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January 2, 1970.



Capital Markets Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D. C.

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### SYMBOLS:

- e Estimate
- Preliminary
- r Revised
- n.a. Not available

TABLE 1: Yields, Volume and Reception

	•				CORPORATE	BOND MARKET	
		•	Y:	TELDS		VOLUM	E 2
WEEK	ENDING	:		MOODY'S SEASONED	GROSS	PER CENT SOLD BY END	BONDS SCHEDULED
			NEW ISSUE	' Aaa	OFFERINGS	OF WEEK	WITHIN 28 DAYS
1969	Nov.	7	8.13	7.26	261	67	991
		14	8.27	7.29	365	81	1,071
		21	8.44	7.38	241	79	903
		28	8.67	7.48	186	91	733
		3.5					
	Dec.	5	8.85	7.60	517	99	586
		12	8.70	7.64	427	92	643
		19	8.76	7.73	365	82	381
		26		7.84	25	100	503
	Jan.	2		7.90	0		702
		9p/	n.a.	n,a,	250e	n.a.	n.a.
			1		MUNICIPAL E	OND MARKET VOLUME	
				ELDS			
WEEK	ENDING	:	MOODY'S	BOND BUYER		PER CENT	
			SEASONED	SEASONED 20	GROSS	SOLD BY END	BONDS SCHEDULED
			Aaa	BOND INDEX	OFFERINGS	OF WEEK	WITHIN 28 DAYS
1969 -	Nov.	7	5.75	6.11	246	48	903
		14	5.78	6.17	83	67	954
	1. (1.4)	21	5 <b>.9</b> 5	6.36	314	59	913
	- 1	28	6.05	6.58	217	86	683
	Dec.	5	6.34	6.72	249	97	437
		12	6,48	6.88	230	77	442
		L9:	6.57	6.90	267	76 91	338 403
		26	6.57	6.79	<b>2</b> 0e	1*	403
	Jan.	2	6.52	6.79	52	87	602
		9p/	n.a.	n.a.	150e	7.5	

Derived by adjusting to a Aaa basis, new issues of publicly-offered corporate bonds with call protection, rated A, Aa, or Aaa by Moody's Investors Service (except serial and convertible issues, offerings of natural gas pipeline and foreign companies, and bonds guaranteed by the Federal Government.)

Note: See footnotes to Table 3

<sup>2</sup> Millions of dollars unless otherwise indicated.

TABLE 2: Details on Inventories

		- 144 - 14 Table	CORPORATE BONDS IN SYNDICAT	E END OF	LATEST WEEK	
	DATE	AMOUNT			ORIGINAL RATING AND	ESTIMATED PRO-
_	OFFERED	(MIL. \$)	ISSUER	COUPON	YIELD CALL PROTECTION	PORTION SOLD
4						
· ·	11/24	13.0	General Tel. New York	9.50	9.45 Baa 5 yrs.	95%

	CORPORATE	BONDS RELEASED FROM SYNDIO	CATE DURING LATEST	WEEK	
DATE			ORIGINAL	INCREASE RATING AND	
OFFERED RELE\SED	AMOUNT	ISSUER	COUPON YIELD	IN YIELD CALL PROT.	PORTION RELEASED
12/15 1/2	35.0	Southwestern Electric	9.00 8.95	<b>A</b> aa 5 yr	rs. 5%

		INVENTORIES 1		
DATE	MUNICI	PALS	CORPORATES	
DATE	BLUE LIST	IN SYNDICATE	IN SYNDICATE	
1969 - Dec. 5 12 19 26	510 461 <u>r</u> /421 370	83 74 46 19	16 4 33 80 5	
Jan. 2p/	369	20	1	

1 All figures in millions of dollars. Blue List is daily average for week ended Friday, except for latest week Digitized for MRCASIR daily average of three days ended Wednesday. All other figures are as of Friday.

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### **BONDS IN SYNDICATE**

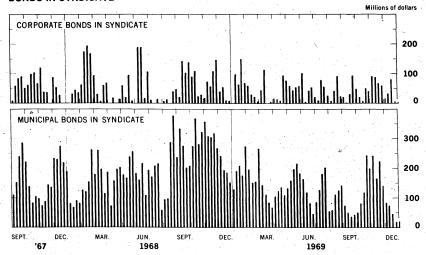


TABLE 3: High Grade Bond Yields

DATE	NEW CORPORATE Aaa <sup>1</sup>	MOODY'S SEASONED CORPORATE Aaa <sup>2</sup>	U.S. GOVERNMENT 20-YEAR CONSTANT MATURITIES 3	BOND BUYER'S SEASONED MUNICIPALS <sup>4</sup>
1967 - High Low	6.55(12/8) 5.11(2/10)	6.24(2/29) 5.00(2/10)	5.73(11/7) 4.48(1/20)	4.45(12/7) 3.40(2/2)
1968 - High Low	7.02(12/13) 6.13(8/30)	6.55(1/27) 5.95(9/13)	5.90(1/20) 5.18(8/9)	4.85(1/26) 4.07(8/8)
1969 - High Low	8.85(12/5) 6.90(2/21)	7.84(12/26) 6.55(1/3)	6.97(12/26) 5.96(1/24)	6.90(12/18) 4.82(1/28)
1969 - Dec. 5 12 19 26	8.85 8.70 8.76	7.59 7.64 7.73 7.84	6.81 6.85 6.93 6.97	6.72 6.88 6.90 6.79
Jan. 2 <u>p</u> /		7.90	7.00	6.79

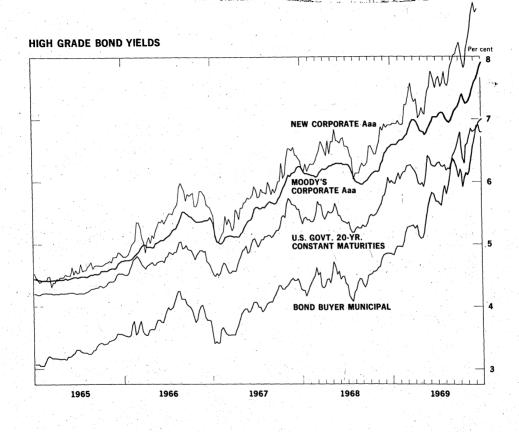
New corporate issues, with call protection, adjusted (as described in footnote 1 of Table 1) to a Aaa basis.

Weekly average of daily figures. Average term of bonds included is 22-24 years.

<sup>3</sup> Weekly average of daily figures.

<sup>4</sup> Thursday figures. The average rating of the 20 bonds used in this index falls midway between the four top groups as classified by Moody's Investors Service.

Note--Highs and lows are for individual series and may be on different dates for different series.



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TABLE 4: Long-term Corporate and State and Local Government Security Offerings and Placements (In millions of dollars)

			GROSS PRO	CEEDS		
PERIOD		CORPORATE 1		S	TATE AND	LOCAL 2
	1969р	1968	1967	1969p	1968	1967
January	2,075	1,771	1,684	1,262	1,178	1,492
February March	2,045 2,098	1,608 1,799	1,418 2,362	987 538	1,158 1,404	1,236 1,450
April	2,748	1,428	2,015	1,801	1,318	1,130
May June	2,076 2,530	1,866 2,411	1,518 2,674	1,109 734	1,143 1,395	1,254 1,497
July -	2,478	2,143	2,589	1,092	1,469	950
August September	1,427 2,427	1,432 1,557	2,481 1,763	804 5 <b>3</b> 4	1,699 1,444	860 1,340
October	2,110e	2,129	2,409	1,264	2,230	975
November December	2,560e 2,940e	1,767 2,054	1,500 2,385	872 800e	1,0 <b>2</b> 1 1,115	1,401 1,182
lst Quarter	6,218	5.178	5,464	2,787	3,840	4,177
. 2nd Quarter 3rd Quarter	7,354 6,332	5,704 5,1 <b>33</b>	6, <b>208</b> 6, <b>832</b>	3,644 2,430e	3,856 4,612	3,881 3,150
4th Quarter	7,610e	5,950	6,294	2,936 <sub>e</sub>	<b>4,3</b> 66	3,557
lst half Three quarters	13,522 19,904e	10,882	11,672	6,431	7,956	8,059
Year	27,514e	16,015 21,965	18,504 24,798	8,861 <b>1</b> 1,797e	12,008 16,574	11, <b>209</b> 14,766
	Excluding	finance com	panies 3			
1st Quarter	6,170	5,107	5,308			ý
2nd Quarter 3rd Quarter		5,427 4,785	6,063 6,584			
4th Quarter	1,500	5,654	5,859			
Year	- en	20,973	23,814			

<sup>1</sup> Securities and Exchange Commission estimates of gross proceeds.

<sup>2</sup> Investment Bankers Association of America estimates of principal amounts.

<sup>3</sup> Total gross proceeds excluding offerings of sales and consumer finance companies.

TABLE 5: New Corporate Security Issues, Type of Issue and Issuer
(In millions of dollars)

				GROSS PR	OCEEDS E	Y				ROCEEDS BY	
				TYPE C	F ISSUE				TYPE	OF ISSUER	
(	UARTER				COMMON						N
	OR			NDS	AND		MO:		PUBLIC	COMMUNI -	OTHER
	MONTH	TOTAL	PUBLICLY	PRIVATELY	PFD.		INCLUDED	MFG.	UTILITY	CATIONS	ISSUERS
			OFFERED	PLACED	STOCK	FOREIGN	CONVERTIBLE			1 2 2 1	
1968	- III	5,133	2,606	1,361	1,166	124	1,037	1,657	1,160	490	1,825
	IV	5,951	2,555	1,922	1,474	113	902	1,712	1,435	319	2,483
1969		6,218	2,657	1,540	2,023	215	1,355	1,407	1,346	473	2,993
	II	6,331	3,411	1,673	2,268	227	1,126	1,773	1,878	432	3,266
	IIIe/	6,419	3,194	1,460	1,764	n.a.	673	1.862	1,544	684	2,243
	IV <u>e</u> /	7,610	3,360	1,800	2,450			2,000	1,760	570	3,280
1968	- Oct.	2,129	1,009	595	5 <b>2</b> 5	24	<b>3</b> 65	640	674	115	700
	Nov.	1,767	939	362	466	49	211	421	443	162	741
1000	Dec.	2,055	607	<b>9</b> 65	483	40	<b>32</b> 6	651	319	41	1,044
1969	- <b>Ja</b> n.	2,075	980	6 <b>3</b> 6	460	103	376	403	6 <b>2</b> 7	186	860
	Feb.	2,045	842	395	807	74	578	513	315	56	1,161
3	Mar.	2,098	835	509	755	38	401	491	404	231	972
	Apr.	2,748	1,268	649	830	6 <b>2</b>	430	513	784	44	1,405
	May	2,076	871	510	694	28	463	569	392	197	915
. N. 4	June	2,530	1,272	514	744	137	233	691	702	191	946
	Ju1y	2,478	1,279	591	57 <b>9</b>	132	<b>20</b> 6	875	493	<b>28</b> 6	826
	Aug.	1,426	685	319	485	122	167	362	507	126	433
	Sept.	2,427	1,230	550	700	n.a.	300	625	544	272	984
	Oct. <u>e</u> /		960	500	650	n.a.	50	450	640	120	900
	Nov. e/		1,060	500	1,000	n.a.	110	750	6 <b>20</b>	190	1,000
	Dec. <u>e</u> /	2,940	1,340	800	800	n.a.	300	800	500	260	1,380
	14.5										_,500

Other issuers are extractive, railroad and other transportation, real estate and finance, and commercial and other.

Source: Securities and Exchange Commission. Quarterly supplements are available.

