



August 18, 1955

To: Federal Open Market Committee

From: Winfield W. Riefler

Just prior to the August 2 meeting of the Federal Open Market Committee, I asked the Banking Section to look into the range of discounts that prevailed in the U. S. Government securities market as they related to the banking position. It proved impossible within the time limits to put the material in form for distribution at that meeting. As it is still of interest, I am distributing it at this time.

Attachment

A handwritten signature in cursive script, appearing to read "Winfield W. Riefler".

August 15, 1955

DISCOUNTS ON UNITED STATES
GOVERNMENT SECURITIES HELD BY
COMMERCIAL BANKS

It is estimated that at July 29 prices the net discount from par on all Treasury bonds and notes held by commercial banks is about 1.0 billion dollars, or about 7 per cent of their capital accounts. This contrasts with a small net premium as late as mid-January of this year. The extent to which the discount from par can be taken as representative of the depreciation from book value is uncertain, although some light can be thrown on the subject indirectly.

Since banks are permitted to carry securities at amortized values, they need not take capital losses on such securities unless they have to sell them in order to meet deposit losses or customer loan demands. The fact that the securities are quoted at a discount, and that sales would result in capital losses, however, would be expected to have some deterrent effect on bank loan expansion even when sales are not imminent.

Discount on securities held. As of May 31, 1955, commercial banks held an estimated 39.3 billion dollars of Treasury bonds and 17.1 billion of notes, as is shown in Table 1. At July 29 market prices, the aggregate net discount on bonds held was about 850 million dollars, or about 2.2 per cent of total holdings, and on notes about 185 million, or about 1.1 per cent of holdings. Aggregate discounts of about 1,135 million dollars on bonds and notes were offset only in small part by premiums of about 100 million. As late as January 14, 1955, after a considerable decline of prices from mid-1954 highs, the aggregate

Table 1
 Estimated Commercial Bank Holdings
 of Treasury Notes and Bonds, and
 Computed Premium or Discount, by
 Class of Bank, July 29, 1955

Classification of security	Class of bank						
	All commercial	New York central reserve city	Chicago central reserve city	Reserve city	Country member	Non-member insured	Non-member uninsured
	Holdings (in billions of dollars)						
<u>Treasury notes</u>	17.1	2.0	.8	5.9	5.7	2.5	.2
Regular issues	16.5	1.9	.8	5.7	5.5	2.4	.2
Issues in exchange for April 1, 1975-80 convertible bond	.6	.1	*	.2	.2	.1	*
<u>Treasury bonds</u>	39.3	5.3	1.8	12.8	13.6	5.4	.4
Partially tax-exempt issues	3.1	.6	.5	1.1	.7	.2	*
Fully taxable issues eligible for commercial bank ownership prior to 1952	5.7	.8	.2	1.4	2.4	.8	.1
Fully taxable issues restricted as to commercial bank ownership prior to 1952	5.6	.8	.1	1.7	2.1	.8	.1
Bonds issued after Dec. 31, 1951	24.9	3.0	1.0	8.6	8.4	3.5	.3
<u>Total notes and bonds</u>	56.3	7.2	2.6	18.7	19.3	7.9	.6
	Net premium (+) or discount (-) (in millions of dollars)						
<u>Treasury notes</u>	- 186	- 28	- 9	- 63	- 61	- 24	- 1
Regular issues	- 170	- 26	- 9	- 58	- 55	- 22	- 1
Issues in exchange for April 1, 1975-80 convertible bond	- 16	- 2	**	- 6	- 7	- 2	**
<u>Treasury bonds</u>	- 849	- 99	- 15	- 263	- 331	- 128	- 13
Partially tax-exempt issues	+ 86	+ 16	+ 14	+ 31	+ 19	+ 6	**
Fully taxable issues eligible for commercial bank ownership prior to 1952	- 147	- 12	- 4	- 37	- 72	- 20	- 1
Fully taxable issues restricted as to commercial bank ownership prior to 1952	- 255	- 36	- 4	- 75	- 96	- 38	- 6
Bonds issued after Dec. 31, 1951	- 533	- 67	- 21	- 182	- 182	- 76	- 6
<u>Total notes and bonds</u>	-1035	- 127	- 24	- 326	- 392	- 152	- 14
Ratio to capital (per cent)	7.0	4.7	4.0	7.3	8.4	7.4	4.3

