U. S. ANNUITY BOND

Payment and Redemption Value Schedule of a \$1,000 - 2½% Interest bearing Bond producing \$60.00 per annum, or \$30.00 each six months. This is a 25 Year Bond with annuity payments commencing 3½ years from the issue date. These \$30. annuity payments become due over 44 semi-annual periods of 22 years. (Not redeemable until end of 3½ year period)

Semi-Annual Periods Years Hence	Semi-Annual Annuity Payments (Subscription price)	Semi-Annual Interest at 2½% per annum	Semi-Annual Principal Reduction Payments	Principal Balances of Bond	Dollars Payable if Redeemed	Net Dollars of Income over Cost if Redeemed	Approx. In- vestment Yield from Issue Date to Redemp- tion Date (Average Life Method Used)	Approx. Yield on Redemption value from Redemption Date to Maturity
End of	½ Yr.	-	-	\$ 928.17	-	-		
"	1 "	-	-	939.78	-	-		
"	1½ Yrs.	-	-	951.52	-	-		
"	2 "	-	-	963.42	-	-		
"	2½ "	-	-	975.46	-	-		
"	3 "	-	-	987.65	-	-		
"	3½ "	\$ 30.00	\$ 12.50	1,000.00	#			
"	4 "	30.	12.28	982.50	\$ 907.00	\$ 8.83	.25%	3.30%
"	4½ "	30.	17.72	964.78	884.	15.83	.40%	3.42%
"	5 "	30.	12.06	946.84	864.	25.83	.60%	3.50%
"	5½ "	30.	11.84	928.68	847.	38.83	.80%	3.53%
"	6 "	30.	11.61	910.29	831.	52.83	1.00%	3.58%
"	6½ "	30.	11.38	891.67	817.	68.83	1.20%	3.59%
"	7 "	30.	11.15	872.82	799.	80.83	1.30%	3.64%
"	7½ "	30.	10.91	853.73	781.	92.83	1.40%	3.73%
"	8 "	30.	10.67	834.40	764.	105.83	1.50%	3.75%
"	8½ "	30.	10.43	814.83	748.	119.83	1.60%	3.77%
"	9 "	30.	10.19	795.02	732.	133.83	1.70%	3.79%
"	9½ "	30.	9.94	774.96	717.	148.83	1.80%	3.80%
"	10 "	30.	9.69	754.65	699.	160.83	1.85%	3.83%
"	10½ "	30.	9.43	734.08	680.	171.83	1.90%	3.91%
"	11 "	30.	9.18	713.26	662.	183.83	1.95%	3.96%
"	11½ "	30.	8.92	692.18	644.	195.83	2.00%	3.99%
"	12 "	30.	8.65	670.83	625.	206.83	2.05%	4.09%
"	12½ "	30.	8.39	649.22	602.	213.83	2.05%	4.30%
"	13 "	30.	8.12	627.34	584.	225.83	2.10%	4.34%
"	13½ "	30.	7.84	605.18	561.	232.83	2.10%	4.57%
"	14 "	30.	7.56	582.74	543.	244.83	2.15%	4.60%
"	14½ "	30.	7.28	560.02	519.	250.83	2.15%	4.95%
"	15 "	30.	7.00	537.02	501.	262.83	2.20%	4.95%
"	15½ "	30.	6.71	513.73	477.	268.83	2.20%	5.32%
"	16 "	30.	6.42	490.15	459.	280.83	2.25%	5.33%
"	16½ "	30.	6.13	466.28	435.	286.83	2.25%	5.75%
"	17 "	30.	5.83	442.11	416.	297.83	2.30%	5.70%
"	17½ "	30.	5.53	417.64	391.	302.83	2.30%	6.37%
"	18 "	30.	5.22	392.86	367.	308.83	2.31%	6.75%
"	18½ "	30.	4.91	367.77	343.	314.83	2.32%	
"	19 "	30.	4.60	342.37	319.	320.83	2.33%	Yields from this period on, increase quite rapidly.
"	19½ "	30.	4.28	316.65	294.	325.83	2.34%	
"	20 "	30.	3.96	290.61	269.	330.83	2.35%	
"	20½ "	30.	3.63	264.24	246.	337.83	2.37%	
"	21 "	30.	3.30	237.54	222.	343.83	2.39%	
"	21½ "	30.	2.97	210.51	197.	348.83	2.41%	
"	22 "	30.	2.63	183.14	173.	354.83	2.43%	
"	22½ "	30.	2.29	155.43	148.	359.83	2.45%	
"	23 "	30.	1.94	127.37	121.	362.83	2.46%	
"	23½ "	30.	1.59	98.96	94.	365.83	2.47%	
"	24 "	30.	1.24	70.20	67.	368.83	2.48%	
"	24½ "	30.	.88	41.08	41.	372.83	2.49%	
"	25 "	11.73	.51	29.49	11.59	373.42	2.50%	
"			.14	11.59	-	373.56		
Totals	\$1,301.73	\$301.73	\$1,000.00					