TABLE 6: Large Long-term Public Security Issues for New Capital
(Other than U.S. Treasury) 1

				Dec	ember 1 throu	gn Januai	y 2, 1970
			AMOUNT (MILLIONS		COUPON RATE OR	OFFER-	MOODY'S
	ISSUER	TYPE 2	OF DOLLARS)	MATURITY	NET INTER- EST COST	ING YIELD	RATING
	Corporate						
		Conv. gub. d		1994	6.00	6.00	N.R.
	Detroit Edison Co. Columbus & Southern Ohio	Gen. ref.	75.0	1999	9.00	8.84	Aa
	Electric Company	1st mtg.	20.0	1999	9.00	8.90	Aa
	Pacific Telephone & Telegraph	Debs.	150.0	2004	9-1/8	9.10	Aaa
100	Union Tank Car Co.	Equip, tr	ıst	F			
	Meridian Investing and	ctfs.	25.0	1989	9.30	9.30	A
	Development Company	Com. stk.	40.0				
	United Tank Car Company	Com. stk.	22.0				
	Mississippi Pwr. & Lt. Co.	1st mtg. 1st mtg.	20.0	1999	9-5/8	9.40	Aa
/	Northwest Natural Gas Co. Natural Gas Pipeline	ISL mcg.	15.0	1974	9-3/8	9.38	Baa
	Co. of America	1st pipel	ine 30.0	1989	9-1/2	9-1/2	Aa
	Natural Gas Pipeline Co.	í. Í					
	of America	Cum. pfd.				1. P. 1.	
	Trans World Airlines, Inc.		Ctfs. 70.0	1985	10.00	10.00	Baa
	Investment Properties Assoc		81.7	1992	9.00	9.00	N.R.
	Public Srv. Elec. & Gas Co.						
	General Public Utilities	Debs.	50.0	1974	10-1/4	10.00	Ва
	Tenneco Corporation	Debs.	75.0		*********	·	Ba
	Ohio Power Company	1st mtg.	80.0		9.00	8.83	Aa
	Atlanta Gas & Lt. Co.	1st mtg.	20.0		9-1/8	9.06	. A
100	Georgia - Pacific Corp.	Conv. sub			5-3/4	5.75	Ва
	Becton Dickinson & Company	Conv. sub			5.00	5.00	Baa
	Walter E. Heller & Co.	Sr. debs.			9.50	9.50	N.R.
	Northern Illinois Gas Co.	Bonds	20.0	1994	9.00	8.80	Aa
	Citizens Mortgage Invest-	Benf. int					
	ment Trust	w/w	21.0		* .		
	Arkansas Power & Light Co. H.J. Heinz Company	1st mtg. Com. stk.	25.0 46.9	1999	9.25	9.08	A
itized for	Viatron Computer Systems FR/Corporation	Conv. del	s. 25.0	1989	6-1/4	6.25	· ·

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TABLE 6: Large Long-term Public Security Issues for New Capital (Other than U.S. Treasury) <sup>1</sup>

			Dece	mber 1 throu	an January	2, 1970
		AMOUNT		COUPON	1	
		(MILLIONS		RATE OR	OFFER-	MOODY'S
ISSUER	TYPE 2	OF	MATURITY	NET INTER-	ING	RATING
		DOLLARS)	1	EST COST	YIELD	
Corporate (continued)		•			·	
Southwestern Elec. Pwr. Co.	1st mtg.	35.0	1999	9.00	8.95	Аа
General Telephone of Calif.	1st mtg.	60.0	1999	9.25	9.15	A
*MGIC Investment Corp.	Conv. debs	50.0	1989	5.75	5.75	N.R.
Pennsylvania Company	S.F. debs.		1994	9.00	9.00	
Kane-Miller Corporation	S.F. debs.		1990	9.50	9.50	N.R.
Central Telephone &		A	1 -555	J. 30	9.30	В
Utilities Corp.	S.F. debs.		1994	9.75	9.75	Baa
Mohawk Data Science Corp.	Conv. sub.	debs. 25.0	1994	5.50	5.50	Ва
South Carolina Elec. & Gas	1st&Ref.	15.0	1999	9.13	9.15	A
*Pennzoil United Inc.	Debs.	45.0	1973-76	9.38	9.38	Baa
*Zayre Corporation	Conv. sub.	debs. 20.0	1994	5.75	5.75	Ва
				<b>3.13</b>	2.75	ьа
State & local Government						
West Virginia, State of	Rev.	90.0	1970-94	6.89	E EO 7 1E	
Montgomery Co., Maryland	G.O.	33.0	1971-90		5.50-7.15	
New York State Dormitory		33.0	13/1-30.	7.00	5,60-7.50	A
Authority	Rev.	32.2	1971-2000	7		
Mecklenburg Co., N.C.	G.O.	14.3	1971-94	7.55 6.45	6.00-7.50	
Richmond, Virginia	G.O.	38.0	1971-90	6.28	5.50-6.60	
Texas	G.O.	15.0	1979-95	6.25	5.40-6.35	
Oregon, State of	G.O.	40.0	1974-83	6.25 6.55	5.80-6.50	
Oregon, State of	G.O.	12.0	1973-2000		6.00-6.50	
Port of New York Authority	Consol. no		1973-2000	7-1/2	5.90-6.80	Aa
Greater Chicago Metropoli-		50.0	2712	/-1/2	7.50	*
tan Sanitary Dist Ill.	G.O.	20.0	1980	6.82	6 10 6 70	
Tulsa Municipal Airport		20.0	1700	0.02	6.10-6.70	A-1
Trust, Oklahoma	Rev.	3.0	1972-80	42.0	6 40 7 00	* * * * * * * * * * * * * * * * * * * *
Tulsa Municipal Airport		J.0	1312-00		6.40-7.20	
Trust, Oklahoma	Rev.	11.0	1994			
Ohio, State of	Rev.	50.0	1971-90	6 6 5	7.75	
Port of Seattle, Washington		16.0	1971-90	6.65	5.60-6.60	Aaa
,		10.0	13/2-30	7.30	6.20-7.30	A

TABLE 6: Large Long-term Public Security Issues for New Capital (continued) (Other than U.S. Treasury)<sup>1</sup>

	1		De	cember 1 th	cough Janua	ry 2, 1970
ISSUER	TYPE 2:	AMOUNT (MILLIONS OF DOLLARS)	MATURITY	COUPON RATE OR NET INTER- EST COST	OFFER- ILC YIELD	MOODY'S RATING
State & local Government (continued)						
Pennsylvania, State of Los Angeles DWAPS Indianapolis, Indiana	G.O. Rev. Bonds	125.0 39.0 10.0	1972-1999 1971-2000 1972-91	6.82 6.90	5.90-7.30 5.65-7.00 5.50-6.50	Aa
<u>Other</u>				•		
Quebec Hydro-Elec. Comm. F.N.M.A. F.N.M.A.	Debs. Debs. Debs.	50.0 250.0 400.0	1995 1973 1971	9-3/4 8.30 8.60	9.88 8.30 8.60	A  
A						

<sup>\*</sup> Rights offering.

<sup>1</sup> Includes corporate and other security offerings of \$15 million and over; State and local security offerings of \$10 million and over.

<sup>2</sup> In case of State and local government securities, G.O. denotes general obligation; Rev.-Ut., revenue obligations secured only by income from public utilities: Rev.-Q.-Ut., revenue bonds secured only by income from quasi-utilities; Rev.-S.T., revenue bonds secured by revenue from specific taxes only; Rev.-Rent., revenue bonds secured solely by lease payments.

<sup>3</sup> Includes foreign government and International Bank for Reconstruction and Development issues and non-quaranteed issues by Federal Agencies.

TABLE 7: Forthcoming Large Long-term Public Security Offerings for New Capital (Other than U.S. Treasury) (Continued)

As of January 2. AMOUNT (MILLIONS APPROXIMATE DATE ISSUER TYPE OF OF OFFERING DOLLARS) Corporate Iowa Pwr. & Light Bonds 15.0 January Ohio Bell Debs. 100.0 January Central Pwr. & Light Co. Bonds 25.0 January \*Commonwealth Edison 1st mtg. 100.0 January Delmarva Pwr. & Light Co. Bonds 25.0-30.0 January 12 Newhall Land & Farming Co. Conv. debs. 35.0 January 12 \*Standard Oil Co. (Ohio) S.F. debs. 150.0 January 13 Oaklahoma Gas & Elec. Bonds 30.0 January 13 Southwestern Elec. Pwr. Co. Pfd. stk. 12.5 January 13 \*Connecticut Pwr. & Light Co. 1st & ref. 40.0 January 14 Carolina Pwr. & Light Ronds 40.0 January 15 Houston Lighting & Pwr. Co. Conv. debs. 40.0 January 20 Montana Pwr. Co. Ronds 30.0-35.0 January 20 \*Ford Motor Company S.F. debs. 75.0 January 20 \*Ford Motor Company Notes 125.0 January 20 Consolidated Edison Co. of New York Bonds 100.0 January 21 Indiana Bell Telephone Co. of Northwest, Inc. Bonds 25.0 January 29 \*General Tele. Co. of the

1st mtg.

Conv. sub. debs.

25.0

100.0

January 29

Northwest, Inc.

\*Greyhound Corporation

TABLE 7: Forthcoming Large Long-term Public Security Offerings for New Capital
(Other than U.S. Treasury)

		inued) As of	January 2	1970.	·
		AMOUNT			
		(MILLIONS	APPROX	IMATE DAT	E .
ISSUER	TYPE	OF	OF (	OFFERING	
		DOLLARS)			
State & local Government					
*Middletown Sewer Auth., N.J.	Rev.	31.2	January	5	
*Maine, State of	G.O.	23.5	January	6	
*Alabama Highway Authority	Rev.	30.0	January	6	
Michigan City Area SBC, Ind.	Rev.	11.2	January	6	
Howard Co., Maryland	G.O.	10.0	January	7	
*Dade Co. Sch Board, Florida	Rev.	11.5	January	. 7	
Dallas, Co. Hospital Dist.,					
Texas	Rev.	12.0	January	8	
Southeastern Penna, Trans.					
Auth.	Rev.	15.5	January	8	200
San Francisco	G.O.	49.1	January	12	
Seattle Dept. Light & Pwr.,					
Washington	Rev.	17.0	January	13	
*Anne Arundel, Maryland	G.O.	12.0	January	13	
Dallas I.S.D., Texas	G.O.	15.0	January	14	
San Francisco Port Comm.	Rev.	11.0	January	14	
Jefferson Parrish S.D. #1,					
Louisiana	G.O.	10.0	January	14	
San Francisco B.A.R.T.	Rev.	50.0	January	15	
Snohomish Co. Public Utility					
District	Rev.	15.0	January	15 .	
*Jacksonville, Elec. Auth.,					
Florida	Rev. ctfs.	22.0	January	15	
*Jersey City, New Jersey	G.O.	12.9	January	20	
Clark Co., Nevada	Rev.	13.0	January	20	
Wheeler Ridge - Maricopa Wtr.			.,		
Dist., Colorado	Rev.	16.0	January	21 .	
Metropolitan Council, Minn.	G.O.	14.0	January	22	
Sacramento Municipal Util.	0.00				
Dist., California	Rev.	58.0	January	22	
Hennepin, Ramsey, Anoka					
Metropolitan Council, Minn.	Rev.	11.0	January	22	
*New York State Dormitory Auth.		18.1	January	27	
*Nassau Co., New York	G.O.	37.9	January	27	
King Co., Washington	Rev.	13.5	January	27	
Chicago, Illinois	Airport Rev.	56.0	January		•
Y-,					

TABLE 7: Forthcoming Large Long-term Public Security Offerings for New Capital (Other than U.S. Treasury)1

	(Other th	tinued)	As of January 2, 1970.		
ISSUER	ТҮРЕ	AMOUNT (MILLIONS OF DOLLARS)	APPROXIMATE DATE OF OFFERING		
<u>Other</u>					
NONE					

Included in table for first time.

Federal Reserve Bank of St. Louis

Includes corporate and other issues of \$15 million and over; State and local Government issues of \$10 million and over.