* Less than 50 million. **Less than .5 million. Note: Holdings are estimated on the basis of the Treasury Survey of Ownership for May 31, 1955. Discounts and premiums are computed on the basis of bid prices as of the close of business July 29, 1955. Capital accounts are as of May 25, 1955, for Federal Reserve member banks and December 31, 1954, for nonmember banks.

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premium on notes and bonds had exceeded discounts by about 65 million dollars. Fluctuations in security prices since July 29 have probably decreased slightly the amount of the discount. 1/

In order to judge the effect of current bond prices on the value of bank portfolios, it would be necessary to be able to compare them with book values rather than par values. Securities may be carried on a bank's books at values either above or below par, depending on the price at which the individual bank purchased them and the amortization practices followed. There are no readily available data on book values of individual issues of securities. Some idea of the general relationship between book and par values may be obtained, however, by breaking down the various issues of securities into those acquired by the banking system generally at par, those acquired frequently at prices above par, and those acquired frequently at prices below par.

Of the total gross discount of 1,135 million dollars, about 535 million dollars, more than 45 per cent, was on 24.9 billion dollars of bank-held bonds issued after 1951, and another 180 million, or about

1/ Changes in bank holdings of notes and bonds since May have probably had only a small effect on the extent of the aggregate discount. Changes in holdings of individual issues have probably been small except for cash subscriptions in July to the 1955 bond issue and refunding subscriptions in August to the August 1956 note issue. Allowing for additional holdings of these issues at current prices would have little effect on the aggregate discount.

No attempt has been made to estimate premiums and discounts on Treasury bills and certificates of indebtedness held. No data are available on holdings of individual issues of Treasury bills, and the discount basis on which they are issued makes the concept of capital gain or loss less meaningful when applied to them. It is difficult to estimate current holdings of certificates of indebtedness on the basis of May data because of the extent of cash and refunding issues by the Treasury and of market transactions in outstanding issues in recent months. In any event, discounts and premiums are small on bills and certificates as a result of their generally short maturities and the fact that the longest term issues outstanding in each category have been issued at rates of interest prevailing in the recent past.

15 per cent, on 16.5 billion dollars of regular issues of Treasury notes. Notes accounted also for about 10 million dollars of the aggregate premium. To a large extent the banking system acquired these bond and note issues from the Treasury at time of issue or in the market shortly thereafter at prices very close to par. Even if acquired originally by the banking system at par, however, these securities may have been acquired by their present owners at prices above or below par as the original bank owners took a profit or loss on the issue. Nevertheless, they are probably more likely on the whole to be carried at par, especially by country member and nonmember banks, than those acquired largely in the market from nonbank investors.

Another 255 million dollars of the aggregate discount, more than 20 per cent, was accounted for by 5.6 billion dollars of fully taxable issues which were not eligible for commercial bank ownership prior to 1952, and a small amount was on 1-1/2 per cent notes issued mainly to nonbank holders in exchange for Series B investment bonds. These securities were acquired to a large extent by their bank owners at prices below par. In this case, the discount probably considerably overstates the depreciation from book value.

On the other hand, about 145 million dollars of the discount, nearly 15 per cent of the total, was on fully taxable bonds which were eligible for commercial bank ownership prior to 1952. To a large extent, these issues were acquired by the banking system at prices above par. Although the premiums have been amortized in part, some of these securities are doubtless still carried at book values considerably in excess of par.

Most of the premium on bank-held securities as of July 29 was on partially tax-exempt bonds. The 3.1 billion dollars of such securities held by banks accounted for a premium of about 85 million dollars. These bonds, like the taxable bonds eligible for bank ownership prior to 1952, were in many cases acquired by the banking system at prices in excess of those now prevailing. In this case, the premium can by no means be considered representative of appreciation over book value.