* Increment of \$71.83 represents an accumulation of 2½% interest compounded semi-annually on the \$928.17 subscription price.

Dollar units were maintained when arriving at Redemption Values.

Registration The bonds would be issued in registered form in denominations of \$1,000, \$5,000, \$10,000, \$50,000, \$100,000 and \$500,000 and made non-negotiable. The rules that now apply to the registration of the defense bonds might be used in connection with the United States Annuity Bond.

• Redeemability The issue would not be callable by the Treasury Department, but on one month's notice in writing may be redeemed prior to maturity after 3 1/2 years from the issue date at the owner's option at fixed redemption values, as provided in the accompanying schedule. These redemption values represent a greater discount of the face value of the bonds than is now the case with defense bonds.

Provision should be made for redemption in full upon the death of the registered owner at the then prevailing principal balance. This is equivalent to making the bonds acceptable for payment of estate and inheritance taxes. Or, if it is preferred by the holder, the annuity payments might be continued after death by registering the bonds in two names, or by naming a beneficiary in the bond's registration.

Annuity Bonds The foregoing description and table outline the
For Smaller
Incomes features of a bond that should appeal to those in the middle and higher income groups. It is entirely possible that the annuity feature could be applied also to a bond designed to draw off

the abnormal wartime incomes of many in the lower income ranges. Industrial workers particularly should look with favor upon an instrument in which they could place enhanced incomes today, and have their incomes returned with interest over a period of years in the future.

A bond designed for this purpose should have a shorter maturity; should pay out in, perhaps, ten years. Since the annuity feature would be its chief attraction, it might carry a moderate rate of interest. Cash outlays of the Treasury to service a bond paying out this rapidly would be heavier, and the amount issued in any year to any one person might be limited to \$2,500. Denominations should be limited, perhaps, to \$100 minimum in order to minimize clerical expenses in servicing the issue.

The following table describes a \$100 bond, at 2 1/2 per cent, to be retired in 10 years. After the three and one-half year period of grace, semi-annual payments of \$7.80 would begin. A somewhat larger payment would be made on the maturity date, so as to return principal with interest in full.

U. S. ANNUITY BOND

Payment and Redemption Value Schedule of a \$100. - $2\frac{1}{2}\%$ Interest bearing Bond producing \$15.60 per annum, or \$7.80 each six months. This is a 10 Year Bond with annuity payments commencing $3\frac{1}{2}$ years from the issue date. These \$7.80 annuity payments become due over 14 semi-annual periods or 7 years. (Not Redeemable until end of $3\frac{1}{2}$ year period)