Includes foreign government and International Bank for Reconstruction and Development issues and non-guaranteed issues of Federal Agencies. Postponements: Eastern Air Lines - 80.0; deferred for the second time because of market conditions.

TABLE 8: Stock Prices and Volume

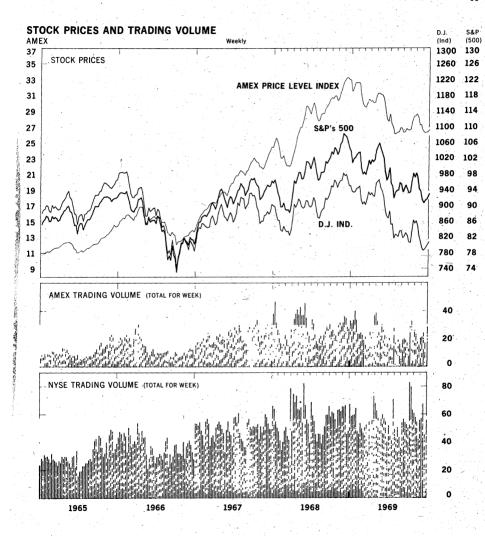
		STOCK PRICES		TRADING V	VOLUME 2
DATE	S&P 500 <sup>3</sup>	D.J IND.	AMEX 4	NYSE	AMEX
1967 - High Low	97.59(9/25) 80.38(1/3)	943.08(9/25) 786.41(1/3)	24.52(12/29) 13.78(1/27)	60.7(8/14) 27.4(1/6)	33.5(10/27) 8.3(1/6)
1968 - High Low	108.37(11/29 87.72(3/5)	9) 985.21(12/3) 825.13(3/21)		82.1(6/7) 34.0(2/23)	45.4(6/7) 14.1(2/23)
1969 - High Low	106.16(5/14) 89.93(7/30)			82.6(10/17) 32.8 <b>(</b> 4/4)	38.4(5/9) 12.9(4/4)
1969 - Dec. 5 12 19 26	91.73 90.81 91.38 91.89	786.69 789.86	26.62 26.34 26.31 26.34	55.6 56.9 67.2 45.0	20.6 21.4 24.3 17.4
Jan. 2 <u>p</u> /	93.00	809.20	26.71	55.7	28.5

Figures other than highs and lows are Fridays only. Highs and lows are for the year and are not necessarily for Fridays.

<sup>2</sup> Total number of shares traded per week (millions of shares). In the past, trading was normally conducted 5 days a week for 5 1/2 hours per day, or 27 1/2 hours per week. From August 8 through August 20, 1967, daily trading was reduced to 4 hours per day or 20 hours per week. A 20-hour week was also in effect from January 22 through March 1, 1968. From June 30 through December 31, 1968, the exchanges were open 5 1/2 hours for 4 days a week or 22 hours. From January 3 through July 3, 1969, the exchanges were open 4 hours each day, 20 hours per week. Beginning July 7, 1969 the exchanges have been open 4 1/2 hours each day, 22 1/2 hours per week. NYSE is New York Stock Exchange; AMEX is American Stock Exchange.

<sup>1941-43 = 10.</sup> 

<sup>4</sup> Average dollar value of shares listed.



\_TABLE 9: Security Credit

	CREDI	T EXTEND	ED TO	CUSTOMERS'	CUSTOMERS' NET	NET CREDIT EXTENDED BY
				NET DEBIT		BROKERS AND
END OF PERIOD	BROKERS	BANKS 2	TOTAL	BALANCES	BALANCES	DEALERS 3
Outstanding:		**:				
1968 - Nov.	6,200	2,630	8,830	9,029	3,419	5,610
Dec.	6,200	2,710	8,900	9,970	3,717	6,073
1969 - Jan.	MARGIN CUSTOMERS BY:  DET PERIOD BROKERS   BANKS   TOTAL BALANCES	5,445				
	5,750	2,810	8,560	9,148		5,501
Mar.	5,590	2,780	8,370	8,318	3,294	5,024
Apr.	5,570	2,760	8,330	8,044	3,077	4,967
May	5,670	2,770	8,440	8,474		5,390
	5,340	2,740	8,080	8,214		5,129
July	5,170	2,700	7,870			4,732
Aug.	5,000	2,670	7,670	7,019		4,442
Sept.	4,940	2,620	7,560	7,039		4,460
					2,753	4,490 4,498
Change in Outstanding:						
1968 - Nov.	-50					158
Dec.		80	80	761	298	563
1969 - Jan.						-628
					50	-9
						-477
					-271	-57
					7	423
					- /	- 261
						-397
					-206	-290
						18
						30
Nov. p/	40	-50	10	-132	-140	8
			400 100 10			

Margin debt, as reported by the New York Stock Exchange. Although margin debt until March 1968 included loans secured by U.S. governments, the amount of such loans included is thought to have been small.

<sup>2 &</sup>quot;Bank loans to others than brokers and dealers for purchasing or carrying securities other than U.S. governments."

<sup>3</sup> The difference between customers' net debit balances and customers net free credit balances, this figure represents the net credit extended by brokers and dealers to the nonfinancial public.

NOTE: With the exception of bank loan data, figures are supplied by the New York Stock Exchange and are end of month data. Bank loans are for weekly reporting large commercial banks. Broker data includes loans for regulated securities; bank data includes loans for the purpose of purchasing or carrying any security, whether regulated or not.

TABLE 10: Savings Flows at Nonbank Depositary Intermediaries
(\$ millions)

					247			*.			
				L SAVINGS B	ANKS	SAVINGS &	LOAN ASSO	CLATIONS			
			REGULAR	DEPOSITS 3	NET	SHARE	CAPITAL	NET	DEI	POSITS	NET
		DATE		ANNUAL	NEW		ANNUAL	NEW		ANNUAL	N EW
	200	14.5	NET	GROWTH	MONEY 2	NET	GROWTH	MONEY 2	NET	GROWTH	MONEY 2
			FLOW	RATE 1		FLOW	RATE 1		FLOW	RATE	
						Not Sea	sonally Ac	ljusted			
	<b>19</b> 66	14	2,557	4.9	227	3,584	3.2	- 55 <b>2</b>	6,141	3.8	<b>-32</b> 5
	1967		5,082	9.3	2,376	10,649	9.4	6,129	15,731	9.4	8,505
	1968		4,203	7.0	1,143	7,432	5.9	2,676	11,635	6.3	3,819
	1969	to date	1,985	·	-510	2,965		-726	4,950		-1,236
	1968	- Sept.	505	,,	-38	1,132		348	1,637	"	310
		Oct.	202		89	504		446	706		535
. *		Nov.	359		293	656		618	1,015		911
			4.								
	1969		307		-269	879		-104	1,186		- 373
		Oct.	-138	·	<b>-2</b> 66	-406	,	-405	- 544		-671
		Nov.p/	260		180	241		19	501		199
	* 1					Seaso	nally Adj	usted			1.4
	1969	- June	192	3.5		449	4.0		641	2.0	
٠		July	-23	-0.4		26	0.2		3	3.9	'
	- 1	Aug.	197	3.6		225	2.0		422	2.5	
		Sept.	152	2.8		446	4.0		598	3.6	
		Oct.	48	0.9	'	-173	-1.5		-125	-0.8	
		Nov. p/	263	4.9		280	2.5		543	3.3	

Annual growth rate for monthly data is the annualized monthly percentage increase in deposits.

NOTE: Data revised reflecting up dated seasonal adjustment and revision of the savings and loans data.

<sup>2</sup> Net New Money is new deposits net of both withdrawals and interest. Data for S&Ls are for insured associations only, which represent 96% of industry total resources.

Regular deposits at mutual savings banks exclude items such as Christmas club and certain escrow accounts, which represent a very small part of total deposits.

SOURCES: National Association of Mutual Savings Banks and Federal Home Loan Bank Board.

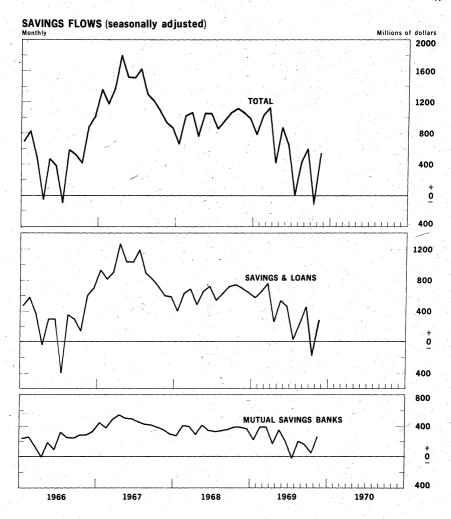
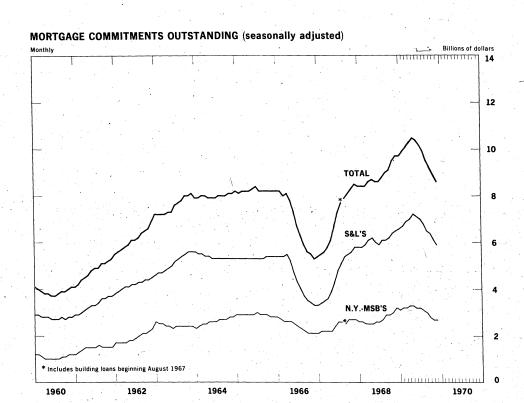


TABLE 11: Mortgage Commitments at Selected Thrift Institutions 1

		OUTSTANDING COMM	ITMENTS	100	NET CHANC	E'		
		ALL	MUTUAL		ALL	MUTUAL		
DATE	TOTAL	SAVINGS &	SAVINGS	TOTAL	SAVINGS &	SAVINGS		
		LOAN	BANKS		LOAN	BANKS		
		ASSOCIATIONS	(N.Y. STATE)		ASSOCIATIONS	(N.Y. STATE)		
		(Billions	of Dollars, Sea	sonally	Adjusted) $1/$			
	1							
			The second second					
1968 - Nov.	9.7	6.5	3.2	20				
Dec.	9.7	6.6	3.1	.28	.11	. 18		
and the second second				1	.09	08		
1969 - Jan.	9.9	6.7	3.2	.18	.11	.07		
Feb.	10.1	6.9	3.2	. 24	. 18	.06		
Mar.	10.3	7.0	3.3	. 18	.12	.06		
Apr.	10.5	7.2	3.3	.15	. 14	.02		
May	10.4	7.1	3.2	11	06	05		
June	10.2	7.0	3.2	18	11	06		
July	9.9	6.8	3.1	32	22	10		
Aug.	9.5	6.5	3.0	36	24	12		
Sept.	9.2	6.3	2.8	31	18	13		
Oct.	8.9	6.1	2.7	33	23	09		
Nov.	8.6	5.9	2.7	26	20	06		
	1							
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						

Based on data from Federal Home Loan Bank Board and Savings Banks Associations of New York State. Data for savings banks and S&L's include a minor amount of non-residential commitments. S&L commitments include loans in process. Net changes are derived directly from unrounded outstandings levels as reported and after seasonal adjustment by Federal Reserve. Subtotals may not add to totals because of rounding.