Relation to capital accounts. The estimated net discount on all bonds and notes held by commercial banks was about 7 per cent of their aggregate capital accounts, which totaled 14.9 billion dollars at the end of May. Discounts ranged from 4 per cent of capital accounts at Chicago central reserve city banks to almost 8-1/2 per cent at country member banks. The ratio was about 4-1/2 per cent for New York central reserve city banks and for nonmember uninsured banks and about 7-1/2 per cent for reserve city banks and for nonmember insured banks.

The ratio of estimated discount to capital accounts varies in accordance with the relationship between capital accounts and total assets, the importance of Government securities in the bank portfolio, and the composition of the portfolio of Government securities. The relatively low ratio of discounts on Government securities to capital accounts for New York banks is attributable to their relatively high capital/asset ratio and the relatively small proportion of Government securities among their total loans and investments. For Chicago central reserve city banks the low net discount/capital account ratio is accounted for partly by the relatively large holdings of partially tax-exempt

bonds. Since these were acquired in large part at prices above par, a comparison of net discounts probably places Chicago banks in a relatively too favorable position. The ratio of aggregate gross discounts on bonds and notes to capital accounts for these banks is about 6-1/2 per cent, somewhat higher than for New York central reserve city banks and for nonmember uninsured banks, but still lower than for other classes of banks.

Any ratio of computed security discounts to bank capital which is based on aggregates conceals large differences among individual banks. An attempt has been made to throw some light on the variability of security discount/capital account ratios by estimating the ratios for country and for reserve city banks in the individual Federal Reserve Districts. Average percentage discounts computed for notes and for bonds of the various maturity classes for each class of bank were applied to District data on security holdings as of the April 11, 1955, call date. 2/ As is shown in Table 2, the estimated discount on bond and note holdings for reserve city banks ranged from less than 4 per cent of capital accounts in the Philadelphia Federal Reserve District to about 12 per cent in the Chicago District. For country banks the range of ratios was narrower, from less than 7 per cent in the Dallas and Boston Districts to almost 11 per cent in the Chicago District.

2/ Somewhat greater accuracy could have been obtained through use of District data on individual issues in the Treasury Survey of Ownership. The use of average discounts for each maturity class probably does not seriously distort the results, however.

The only significant change in note and bond holdings of commercial banks from April 11 to May 31 was the issue of August 1956 notes for maturing certificates of indebtedness and for cash in May. For this reason, the average rate of discount on notes was recomputed to exclude this issue before being applied to April 11 data on holdings.

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Table 2

Estimated Discount on Treasury Notes and Bonds held by
Member Banks and Relevant Ratios, by Class of Bank
and Federal Reserve District, July 29, 1955

Class of bank and Federal Reserve District	Estimated discount (in millions of dollars)	Ratios (in per cent)			
		Discount: capital	Discount: total U.S. Government securities	U. S. Government securities: total loans and investments	Capital: assets
<u>Central reserve city</u>					
New York	129	4.8	1.6	34.8	8.6
Chicago	25	4.2	0.9	46.6	7.4
<u>Reserve city</u>	326	7.4	1.6	41.2	6.6
Boston	11	4.3	1.6	32.5	9.5
New York	7	6.0	1.5	36.1	6.9
Philadelphia	12	3.8	1.5	28.8	8.6
Cleveland	46	7.0	1.6	45.1	8.1
Richmond	18	7.6	1.5	44.8	6.6
Atlanta	16	7.1	1.4	42.3	6.0
Chicago	55	12.1	1.6	53.0	5.4
St. Louis	13	5.9	1.5	38.2	7.0
Minneapolis	6	6.1	1.5	37.1	6.7
Kansas City	18	6.6	1.4	42.9	6.4
Dallas	18	5.4	1.6	34.7	6.9
San Francisco	105	8.9	1.6	39.4	5.8
<u>Country</u>	388	8.4	1.7	45.6	7.2
Boston	28	6.9	1.8	40.0	8.1
New York	72	9.1	2.0	41.0	7.2
Philadelphia	35	7.2	1.8	44.7	9.3
Cleveland	37	8.4	1.7	48.2	7.9
Richmond	24	7.5	1.7	44.7	7.9
Atlanta	29	8.9	1.6	48.1	6.5
Chicago	66	10.6	1.6	50.5	6.4
St. Louis	19	8.4	1.6	48.0	7.2
Minneapolis	15	8.3	1.4	48.2	6.5
Kansas City	20	7.5	1.4	50.5	7.1
Dallas	21	6.7	1.5	42.4	6.6
San Francisco	22	9.4	1.6	43.6	6.1