Semi-Annual Periods Years Hence	Semi-Annual Annuity Payments	Semi-Annual Interest at $2\frac{1}{2}\%$ per annum	Semi-Annual Principal Reduction Payments	Principal Balances of Bond	Dollars Payable if Redeemed	Net Dollars of Income over Cost if Redeemed	Approx. In- vestment Yield from Issue Date to Redemp- tion Date (Average Life Method Used)	Approx. Yield on Redemption value from Redemption Date to Maturity
End of	(Subscription price) -	-	-	\$ 92.82	-	-		
$\frac{1}{2}$ Yr.	-	-	-	93.98	-	-		
1 "	-	-	-	95.15	-	-		
$1\frac{1}{2}$ Yrs.	-	-	-	96.34	-	-		
2 "	-	-	-	97.55	-	-		
$2\frac{1}{2}$ "	-	-	-	98.77	-	-		
3 "	-	-	-	100.00	#	-		
$3\frac{1}{2}$ "	\$ 7.80	\$ 1.25	\$ 6.55	93.45	\$ 85.90	\$ 00.88	.26%	5.15%
4 "	7.80	1.17	6.63	86.82	78.80	1.58	.41%	6.00%
$4\frac{1}{2}$ "	7.80	1.09	6.71	80.11	72.00	2.58	.60%	7.00%
5 "	7.80	1.00	6.80	73.31	65.40	3.78	.81%	Yields from
$5\frac{1}{2}$ "	7.80	.92	6.88	66.43	58.90	5.08	1.01%	this period
6 "	7.80	.83	6.97	59.46	52.50	6.48	1.21%	on, increase
$6\frac{1}{2}$ "	7.80	.74	7.06	52.40	45.60	7.38	1.30%	quite rapidly.
7 "	7.80	.66	7.14	45.26	38.70	8.28	1.40%	
$7\frac{1}{2}$ "	7.80	.57	7.23	38.03	31.90	9.28	1.50%	
8 "	7.80	.48	7.32	30.71	24.90	10.08	1.60%	
$8\frac{1}{2}$ "	7.80	.38	7.42	23.29	18.10	11.08	1.70%	
9 "	7.80	.29	7.51	15.78	11.10	11.88	1.80%	
$9\frac{1}{2}$ "	7.80	.20	7.60	8.18	2.80	12.38	1.85%	
10 "	8.28	.10	8.18	-0-	-	16.86		
Totals	\$ 109.68	\$ 9.68	\$ 100.00					

* Increment of \$7.18 represents an accumulation of $2\frac{1}{2}\%$ interest compounded semi-annually on the \$92.82 sub-
scription price.

Dollar units were maintained when arriving at Redemption Values.

Economic
Effects

The economic effects of using annuity bonds as a supplement to Series "E" defense bonds and, perhaps, as a substitute for Series "F" and "G" bonds may be considered from the standpoint of the Treasury, the holder of the bonds, and the general economy of the country.

Effect on
the Treasury

The present defense bonds create a contingent claim upon the Treasury in any month that holders may wish to redeem. The amount of this contingent claim increases in proportion to the success realized in selling the defense issues. There are two principal reasons why holders might demand payment. Individuals may need funds from time to time which they can conveniently obtain by redeeming their defense bonds. This could result in a large number of demands upon the Treasury in the event of a post-war deflation with rising unemployment. But it is improbable that the aggregate dollar demands from this source would be great or would be difficult for the Treasury to handle. Moreover, redemption in these circumstances would supply purchasing power to the community when it would be desirable.

The most important potential demand upon the Treasury in dollar amount is provided by the possibility of a material revision in the economic expectations of the larger holders of defense bonds. A state of high business activity with booming prices might induce redemption of the Series "F" and "G" bonds especially. In these circumstances, unlike those in a situation of large unemployment, redemption on a large scale would provide the community with new purchasing power at a time when it is most undesirable that purchasing power be increased.

A highly desirable feature of the United States Annuity Bond is that it is redeemable at sizable discounts of the face value. In this circumstance, a holder confronted with the decision of redeeming

the bonds to acquire funds to use in other investments must accept a known loss for a contingent gain. It seems less likely that a large "run" on redeemable government bonds could occur in this situation.