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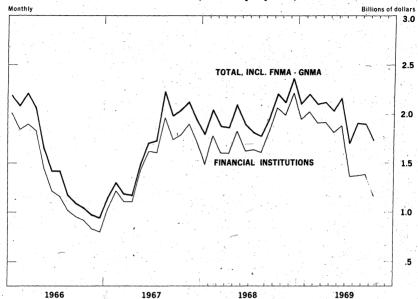
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TABLE 12: Net Change in Mortgage Holdings 1

					<u> </u>	<u> </u>	
			FINAN	CIAL INSTI	TUTIONS		
	TOTAL	1		MUTUAL	SAVINGS &	LIFE	T
DATE	INCLUDING	TOTAL	COMMERCIAL	SAVINGS	LOAN	INSURANCE	FNMA - GNMA
	FNMA - GNMA		BANKS	BANKS	ASSOC:	COMPANIES	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Not	Seasonally	Adjusted		
1966	18,197	15,874	4,705	2,760	3,761	4,648	2,323
1967	19,988	18,191	4,369	3,118	7,538	2,914	1,797
1968	23,776	21,268	6,677	2,796	9,330	2,465	2,508
1968 - July	1.835	1,683	517	248	718	200	152
Aug.	1,995	1.854	549	233	874	198	141
Sept.	1,997	1.889	746	221	810	112	108
Oct.	2,258	2,097	751	313	945	188	166
Nov.	2,099	1,954	717	310	732	195	145
1969 - July	1,688	1,395	200	215	865	115	293
Aug.	2,124	1,596	400	181	844	171	528
Sept.	1,987	1,486	500	120	687	179	501
Oct.	1,795	1,206	300	158	608	140	589
Nov.			300	151	442		594
			Se	asonally A	djusted	•	
196 - Jan.	2,101	1.948	638	281	885	144	153
Feb.	2,202	2,025	668	266	884	207	177
Mar.	2,099	1,096	632	240	875	159	193
Apr.	2,117	1,910	567	250	899	194	207
May	2,032	1,808	534	251	854	169	224
June	2,153	1,875	440	230	1,022	183	278
July	1,698	1,364	151 _	181	859	173	334
Aug.	1,900	1,370	310	147	720	193	530
Sept.	1,896	1,385	383	137	674	191	511
Oct.	r/1,734	r/1,166	244	r/124	627	171	- 568
Nov.			237	<sup>-</sup> 146	519		583

Monthly data for commercial banks based on Federal Reserve estimates benchmarked to Call Report data on real estate loans outstanding as available. Other data derived from mortgage debt outstanding as reported separately by National Assn. of Mutual Savings Banks, Federal Home Loan Bank Board, Institute of Life Insurance and, through August 1968, the Federal National Mortgage Association, and thereafter by FNMA and the Government National Mortgage Association. Data for mutual savings banks and for Life Insurance companies may differ somewhat from those derived from regular quarterly series because of minor conceptual differences for which adjustments are not made in the monthly series. Altogether, these groups accounted for 87 per cent of the net increase estimated for all holders in 1967.

## NET CHANGE IN MORTGAGE HOLDINGS (seasonally adjusted)



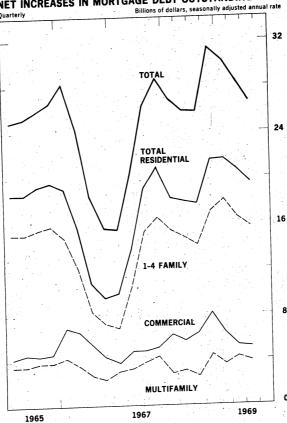
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TABLE 13: Net Increases in Mortgage Debt Outstanding . Billions of dollars, SAAR 2

		the state of the s			The second secon		
QUARTER	TOTAL	RESIDENTIAL <sup>2</sup>	1- to 4- FAMILY	MULTI- FAMILY	COMMERCIAL	MULTI-AND COMMERCIAL	FARM
1965 - I	24.9	18.6	15.1	3.5	4.2	8.0	2.2
II	25.2	18.5	15.1	3.5	4.5	8.1	2.1
III	25.8	19.3	15.5	3.8	4.4	8.4	2.2
IV	26.6	19.6	15.8	3.8	4.6	7.9	2.4
1966 - I	28.3	19.0	14.7	4.3	6.9	11.6	2.4
II	24.2	15.6	12.1	3.5	6.5	10.0	2.2
III	18.4	10.8	8.3	2.6	5.4	8.3	2.1
IV	15.6	9.5	7.2	2.3	4.3	6.2	1.7
1967 - Ip IIp III IVp		9.9 13.7 19.1 20.9	6.8 10.5 15.3 16.5	3.0 3.3 3.8 4.4	3.8 4.8 4.8 5.1	7.3 8.1 8.8 8.8	1.8 1.9 2.4 2.6
1968 - IP	26.9	18.2	15.4	2.8	6.2	9.4	2.4
IIP	25.8	17.9	14.8	3.1	5.7	8.7	2.3
III	25.8	17. <b>7</b>	14.1	2.5	6.4	10.2	1.8
IV <sub>P</sub>	31.3	21.5	17.0	4.5	8.1	11.8	1.7
1969 - Ip	30.2	21.6	18.0	3.6	6.4	10.4	2.2
II <b>p</b>	28.4	20.7	16.5	4.2	5.3	9.4	2.4
IIIp	26.6	19.5	15.6	3.8	5.1	9.2	2.0

Derived from data on mortgage debt outstanding from Federal Deposit Insurance Corporation, Federal Home Loan Bank Board, Institute of Life Insurance, National Association of Mutual Savings Banks, Departments of Commerce and Agriculture, Federal National Mortgage Association, Federal Housing Administration, Veterans Administration and Comptroller of the Currency. Separation of non-farm mortgage debt by type of property, where not available and interpolations and extrapolations, where required, estimated by Federal Home Loan Bank Board and the Federal Reserve.

Residential mortgage debt includes nonfarm only and is sum of 1-to 4-family and multifamily mortgage debt combined.



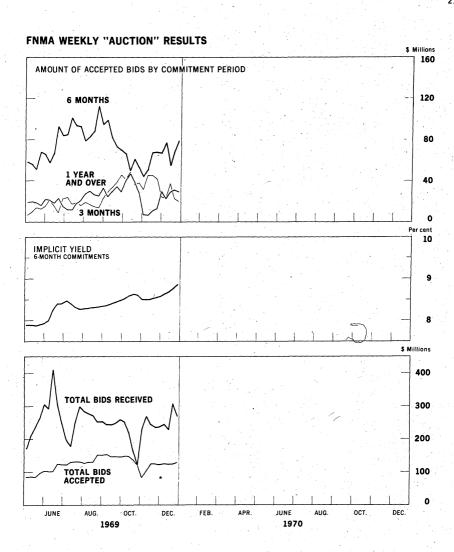
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TABLE 14: FNMA Weekly "Auction" Results

11.		CO	MMI TMENT	S IN \$	MILLION	IS	IMPLICI	T YIELD2(	er cent)
- 1 Tr		The second of		ACCE	PTED				
7 /	WEEK	TOTAL	TOTAL	90-	6-	1-YEAR	90-	6-	1-YEAR 1
7 × 7	ENDE	D OFFERED		DAY	MONTH	& OVER	DAY	MONTH	& OVER
1969 -	Nov.	3 230.2	81.7	31.0	44.1	6.6	8.44	8.49	8.45
	10	267.4	101.9	45.1	50.6	6.2	8.47	8.49	8.47
	1	7 242.6	122.7	45.0	67 <b>.3</b>	10.4	8.50	8.51	8.48
	24	4 233.4	122.3	41.6	67.7	13.0	8.53	8.54	8,50
			/				[ '		
	Dec.	1 235.9	120.6	24.2	67 <b>.0</b>	29.4	8.57	8.58	8.52
		8 242.9	123.0	23.2	77.0	22.7	8.62	8.64	8.57
V / 1	. 1	5 229.4	121.7	37.1	55.4	29.2	8.67	8.70	8.62
	2		121.8	22.6	68.2	31.0	8.75	8.78	8.69
\	2	9 269.3	128.4	20.1	79.0	29.3	8.85	8.87	8.77
\ :			1	_					
	Jan.	5 <u>p/</u>	(120.0)	3/					
		1		4.					
							}		
				• .		1.0			
					(1 · · · · ·				
					<del></del>				

Note: Under the FNMA auction system, approved sellers of Government-underwritten mortgages bid for FNMA forward purchase commitments, subject to an over-all dollar limit announced by FNMA in advance. Bids accepted by FNMA are for delivery at the seller's option, and at any time within the specified period. Bids on proposed homes relate to construction not yet started on which mortgages may be delivered only after completion and occupancy.

- For "proposed construction" of new homes only.
- Average secondary market yield after allowance for commitment fee and required purchase and holding of FNMA stock, assuming prepayment of 15 years for 30-year Government-underwritten mortgages. Yields shown are gross, before deduction of 50 basis points fee paid by investors to servicers.
- 3 FNMA announced limit of accepted bids for next week's auction.



Federal Reserve Bank of St. Louis

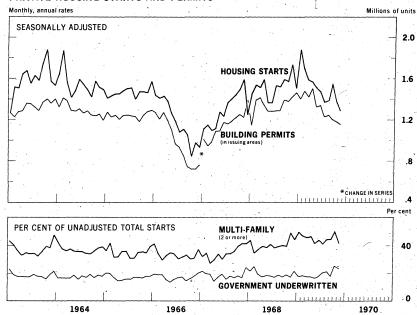
TABLE 15: Private Housing Starts and Permits

	- 1	1. 1.		STARTS				BUILDING		
		1.11				UNADJ	USTED	D PERMITS		
1 to	SE	SONALLY .	ADJUSTED		TYP	E OF	FINANCING	NCING (SEASONALLY		
DATE		ANNUAL	RATE	TOTAL	FHA	VA	OTHER	ADJUSTED		
	TOTAL	1-FAMILY	2 OR MORE					ANNUAL		
	. 1				1 .			RATE) <sup>2</sup>		
1968 - Sept.	1,592	944	648	134.3	18.6	4.6	111.1	1,393		
Oct.	1,570	965	605	140.8	21.4	5.3	114.0	1,378		
Nov.	1,733	905	828	127.1	17.5	4.2	105.4	1,425		
Dec.	1,509	922	585	96.4	16.3	4.4	75.7	1,463		
1969 - Jan.	1,878	1,066	812	101.5	14.2	3.8	83.5	1,403		
Feb.	1,686	975	711	90.0	13.2	3.5	73.3	1,477		
Mar.	1,584	828	756	131.9	18.9	3.9	109.1	1,421		
Apr.	1,563	797	766	159.0	23.0	4.4	131.6	1,502		
May	1,509	883	626	155.5	21.1	4.3	130.1	1,323		
June	1,469	808	661	147.3	21.5	4.6	121.2	1,340		
July	1,371	765	606	125.2	20.8	4.7	99.7	1,228		
Aug.	1,384	723	661	124.9	22.4	4.2	98.3	1,245		
Sept.	<b>e/1,</b> 542	846	696	129.3	18.3	4.8	106.2	1,201		
Oct.	2/1,372	770	602	121.6	25.1	5.0	91.5	1,183		
Nov.	2/1,287	767	520	93.7	18.4	3.9	71.4	1.159		

Total starts are Census estimates including farm for both permit-issuing and non-issuing areas. A dwelling unit is started when excavation begins; all units in an apartment structure are considered started at that time. FHA and VA starts are units started under commitments by these agencies to insure or guarantee the mortgages. As reported by FHA and VA, a unit is started when a field office receives the first compliance inspection report, which is made before footings are poured in some cases but normally after the foundations have been completed. Other starts are derived as a residual, although total and FHA and VA starts are not strictly comparable in concept or timing; other starts include both units financed by conventional mortgages and units without mortgages.

2 Building permits before January 1963 are Census estimates for about 10,000 areas identified as having a local building permit system in 1959. Estimates beginning January 1963 are for approximately 12,000 and beginning January 1967 13,000, or all known permit-issuing places. Unlike starts, seasonally adjusted building permits reflect direct adjustment for differences in the number of working days per month, as well as other differences in timing and coverage.