Note: Average discount for Treasury notes and for bonds of each maturity class was computed for each class of bank from holdings of individual issues on May 31, 1955, as reported to Treasury Survey of Ownership, valued at July 29, 1955 bid prices. Other data utilized are from April 11, 1955, Member Bank Call Report.

The differences that appear to exist in District security discount/capital account ratios are related to the factors discussed above in connection with differences in ratios by class of bank. A large part of the computed differentials is attributable to differences in the ratios of capital accounts to assets and of United States Government securities to total loans and investments. Among reserve city banks, Boston and Philadelphia banks, with the two lowest ratios of estimated security discounts to capital accounts, rank highest in the ratio of capital to assets and lowest in the ratio of United States Government securities to total loans and investments. Reserve city banks in the Chicago District, on the other hand, have the lowest capital/assets ratio and the highest ratio of Government securities to total loans and investments. Country banks in the Dallas District have a relatively low capital/assets ratio; their low discount/capital ratio results largely from a high cash ratio, a relatively liquid portfolio of Government securities, and a relatively low ratio of Government securities to loans and investments. Country banks in the Boston and Philadelphia Districts, however, with the next lowest discount/capital ratios, have the highest capital/asset ratios among country banks.

Significance of the ratio of discounts on securities to capital accounts. The ratio of discounts on Government securities to capital accounts cannot by any means be looked upon as a measure of capital impairment, even assuming that discounts from par can be taken as representative of depreciation from book value. The market value of Government securities is a liquidation value. Commercial banks are

permitted to carry investment-type securities at amortized values, notwithstanding fluctuations in market values. Hence, fluctuations in market values below book values have no direct significance for the bank's capital position unless it liquidates the securities either to raise needed funds or to take losses for tax purposes. Few banks are likely to be in a position in which they need to liquidate a major share of their intermediate- and long-term securities.

The security discount/capital account ratio can be taken as one indicator of the extent of possible future losses to the individual bank, but only if it is considered in relation to the underlying factors determining it. To the extent that a bank's relatively low discount/capital ratio can be attributed to a high ratio of capital to total assets, a high cash ratio, or a liquid portfolio of Government securities, it reflects generally greater ability to meet needs for funds without endangering its capital position. To the extent that it reflects primarily a low ratio of Government securities to total loans and investments, however, it may actually reflect illiquidity and unsoundness on the part of a bank, which may encounter difficulties from a large volume of slow-moving loans or depreciated State and local government securities.

Ultimately, the ability of banks to meet their future requirements for reserve funds without capital impairment depends more on their ability to respond to changes in needs without selling long-term securities than on the extent of discounts prevailing on such securities. This ability depends, among other things, on the variability of their deposits and their customers' loan demands,

on the volume of cash assets in excess of required reserves, and on the volume of short-term open market assets held.

On the whole, the number of banks that are in any danger of capital impairment because of recent reductions in the prices of securities is probably quite small. Some banks, however, have found it necessary to sell some long-term securities at a loss. Moreover, it is possible that many banks that have adequate cash and short-term securities to meet foreseeable needs, as well as others that may find it necessary to sell some longer term securities at a loss, may be somewhat less ready to grant loans because of the discount on their portfolio and the fact that sales would be at a loss.