Even if open-market bonds should decline in market price to a level making it profitable for the holder of Annuity Bonds to cash his holdings and purchase the open-market government obligations, the Treasury would find itself in the enviable position of realizing a net decrease in its debt as a result of the transaction. But this is an improbable contingency in view of the announced intention to maintain comparatively easy interest rates.

After the three year accretion period, the service of Annuity Bonds would require greater cash outlays than other types of government issues. The following table uses the 25-year Annuity Bond to show just how much greater this service would be for outstanding amounts from \$10,000,000,000 to \$40,000,000,000. To the extent that it is not financed with new issues, the additional cash outlay represents a reduction of debt and a strengthening of government credit. In addition, it is a determinable amount, whereas the cash outlays to service an equal amount of Defense Bonds might fluctuate within wide ranges, depending upon the rate of their redemption.

ANNUAL DEBT SERVICE TO CARRY DEFENSE PROGRAM
(in millions of dollars)

<u>Amount</u>	Six per cent Principal and Interest Service Per Annum	Two and one-half per cent Interest on "Long" Bonds in any event	Additional Cash Outlays of Treasury--Applied to Principal Reduction of "Defense" Debt
\$10,000	\$ 600	\$ 250	\$ 350
20,000	1,200	500	700
25,000	1,500	625	875
30,000	1,800	750	1,050
40,000	2,400	1,000	1,400

Effect on
the Holder The holder of Annuity Bonds has somewhat less to
fear from changing economic developments than
would be the case if he possessed a marketable government bond of the
customary type, which he held to maturity or was forced to sell in
the market at an inopportune time. In the third year after issuance,
semi-annual return of principal begins in progressively larger amounts
until the issue has been fully paid at its redemption date. These
successive principal payments provide the holder with the opportunity
of reinvesting successive parts of his original funds over a period of
time so that the average conditions that pertain over the life of the
bond are available to him in his reinvestment decisions. This provides
him with the opportunity of mitigating the effects of broad economic
change upon his personal affairs.

Moreover, it provides the holder with a convenient means of
saving wartime income that would be returned in instalments with
interest over a period of years in the future. This is especially true
of the 10-year issue designed to appeal to smaller income receivers.

Effect on the
Economy The effects of the Annuity Bond issue upon the
general economy, and more specially upon the money
markets, depend largely upon the extent of their sale. To the extent
that the bonds are sold in large amounts to people who use existing
dormant deposits, the result is an activating of those deposits. Since
the annuity feature of the bonds is designed to appeal to those who have
substantial resources, it is reasonable to believe that this would be one
of the results. No other type of government issue has been conspicuously
successful in tapping these large unused funds.

To the extent that the Treasury might succeed in financing the war effort in this way, there would be a reduction in the amount of new general money market bonds which it had to sell. Perhaps the most difficult problem today associated with war finance occurs in connection with the now indicated necessity of large bond purchases by the commercial banks of the nation. From the standpoint of the money markets, this problem can be eased somewhat by the Treasury gradually reducing the maturity of its outstanding obligations and concentrating the bulk of its forthcoming financing in the short-term market. But it still remains true that for many reasons, it is highly desirable for the government to sell as large a part of its issues as possible to non-banking purchasers. Anything that can divert the forthcoming Treasury financing away from the banks and toward the public will serve the national interest and is worthy of serious consideration. The Annuity Bonds appear to possess the necessary features to attract large balances from private sources and thus to ease this phase of government finance.

Finally, the method of repayment should have a beneficial effect on the economy. Repayment of the Liberty and Victory bonds of the last war occurred at irregular maturity intervals. This released funds to the money markets that were used to stimulate some of the undesirable financing of the 1920's. In contrast, the provisions of the Annuity Bonds would insure that new funds would arrive in stabilized amounts. To the extent that the bonds might be widely held, funds would be returned to all sections of the nation and not concentrated in the large money markets.

January 28, 1942