### PRIVATE HOUSING STARTS AND PERMITS



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Federal Reserve Bank of St. Louis

TABLE 16: Mortgage and Bond Yields 1

1.0						
	MORTO	IA 2	CONVEN-	SPREAD BE-	NEW	SPREAD BETWEEN
DATE	MORTO	AGES	TIONAL	TWEEN YIELDS	Aaa COR-	YIELDS ON NEW
DAIL	05 100	20	MORT-	ON CONV. &	PORATE	CORPORATE BONDS
	25-YEAR	30-YEAR	GAGES	FHA MORT-	BONDS	AND
			3	GACES	4	FHA MORTGAGES
1957 - High	5.63	n.a.	6.00	.47	4.94	1.58
1968 - Low	5.35	n.a.	5.55	.15	3.65	.88
1959-60 - High	6.26	n.a.	6.30 ·	.23	5.25	1.69
1961-66 - Low	5.43	5.44	5.80	.25	4.41	.77
1966 - High	6.73	6.81	6.70	.30	5.82	1.16
1967 - High	n.a.	6.81	6.65	.11	6.51	1.28
Low	n.a.	6.29	6.40	12	5.18	.27
1968 - High	n.a.	7.52	7.40	. 12	6.79	1.20
Low	n.a.	6.78	6.75	27	6.15	.26
1969 - Apr.	n.a.	8.06	7.75	31	7.17	.89
May	n.a.	8.06	7.75	31	7.22	. 84
June	n.a.	8.38	8.00	35	7.58	.77
July	n.a.	8.36	8.10	26	7.63	.73
Aug.	n.a.	8.36	8.20	16	7.65	.71
Sept.	n.a.	8.40	8.25	15	7.98	.42
Oct.	n.a.	8.48	8.30	18	7.89	
Nov.	n.a.	8.48	8.35	13	8.32	. <b>5</b> 9

- Neither mortgage nor bond yields include allowance for servicing costs which are much higher for mortgages than for bonds. Generally, bonds pay interest semiannually; mortgages, monthly. Mortgage yields, if computed as equivalent to a semi-annual interest investment, would be slightly higher than given in the table.
- 2 Based on FHA-field-office opinions about average bid prices in the private secondary market for new-home mortgages for immediate delivery. Separate data available for 25-year and-beginning July 1961--30-year mortgages with minimum downpayments, weighted by probable volume of transactions. Yields computed by FHA, assuming prepayment period of 12 years for 25-year mortgages and 15 years for 30-year mortgages. Over the period for which they can be compared, the movement of the two mortgage yield series has been similar. Dashed-lines indicate periods of adjustment to changes in contractual interest rates.
- 3 Based on FHA-field-office opinion on typical interest rates (rounded) on conventional first mortgages prevailing in the market areas of insuring office cities. Beginning with April 1960, rate relates only to new-home mortgages; prior to that date, rate related to both new as well as existing-home mortgages. Dashed line indicates this change in the series.
- 4 See note for Table 1.

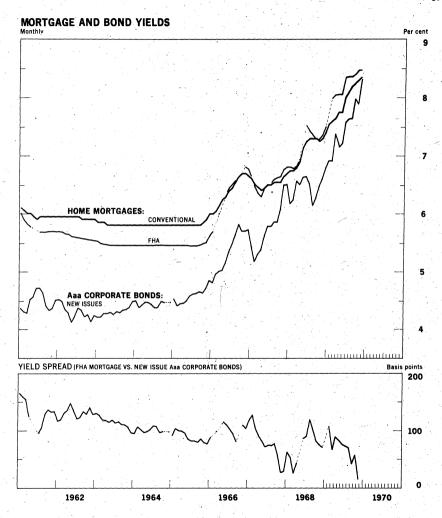


TABLE 17: Conventional Mortgage Terms 1

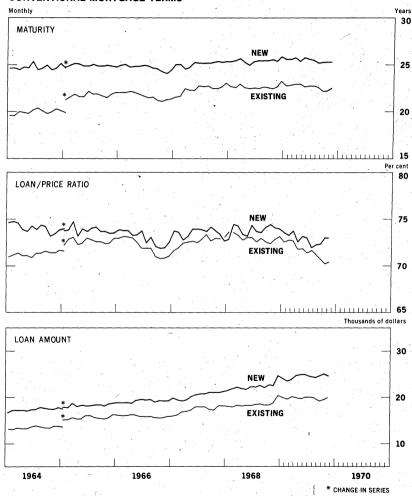
1.			NEV	N HOMES					EXISTI	NG HOME	3	
	CON -	FEES &			LOAN/		CON-	FEES &			LOAN /	T .
	TRACT	CHARCES	TEFFEC-	MATURITY	PRICE	LOAN	TRACT	CHARGES	EFFEC-	MATU-	PRICE	LOAN .
DATE	RATE	(PER	TIVE	(YEARS)	RATIO	AMT.	RATE	(PER	TIVE	RITY	RATIO	AMT.
	(PER	CENT)	RATE		(PER	(\$000)	(PER	CENT)	RATE	(YEARS)	(PER	(\$000)
	CENT)	2	3		CENT)		CENT)	2	3		CENT)	
					1, 4							
								2.00				
1968								•				
Oct.	7.09	0.88	7.23	25.6	74.5	22.7	7.09	0.84	7.22	22.5	72.4	18.3
Nov.	7.07	0.84	7.21	25.4	74.1	22.5	7.07	0.82	7.21	22.7	72.9	18.9
Dec.	7.09	0.89	7.23	25.9	74.0	24.7	7.09	0.85	7.23	23.3	73.2	20.4
1969												
Jan.	7.16	0.84	7.30	25.6	73.6	24.1	7.18	0.86	7.32	22.8	72.6	20.0
Feb.	7.26	0.81	7.39	25.6	73.3	23.5	7.28	0.86	7.42	22.9	72.8	19.6
Mar.	7.32	0.93	7.47	25.8	73.8	24.0	7.35	0.84	7.49	23.0	72.7	20.2
Apr.	7.47	0.96	7.62	25.4	72.6	24.8	7.46	0.85	7.60	23.0	71.8	19.9
May	7.50	0.88	7.65	25.8	73.2	25.0	7.54	0.83	7.68	22.7	71.9	19.7
June	7.62	0.84	7.76	25.6	73.0	24.9	7.64	0.86	7.79	22.8	71.4	20.1
July	7.76	0.92	7.91	25.5	72.0	24.5	7.79	0.91	7.94	22.8	71.7	20.1
Aug.	7.86	0.86	8.00	25.2	72.3	24.3	7.90	0.93	8.05	22.6	71.2	19.8
Sept.	7.89	0.92	8.05	25.3	72.9	24.7	7.92	0.92	8.08	22.2	70.7	19.2
Oct.	7.98	0.89	8.13	25.4	72.9	25.0	7.98	0.91	8.13	22.2	70.2	19.5
Nov. p/	7.98	0.96	8.13	25.3	72.9	24.6	7.98	0.89	8.13	22.5	70.4	19.9
												. 8

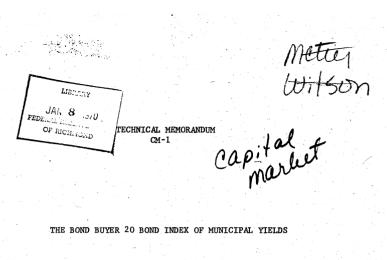
Compiled by Federal Home Loan Bank Board in cooperation with Federal Deposit Insurance Corporation. Data are weighted averages based on probability sample survey of characteristics of conventional first mortgages originated by major institutional lender groups (including mortgage companies) for purchase of single family homes. Data exclude loans for refinancing, reconditioning or modernization; construction loans to home-builders; and permanent loans which are coupled with construction loans to owner-builders. Related series on conventional mortgage rates only, based on unweighted opinions of field-office directors of the Federal Housing Administration, are available somewhat sooner than the results of the FHLBB-FDIC survey, and are included-in the case of new home mortgage rates-in Table 16.

Fees and charges--expressed as a percentage of the principal mortgage amount--include loan commissions, fees, discounts, and other charges which provide added income to the lender and are paid by the borrower. They exclude any closing costs related solely to transfer of property ownership.

<sup>3</sup> Includes fees & charges amortized over a 10 year period in addition to the contract interest rate.

### **CONVENTIONAL MORTGAGE TERMS**





THE BOND BUYER 20 BOND INDEX OF MUNICIPAL YIELDS

This is one of a series of technical memoranda describing statistical series included in "Capital Market Developments" (L.5.8.). It is to be used only within the Federal Reserve System.

Prepared by Rodney A. Gross, Research Assistant

Capital Markets Sections, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C.

#### BOND BUYER 20-BOND INDEX

The 20-Bond Index is an arithmetic average of Thursday closing bid quotations for selected bonds issued by twenty State and local governmental units. There are two basic considerations that determine the construction of the series: 1) Issuer characteristics; and 2) Bond characteristics.

Issuers. I The average rating of the index falls mid-way between the top four groups as classified by Moody's Investor Service. Although the list of twenty issuers used to compile the index has been altered periodically--due mainly to changes in Moody's rating--frequent changes have been avoided by selecting large issuers with stable ratings, whose bonds trade frequently, and which represent a broad geographical spectrum.

Bonds. Twenty general obligation bonds (one from each issuer) with a 20-year maturity and selling close to par are included in each compilation. Specific issues are not used for the series as a whole.

Rather, from week to week, the bonds most closely meeting the above

### 1/ Issuers as of December 1969 and Moody's ratings.

Illinois Aaa
New Jersey Aaa
North Carolina Aaa
Public Housing
Authorities Aaa
California Aa
Columbus, Ohio Aa
Los Angeles, Calif. Aa
Massachusetts Aa
Memphis, Tennessee Aa
New York State Aa

St. Louis, Missouri Aa
Baltimore, Maryland A
Chicago, Illinois A
Cleveland, Ohio A
Houston, Texas A
Nassau Co., New York A
Oklahoma City, Oklahoma A
Seattle, Washington A-1
Boston, Massachusetts Baa
New York City Baa-1

definition are used. If a specific bond has not traded during a given week, and no other 20-year bond of that issuer is selling close to par, bid prices are solicited from several underwriters in an attempt to estimate a reasonable "hypothetical yield."

Historical and Current Data Sources. Currently the index is compiled each Thursday and published in The Daily Bond Buyer and The Weekly Bond Buyer. An annual summary of the series has appeared in the Bond Buyer's Municipal Finance Statistics since 1963.

Prior to January 1946, when weekly calculations were started, the index was compiled for the first day of each month. Appended are all available back data.  $\frac{2}{}$ 

<u>Comments</u>. A fairly sensitive indicator of municipal bond yield movements, the 20-Bond Index has several desirable features which are not generally found in other leading series. However, the user of the series should be aware of a number of problems as well.

Since the index is computed from once-a-week quotations, it is subject to fluctuations not representative of the market. Nonetheless, given that the series is to be based on one quotation a week, Thursday is probably the best choice, because most new issues have been offered and market activity for the week is consolidated by that time.

A second potential problem arises in considering the size and composition of the issuer sample. Because the index includes, by definition, only large issuers with an investment qulity rating (Asa,

<sup>2/</sup> For the years 1904-14 only annual averages are available and for 1915-16 only quarterly averages.

Aa, A, Baa), it may not be adequate for special purposes such as the measurement of yield movements on below-investment grade or small regional issues. Although lower quality bonds will typically have higher yields than investment quality issues, the differential will probably vary with cyclical movements, widening on the upswing and narrowing as yields in general decline.

Furthermore, because particular issues are used in each compilation, the possibility exists that extraneous circumstances—not representative of the overall market—may cause fluctuations in the yield of some issues. This bias —averaged with 19 other yields—would tend to be small, but nevertheless, present. It should be pointed out, however, that this is a problem inherent in time series of this type, and is not peculiar to the Bond Buyer Index.

Perhaps the best feature of the 20-Bond Index is that of holding two key variables constant: 1) The maturity is always 20 years. 5/
By using coupons of one maturity, we eliminate term structure considerations which might otherwise seriously complicate matters, particularly since most municipal issues have serial maturities. 2) Only bonds selling

The yield on a particular issuers bonds might be subject to unusual fluctuation when, for example, banks or pension funds suddenly sell large blocks of an issue or when a large new offering reaches the market.

4/ The change in yield on a 20 year bond with a 6 per cent coupon whose price has changed from 99 to 101 would be about 17 basis points.

5/ Although we say only twenty years bonds are used, the practical limitation of this is perhaps a 19-21 year range. This does not appear to seriously affect the yield series.

close to par are included. By eliminating bonds which are selling at significant premium or discount prices, the influence of capital loss and/or gain tax treatment is minimized. This is particularly crucial in a municipal bond yield series, since interest income is tax exempt, while capital gains are taxed as such, and losses may off-set ordinary income.

Another favorable feature of the index is that bid quotations are used. Although normally the spread between bid and asked quotations is fairly constant, bid prices are usually more sensitive in an active market, causing the spread to widen or narrow as yields move up or down. This sensitivity, in turn, is reflected in the series.

In summary, the 20-Bond Index is probably one of the most representative seasoned municipal yield series presently available. Like most indices, problems of use normally arise from misunderstandings of its construction and intent. Hopefully, technical features have been explained so that some of the potential pitfalls may be avoided.

Bond Buyer's 20 Bond Index

Yield	Date	Yield	Date	Yield	Date	Yield
			· ]			
3.40	1917		1919		1921	6. 1.0
3.48			1	42.00	1	
3.53	Jan. 1	3.92	Jan. 1	4.44	Jan. 1	5.06
						5.05
	Mar. 1	3.98	Mar. 1	4.50	Mar. 1	5.07
	Apr. 1	4.03	Apr. 1	4.55	Apr. 1	5.11
	May 1	4.15	May 1	4.55	May 1	5.12
	June 1	4.28	June 1	4.45	June 1	5.18
		4.35		4.46		5.26
						5.24
						5.22
4.16						5.13
						5.00
	Dec. 1	4.36	Dec. 1	4.51	Dec. 1	4.50
4.26			1			
			1			1.5
4.23	1918		1920		1922	
4.28	Ton 1	4.62	7	4 56	7 1	4.38
4.26						
						4.41
						4.39
						4.35
4.06						4.15
						4.18
4.08	July 1					4.18
4.03	Aug. 1				Aug. 1	4.19
4.10	Sept. 1	4.57	Sept. 1	5.27	Sept. 1	4.15
4.03	Oct. 1	4.57	Oct. 1	5.18	Oct. 1	4.09
	Nov. 1	4.55	Nov. 1	5.06	Nov. 1	4.14
	Dec. 1	4.40	Dec. 1	4.97	Dec. 1	4.18
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		10.00	4.			
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			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
	3.67 3.87 3.76 3.91 3.98 4.01 4.45 4.16 4.26 4.26 4.26 4.23 4.28 4.26	3.67	3.67	3.67   Mar. 1   3.98   Mar. 1   3.98   June 1   4.28   June 1   4.45   Aug. 1   4.45   Aug. 1   Aug. 1	3.67   Mar. 1   3.98   Mar. 1   4.50   Apr. 1   4.55   Apr. 1   4.45   Aug. 1   4.38   Aug. 1   4.45   Aug. 1   4.45   Aug. 1   4.45   Aug. 1   4.45   Aug. 1   4.50   Apr. 1   4.51   Apr. 1   4.62   Apr. 1   4.63   Apr. 1   4.63   Apr. 1   4.64   Apr. 1   4.66   Apr. 1   4.67   Apr. 1   4.70   Apr. 1   4.70   Apr. 1   4.70   Apr. 1   4.50   Apr. 1	3.67

Bond Buyer's 20 Bond Index

Date	Yield	Date	Yield	Date Yi	eld Date	Yield
1923		1925		. 1927	1929	•
Jan. l	4.16	Jan. 1	4.16	Jan. 1 4	.13 Jan.	1 4.17
Feb. 1	4.14	Feb. 1	4.16		.08 Feb.	1 4.19
Mar. 1	4.11	Mar. 1	4.11		.08 Mar.	1 4.22
Apr. 1	4.13	Apr. 1	4.10		.98 Apr.	1 4.34
1ay 1	4.18	May 1	4.07		.95 May	1 4.25
June 1	4.22	June 1	3.99		.95 June	1 4.30
July 1	4.24	July 1	4.00		.01 July	1 4.33
Aug. 1	4.29	Aug. 1	4.07		.06 Aug.	1 4.33
Sept. 1	4.35	Sept. 1	4.15			
Oct. 1	4.40	Oct. 1	4.21			1 4.41 1 4.49
lov. 1	4.39	Nov. 1	4.26			
ec. 1	4.37	Dec. 1	4.22			1 4.37
,	4.57	Dec. 1	4.22	Dec. 1 3	.93 Dec.	1 4.29
						- 1
924		1926		1928	1000	
		i		1928	1930	
an. 1	4.37	Jan. 1	4.23	Jan. 1 3.	87 Jan.	1 4.23
eb. 1	4.32	Feb. 1	4.17	Feb. 1 3.	87 Feb.	1 4.29
ar. 1	4.36	Mar. 1	4.15	Mar. 1 3.		1 4.27
pr. 1	4.34	Apr. 1	4.14			1 4.15
ay 1	4.30	May 1	4.12			1 4.17
une 1	4.26	June 1	4.12	June 1 4.		1 4.18
uly 1	4.15	July 1	4.10	July 1 4.	06 July 1	4.14
ug. 1	4.14	Aug. 1	4.11	Aug. 1 4.		4.08
ept. 1	4.12	Sept. 1	4.12	Sept. 1 4.		4.01
ct. 1	4.11	Oct. 1	4.16		16 Oct. 1	
ov. 1	4.11	Nov. 1	4.16	Nov. 1 4.		3.99
ec. 1	4.13	Dec. 1	4.14	Dec. 1 4.		
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Bond Buyer's 20 Bond Index

Date	-	<u>Yield</u>	Date	-	Yield	Date	Yield	Date	Yield
1931			1933			1935		1937	
Jan.	1	4.12	Jan.	1	4.61	Jan. 1	3.81	Jan. 1	2.62
Feb.	1	4.05	Feb.	1	4.48	Feb. 1	3.61	Feb. 1	2.74
Mar.	1	4.03	Mar.	1	4.92	Mar. 1	3.55	Mar. 1	2.90
Apr.	1	3.90	Apr.	1	5.24	Apr. 1	3.37	Apr. 1	3.15
1ay	1	3.85	May	1	5.69	May 1	3.39	May 1	3.09
June	1	3.74	June	1	5.35	June 1	3.46	June 1	3.04
July	1	3.84	July	1	5.09	July 1	3.31	July 1	3.06
lug.	1	3.86	Aug.	1	5.00	Aug. 1	3.25	Aug. 1	2.94
ept.	1	3.85	Sept.	1	4.98	Sept. 1	3.34	Sept. 1	2.95
Oct.	1	4.06	Oct.	1	4.94	Oct. 1	3.51	Oct. 1	3.05
vov.	1	4.34	Nov.	1	5.01	Nov. 1	3.34	Nov. 1	3.15
Dec.	1	4.45	Dec.	1	5.52	Dec. 1	3.23	Dec. 1	3.17
			1		* * * * * * * * * * * * * * * * * * *			1 200.	3.1,
			1					1	
			1						
932		•	1934			1936		1938	
an.	1	4.87	Jan.	1	5.48	Jan. 1	3.25	Jan. 1	3.16
eb.	1	4.94	Feb.	1	4.89	Feb. 1	3.11	Feb. 1	3.07
ar.	1	4.96	Mar.	1	4.74	Mar. 1	3.04	Mar. 1	3.05
pr.	1	4.73	Apr.	1	4.56	Apr. 1	3.03	Apr. 1	3.19
la <del>ý</del>	1	4.77	May	1	4.27	May 1	3.12	May 1	3.08
une	1	4.94	June	1.	4.17	June 1	3.00	June 1	3.05
uly:	1	5.09	July	1	4.01	July 1	2.99	July 1	3.00
ug.	. 1 l	4.82	Aug.	1	4.05	Aug. 1	2.95	Aug. 1	3.01
ept.	1	4.58	Sept.	1	4.15	Sept. 1	2.91	Sept. 1	2.88
ct.	1	4.57	Oct.	1	4.21	Oct. 1	2.86	Oct. 1	2.98
lov.	1	4.59	Nov.	1	3.94	Nov. 1	2.85	Nov. 1	2.90
ec.	1	4.65	Dec.	1	3.89	Dec. 1	2.69	Dec. 1	2.83
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)ate	<u>Yield</u>	Date	,	Yield	Date	Yield	Date	Yield
.939		1941			1943		1945	
an. 1	2.78	Jan.	1	2.14	Jan. 1	2.17	Jan. 1	1.62
eb. 1	2.76	Feb.	1	2.29	Feb. 1	2.12	Feb. 1	1.53
ar. 1	2.80	Mar.	1	2.43	Mar. 1	2.08	Mar. 1	1.46
pr 1	2.72	Apr.	1 '	2.33	Apr. 1	2.08	Apr. 1	1.38
ay 1	2.78	May	1	2.26	May 1	2.01	May 1	1.35
une 1	2.66	June	ī	2.14	June 1	1.93	June 1	1.43
uly 1	2.66	July	1	2.07	July 1	1.86	July 1	1.40
ug. 1	2.67	Aug.	ī	2.07	Aug. 1	1.83	Aug. 1	1.46
ept. 1	3.21	Sept.	î	2.08	Sept. 1	1.81	Sept. 1	1.64
ct. 1	3.30	Oct.	1	2.02	Oct. 1	1.79	Oct. 1	1.72
	2.93			1.90		1.69		1.72
ov. 1		Nov.	1					
ec. 1	2.72	Dec.	1	1.93	Dec. 1	1.82	Dec. 1	1.51
the second	the same of the							
940		1942			1944			
an. 1	2.59	Jan.	1	2.24	Jan. 1	1.77		
				2.36			3.7	
eb. 1	2.63	Feb.	1		Feb. 1	1.70		1.00
ar. 1	2.70	Mar.	1	2.51	Mar. 1	1.65		* 1 ( 14 to )
pr. 1	2.62	Apr.	1	2.38	Apr. 1	1.65		
ay 1	2.59	May	1	2.33	May 1	1.69	1 t	
une 1	3.00	June	1	2.33	June 1	1.65		
uly 1	2.67	July	1	2.21	July 1	1.64		
ug I	2.53	Aug.	1	2.15	Aug. 1	1.59		·
ept. 1	2.52	Sept.	1	2.15	Sept. 1	1.59	-	
ct. 1	2.39	Oct.	1	2.16	Oct. 1	1.66		* 1
ov. 1	2.32	Nov.	1	2.13	Nov. 1	1.64		
ec. 1	2.18	Dec.	1	2.16	Dec. 1	1.63		1.0
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Bond Buyer's 20 Bond Index

		19	46		1947					
Date	•	<u>Yield</u>	Date	Yield	Date		Yield	Date	<u>Yield</u>	
Jan.	3	1.42	Sept. 5	1.58	Jan.	2	1.85	Sept. 4	1.82	
,	10	1.34	12	1.61	1	9	1.82	11	1.82	
	17	1.33	19	1.67		16	1.80	18	1.82	
	24	1.32	26	1.73	1	23	1.78	25	1.82	
	31	1.31	20	1.73	1	30	1.81		1.02	
	21	1.31			1	30	1.01			
eb.	7.	1.31	Oct. 3	1.73	1		1.83	Oct. 2	1.84	
eu.	14	1.29	10	1.74	Feb.	6		9	1.87	
	21	1.29	17	1.73		13	1.85	16	1.91	
			24	1.70		20	1.93	23	1.93	
	28	1.29	31	1.66		27	1.97	30	1.97	
iar.	7	1.29	Nov. 7	1.66	Mar.	6	1.99	Nov. 6	2.03	
	14	1.30	14	1.66	1	13	1.97	13	2.06	
	21	1.29	21	1.67	100	20	1.93	20	2.06	
	28	1.29	27	1.78		27	1.91	27	2.09	
	4	1.29		2.,,	1	'	1.71		,	
Apr.	11	1.29	Dec. 5	1.90	Apr.	3	1.90	Dec. 4	2.09	
			12	1.89		10	1.90	11	2.25	
	18	1.29	19	1.91	1	17	1.90	18	2.24	
	25	1.34	26	1.89	1 /	24	1.89	24	2.25	
ay	2	1.37						31	2.35	
ay	9	1.38			May	1	1.89			
	16	1.38			May	8	1.86			
- :	23	1.38	January	1.34		15	1.83	January	1.81	
	29	1.36	February	1.30	{	22	1.83	February	1.90	
1.	29	1.30	March	1.29		29	1.83	March	1.95	
une	6	1.37	April	1.30		29	1.03	April	1.90	
Ž.,	13	1.38	May	1.37	June	5	1.83	May	1.85	
	20	1.39	June	1.39	June	12	1.83	June	1.83	
	27	1.41	July	1.47			1.83	July	1.81	
			August	1.54		19 26			1.83	
uly	3	1.42				26	1,81	August	1.82	
	11	1.43	September	1.65	July	3	1.81	September	1.90	
	18	1.50	October	1.71 1.69		10	1.81	October		
	25	1.51	November		100	17	1.80	November	2.06	
			December	1.90		24	1.81	December	2.24	
ug.	1	1.51				31	1,81		- 1 to 1	
	8	1.53			1000					
	15	1.55	1946	1.50	August		1.81	1947	1.91	
1000	22	1.55	1946	1.50		14	1.83	1947	1.71	
	29	1.58				21	1.83			
1,27						28	1.83			
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Bond Buyer's 20 Bond Index

	19					1949	
Date	Yield	Date	Yield	Date	<u>Yield</u>	Date	Yield
Jan. 8	2.36	Sept. 2	2.39	Jan. 6	2.19	Sept. 1	2.12
15	2.35	9	2.39	13	2.16	8	2.12
22	2.35	16	2.41	20	2.15	15	2.13
29	2.40	23	2.42	27	2.15	22	2.17
		30	2.43			29	2.16
Feb. 5	2.44			Feb. 3	2.17	1 -7	2.10
11	2.48	Oct. 7	2.43	10	2.20	Oct. 6	2.16
19	2.48	14	2.42	17	2.21	13	2.16
26	2.48	21	2.40	24	2.21	20	2.16
		28	2.41			27	2.14
Mar. 4	2.47			Mar. 3	2.21	-/	~
11	2.46	Nov. 4	2.45	10	2.18	Nov. 3	2.13
18	2.44	10	2.39	17	2.17	9	2.12
25	2.42	18	2.35	24	2.17	17	2.11
	4	24	2.34	31	2.17	23	2.11
Apr. 1	2.42	1 24	4.34	1 31	2.11	1	~.11
8	2.38	Dec. 2	2.31	Apr. 7	2.16	Dec. 1	2.11
15	2.36	9	2.29	14	2.15	8	2.10
22	2.35	16	2.27	21	2.14	15	
29	2.34			- 28	2.13		2.09
	2.34	23	2.24	- 20	2.13	22	2.08
May 6	2.33	30	2.20	May 5	2.10	29	2.08
13	2.33	1		12	2.10		
20	2.32	i .	1.5	19	2.16		
27	2.27	January	2.37	26	2.20	January	2.16
21	2.41			20	2.20		
June 3	2.23	February	2.47	June 2	2.21	February	2.20
Julie 5	2.23	March	2.45			March	2.18
		April	2.37	9	2.21	April	2.15
17	2.24	May	2.31	16	2.20	May	2.14
24	2.25	June	2.24	23	2.20	June	2.20
	0.07	July	2.27	30	2.20	July	2:16
July 1	2.27	August	2.37			August	2.12
8	2.27	September	2.41	July 7	2.18	September	2.14
15	2.27	October	2.42	14	2.16	October	2.16
22	2.28	November	2.38	21	2.15	November	2.12
29	2.28	December	2.26	28	2.13	December	2.09
		Pecemper	2.20			December	2.05
Aug. 5	2.33			Aug. 4	2.13		
12	2.37			11	2.12		
19	2.39		-1.12	18	2.12		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
26	2.39	1948	2.36	25	2.12	1949	2.15
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Date	100	<u>Yield</u>	Date	Yield	Date		Yield	Date	Yield
Jan.	5	2.07	Sept. 7	1.83	Jan.	4	1.66	Sept. 6	1.98
	12	2.05	14	1.83		11	1.60	13	2.00
	19	2:05	21	1.83		18	1.59	20	2.02
	26	2.05	28	1.85		25	1.59	27	2.05
Feb.	2	2.05	Oct. 5	1.82	Feb.	1	1.58	Oct. 4	2.05
	9 .	2.03	11	1.79		8	1.58	10	2.06
	16	2.02	19	1.77	1	15	1.59	18	2.07
	23	2.02	26	1.77		21	1.59	25	2.05
Mar.	2	2.02	Nov. 2	1.75	Mar.	1	1.63	Nov. 1	2.04
	9 -	2.01	9	1.73	1	8	1.73	8	2.04
	16	2.01	16	1.72		15	1.76	15	2.04
	23	2.01	22	1.74	1	22	1.77	21	2.07
	30	2.01	30	1.75	15.4	29	1.82	29	2.07
Apr.	. 6	2.02	Dec. 7	1.75	Apr.	5	1.92	Dec. 6	2.09
- T	13	2.03	14	1.74	1	12	1.93	13	2.07
	20	2.03	21	1.70		19	1.97	20	2.09
	27	2.03	28	1.70		26	1.96	27	2.10
May	4	2.02			Мау	3	1.94		
	11	2.00			l	10	1.95		
	18	1.99				17	1.99		
	25	1.99	January	2.06	1	24	2.05	January	1.61
		$ ^{*}$ $^{*}$ $^{*}$ $^{*}$ $^{*}$ $^{*}$ $^{*}$	February	2.03		31	2.07	February	1.59
June	1	1.99	March	2.01				March	1.74
	8 .	1.99	April	2.03	June	7	2.15	April	1:95
	15	1.99	May	2.00		14	2.16	May	2:00
	22	1.99	June	1.99		21	2.23	June	2.19
	29	2.00	July	2.01		28	2.21	July	2.15
- 1 -	6	2.02	August	1.83				August	2.02
July .			September	1.84	July	5	2.20	September	2.01
	13 20	2.06	October	1.79		12	2.17	October	2.06
	27	2.05	November	1.74		19	2.13	November	2.05
		1.91	December	1.72		26	2.10	December	2.09
Aug.	3	1.85			Aug.	2	2.06		
	10	1.83			14.5	9	2.03		
	17	1.83	1			16	2.00		
	24	1.82	1950	1.92		23	2.00	1951	1.96
	31	1.83				30	2.00		
		4.47							
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Bond Buyer's 20 Bond Index

<del>-</del>			52					953	
Date	•	<u>Yield</u>	Date	<u>Yield</u>	Date		Yield	Date	Yield
Jan.	3	2.11	Sept. 4	2.28	Jan.	8	2.40	Sept. 3	2.92
	10	2.09	11	2.30	- 1	15	2.42	10	2.91
. 12	17	2.09	18	2.32	- 1	22	2.43	17	2.90
	24	2.09	25	2.32		29	2.46	24	2.86
1	31	2.08	23	2.32			2.50	24	2.80
			Oct. 2	2.34	Feb.	5	2.48	Oct. 1	2.82
Feb.	: 7	2.07	9	2.38	reb.				
3.00	14	2.07	16	2.39	1	11	2:51	8	2.78
	21	2.07			1	19	2.58	15	2.74
	28	2.07	23	2.39		26	2.63	22	2.72
			30	2.38				29	2.69
Mar.	6	2.09	Nov. 6	2.38	Mar.	5	2.65	Nov. 5	2.64
	13	2.09	13	2.38		12	2.65		
	20	2.09	20			19	2.65	12	2.62
	27	2.07		2.37	i	26	2.65	19	2.60
			26	2.37				25	2.60
Apr.	3	2.05	Dec. 4	2.37	Apr.	2	2.65	Dec. 3	2.60
	10	2.03	11	2.37		9	2.65	10	2.60
100	17	2.03	18	2.38	1	16	2.64	17	2.60
	24	2.03	24	2.38	1	23	2.64		
		- 1111	31	2.38	1	30	2.68	23	2.60
May	1	2.03	, J <u>.</u>	2.50		50	2.00	30	2.58
. •	8	2.04			May	7	2.75	1	12.5
	15 .	2.05			riay	14	2.77		
	22	2.06	January	2.09	1	21		1	
	29	2.10			<b>.</b>		2:79	January	2.43
	29	2.10	February	2.07	1	28	2.81	February	2.55
June	5	2.11	March	2.09	June	4	2.90	March	2.65
Julie	12	2.13	April	2.04	June			April	2.65
			May	2.06		11	2.96	May	2:78
	19 26	2.14	June	2.13		18	3.02	June	2.99
	26	2.15	July	2.15		25	3.09	July	2.98
uly	2	2.15	August	2.24	July .	2	3.04	August	2.91
y	10	2.15	September	2.31	Jury	9		September	2.90
1.50	17	2.15	October	2.38	-		3:00	October	2.75
	24		November	2.38		16	2.97	November	2.62
		2.15	December	2.38		23	2.95	December	2.60
	31	2.15				30	2.92	December	2.00
lug.	7	2.17		•	Aug.	6	2.92		
٦	14	2.24				13	2.90	1	
	21	2.27	1952	2.19	1	20	2.90	10	2.73
	28	2.28				27	2.90	1953	2.13
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Federal Reserve Bank of St. Louis

Bond Buyer's 20 Bond Index

		195				1955					
Date		Yield	Date	Yield	Date		Yield	Date	Yield		
Jan.	7	2.54	Sept. 2	2.26	Jan.	6	2.38	Sept. 1	2.63		
	14	2.51	9	2.29		13	2.39	8	2.61		
11. 18	21	2.50	16	2.33		20	2.41	15	2.59		
	28	2.46	23	2.33	1.20	27	2.43	22	2.55		
			30	2.35				29	2.53		
Feb.	4	2.46			Feb.	.3	2.43				
	10	2.43	Oct. 7	2.35		10	2.43	Oct. 6	2.52		
	18	2.41	14	2.35		17	2.43	13	2.51		
	25	2.39	21	2.33		24	2.45	20	2.51		
		100	28	2.33				27	2.50		
lar.	4	2.39			Mar.	3	2.45				
	11	2.38	Nov. 4	2.33		10	2.45	Nov. 3	2.45		
	18	2.38	10	2.33		17	2.45	10	2.45		
	25	2.43	18	2.31	1	24	2.45	17	2.45		
		0.44	24	2.31		31	2.42	23	2.47		
Apr.	1	2.44	Dec. 2	0-00		7	2.42	Dec. 1	2.52		
	8	2.46		2.33	Apr.						
A	15	2.48	9	2.35		14	2.42	8	2.57		
	22	2.49	16	2.37	18,7%	21	2.40	15	2.58		
	29	2.49	23	2.37		28	2.40	22	2.58		
ay	6	2.49	30	2.36	May	5	2.39	29	2.58		
зу	13	2.49			May	12	2.37				
	20	2.49				19	2.37				
	27	2.49		2.50		26	2.39	January	2:40		
	41	2.31	January	2.50		, ,20	2.39	February	2.44		
une	3	2.51	February	2.42	June	2	2.39	March	2.44		
une	10	2.51	March	2.40	June	9	2.39		2.41		
	17	2.47	April	2.47	100	16	2.40	April			
	24	2.41	May	2.50		23	2.41	May	2.38		
	24	2.41	June	2.48		30	2.48	June	2.41		
uly	1	2.40	July	2.32			and the second	July	2.54		
	8	2.36	August	2.26	July	7	2.53	August	2.60		
	15	2.31	September	2.31	14 A	14	2.54	September	2.58		
1.	21	2.28	October	2.34		21	2.54	October	2.51		
	29	2.26	November	2.32		28	2.56	November	2.46		
			December	2.36	1, 1			December	2.57		
ug.	5	2.26			Aug.	. 4	2.58				
-	12	2.26		1 - 4 - 42		11	2.58		. 4		
	19	2.26	1954	2.39		18	2.60	1955	2.48		
	26	2.26				25	2.63	1755			
		1									
		1									
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						100	·	1.67	eras in the		
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Bond Buyer's 20 Bond Index

		195			<del> </del>	777.11	1957	Viold
Date		Yield	Date	Yield	Date	<u>Yield</u>	Date	<u>Yield</u>
Jan.	5	2.56	Sept. 6	2.94	Jan.	3 3.23	Sept.	5 3.56
	12	2.50	13	2.96		10 3.24		12 3.55
. * .	19	2.48	20	2.94		17 3.22		19 3.52
1.0	26	2.48	27	2.90	1	24 3.12	·	26 3.51
Feb.	2	2.48	Oct. 4	2.90	ļ	31 3.07		
reb.	. 2	2.48	10	2.90	Feb.	7 3.03	Oct.	3 3.45
	16	2.43	18	2.92	Feb.	14 2.96		10 3.38
	23	2.42	25	3.03		20 2.98		17 3.41
	23	2.42	1 23	3.03		28 3.05		24 3.43
Mar.	1	2.49	Nov. 1	3.08		20 3.03		31 3.43
	8	2.53	8	3.10	Mar.	7 3.12	Nov.	7 3.43
	15	2.58	15	3.19		14 3.12		14 3.46
** 1	22	2.60	22	3.21	1 . 2	21 3.07		21 3.33
	29	2.64	29	3.24	1	28 3.07		28 3.27
Apr.	. 5	2.66	Dec. 6	3,24	Apr.	4 3.06	Dec.	5 3.16
a distrib	12	2.67	13	3.21	1	11 3.06		12 3.05
	19	2.72	20	3.21		18 3.16		19 2.97
	26	2.77	27	3.21		25 3,25		26 2.97
May	3	2.76			Мау	2 3.23	er litte	
	10	2.69				9 3.23		5
	17	2.69			1	16 3.25		* 4
1	24	2.65				23 3.30		
	31	2.62	January	2.51		30 3.35	Januar	y 3.18
		4	February	2.44	1		Februa	ry 3.01
June	7.	2.56	March	2.57	June	6 3.38	March	3.10
	14	2.53	April	2.71		13 3.41	April	3.13
	21	2.53	May	2.68		20 3.43	May	3.27
	28	2.56	June	2.55	1	27 3.43	June	3.41
July	5	2.61	July	2.65	July	3 3.40	July	3.40
July	. 12	2.64	August	2.80	July	11 3.37	August	3.54
1.5	19	2.66	September	2.94		18 3.38	Septemb	
	26	2.68	October	2.95		25 3.43	October	
			November	3.16		-3	Novembe	
Aug.	2	2.71	December	3.22	Aug.	1 3.47	Decembe	r 3.04
	9	2.75				8 3.53		
	16	2.79	1			15 3.57		4 7 8
	23	2.84	1956	2.77	-	22 3.57	1957	3.28
	30	2.90				29 3.56		J
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## Bond Buyer's 20 Bond Index

				1	958						1959	
Date	_		Yield		Date		Yield	Date		Yield	Date	Yield
Jan.	2		2.97		Sept.	4	3.59	Jan.	8	3.40	Sept. 3	3.72
	9		2.97		Deper	11	3,54	Jan	15	3.40	10	3.79
	16		2.87		1	18	3.52		22	3.43	17	
	23		2.85		1	25		1				3.81
	30				1	25	3.52	1	29	3.45	24	3.80
	30		2.90									
Feb.	- 6		2.97	•	Oct.	2	3.54	Feb.	5	3.43	Oct. 1	3.72
	13		2.98		1	9	3.50		11	3.39	8	3.67
	20		3.05			16	3.43	1	19	3.34	15	3.60
	27		3.08			23	3.40	1	26	3.29	22	3.55
• 5.						30	3.38				29	3.55
Mar.	6		3.08		Nov.	6	3.35	Mar.	5	3.26	Nov. 5	3.54
	13		3.08			13	3.32	1,,,,,,	12	3.31	12	3.57
	20		3.05			20	3.31	1	19	3.31	19	3.55
	27		3.05			26	3.30	1	26	3.32	25	3.55
	۷,		3.03		1	-0	3.30	1				3.33
Apr.	3	3	3.02		Dec.	4	3.30	Apr.	2	3.33	Dec. 3	3.60
	10		2.99			11	3.30		9	3.33	10	3.63
	17		2.96	*		18	3.33		16	3.36	17	3.73
	24		2.89			24	3.38		23	3.43	23	3.75
						31	3.40	1	30	3.50	31	3.77
			1									
May	1		2.91					May	7	3.53		
	8		2.94		11.			1.	14	3.57		
	15		2.93					1	21	3.59		
	22		2.92					100	28	3.61		
	29		2.92		1	1						
_	5		2,92		Januar		2.91		1.1	0.64	January	3.42
June	12				Februa	ry	3.02	June	4	3.64	February	3.36
			2.92		March		3.07		11	3.67	March	3.30
	19	100	2.99		April		2.97		18	3.74	April	3.39
	26		3.04		May		2.92		25	3.81	May	3.58
July	3		3.05	4.	June		2.97	July	2	3.81	June	3.72
Jury	10		3.07		July		3.09	July	9	3.77	July	3.71
	17	7 -	3.10	. 5	August		3.36		16	3.71	August	3.58
	24		3.10		Septemb	er	3.54	1.1	23	3.65	September	3.78
	31	1	3.13		October	c	3.45	1	30	3.59	October	3.62
			3.13	-	Novembe	r	3.32		50	3.75	November	3.55
Aug.	7		3.21		Decembe	r	3.34	Aug.	6	3.57	December	3.70
	14		3.27	- 1				ľ	13	3.57		
	21		3.42	- /					20	3.57		
	28		3.52		1958		3.16		27	3.61	1959	3.56
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Bond Buyer's 20 Bond Index

/				1960		T			1961		
Date			Yield	Date	Yield	Date		Yield	Date	Yield	
Jan.	7		3.78	Sept. 1	3.33	Jan.	5 *	3.39	Sept. 7	3.55	
	14		3.74	8	3.38		12	3.41	14	3.55	
	21		3.69	15	3.44		19	3.40	21	3.52	
	28		3.68	22	3.46	ŀ	26	3.38	28	3.49	
1, 1	. 20		3.00	29	3.51	1		3.30		3.47	
					3.51	1		100			
Feb.	- 4	* 1	3.64			Feb.	2	3.38	Oct. 5	3.46	
	11		3.58	Oct. 6	3.55	1	9	3.31	12	3.45	
	18	40.0	3.58	13	3.55		16	3.28	19	3.40	
	25		3.61	20	3.53	1	23	3.26	26	3.39	
				27	3.48	1	•				
Mar.	3		3.65			Mar.	2	3.33	Nov. 2	3.36	
	10		3.61	Nov. 3	3.42		9	3.43	9	3.36	
	17		3.56	10	3.42		16	3.48	16	3.41	
	24		3.50	17	3.38	1	23	3.51	23	3.45	
	31		3.50	24	3.38		30	3.51	30	3.48	
				1		1		7.77	1	٥, , ٥	
Apr.	7		3.50	Dec. 1	3.43	Apr.	. 6 -	3.51	Dec. 7	3,51	
	14		3.55	8	3.43		13	3.51	14	3.51	
	21		3.59	15	3.38		20	3.51	21	3.44	
	28		3.61	22	3.38		27	3.40	28	3.42	
	20		3.51	29	3.38			3.40	1	3.72	
	11					1					
May	5		3.61			May	4	3.42			
	12		3.57	- 1			11	3.42			
	19		3.62	)			18	3.42			
	26		3.62				25	3.46	1.		
-June	2	*	3.61		100	June	1	3.48			
	9		3.58	January	3.72		8	3.52	January	3.40	
	16		3.53	February	3.60	1	15	3.53	February	3.31	
	23		3.52	March	3.56	1	22	3.53	March	3.45	
	30		3.53	April	3.56	ľ	29	3.54	April	3.50	
				May	3.61				May	3.43	
July	7		3.52	June	3.55	July .	6	3.54	June	3.52	
	14		3.52	July	3.51		13	3.54	July	3.52	
	21	1	3.51	August	3.34		20	3.49	August	3.52	
1.5	. 28		3.47	September	3.42		27	3.49	September	3.53	
		. •	•	October	3.53	100			October	3.43	
Aug.	4		3.45	November	3.40	Aug.	3	3.49	November	3.41	
	11		3.35	December	3.40		10	3.53	December	3.47	
	18		3.27				1.7	3.53			
200	25		3.27	1960	3.52		24	3.53	1961	3.46	
141							31	3.54			
									1		
				1					1		

Bond Buyer's 20 Bond Index

			962				1	963		
Date	<b>-</b> 1 1 1 1	Yield	Date	Yield	Date	1.1	Yield	Date	Yield	
Jan.	4	3.37	Sept. 6	3.14	Jan.	3	3.05	Sept. 5	3.15	
	11	3.36	13	3.12	1	10	3.04	12	3.20	
	18	3.35	20	3.11	1	17	3.09	19	3.22	
•	25		27	3.06		24	3.14	26	3.22	
	23	3.27	1 21	3.00	1 .			26	3.22	
						31	3.18			
eb.	1	3.22	Oct. 4	3.06	Feb.	7	3.18	Oct. 3	3.19	
	8	3.21	11	3.02	100.	14	3.17	10	3.18	
	15	3.20	18	2.98	1	21	3.12	17	3.18	
	22	3.21	29	3.01		28	3.12	24		
	22	3.21	29	3.01		28	3.12		3.21	
					1 .			31	3.24	
ar.	1	3.20	Nov. 1	3.01	Mar.	7	3.08	Nov. 7	3.27	
	8	3.15	8	3.01	1	14	3.04	14	3.31	
*	15	3.12	15	3.05	1	21	3.01	21	3.31	
	22	3.12	22	3.05		28	3.06	27	3.31	
	29		29			,40	3.00	21	3.31	
	29	3.12	29	3.10					£ 1	
pr.	5	3.10	Dec. 6	3.11	Apr.	4	3.06	Dec. 5	3.31	
	12 .	3.08	13	3.06		11	3.09	12	3.26	
	19	3.04	20	3.05		18	12. د	19	3.26	
	26	3.02	27	3.05		25	3.12	26	3.26	
	-0	3.02	1 /	3.03			3.12		3.20	
lay	3	3.00		- 1 to 1 to 1	May	2	3.11			
	10	3.00	1		j .	9	3.08		4	
	17	3.10			1 %	16	3.08			
•	24	3.20				23	3.12			
	31	3.24				30	3.16			
							2.10		2.10	
une	7	3.26	January	3.34	June	6	3.19	January	3.10	
	14	3.26	February	3.21	1	13	3.20	February	3.15	
	21	3.26	March	3.14	<u> </u>	.20	3.22	March	3.05	
	28	3.24	April	3.06	1	27	3.22	April	3.10	
			May	3.11				May	3.11	
u1y	5	3.24	June	3.26	July	4	3.22	June	3.21	
	12	3.27	July	3.28		11	3.25	July	3.22	
	19	3.27	August	3.23		18	3.23	August	3.13	
	26	3.32	September	3.11		25	3.17	September	3.20	
	4		October	3.02				October	3.20	
ug.	2	3.33	November	3.04	Aug.	1	3.12	November	3.30	
-6-	9	3.33	December	3.07		8	3.11	December	3.27	
	16	3.21	]	2.0,		15	3.12			
	23	3.14				22	3.15			
	30	3.14	1962	3.03		29	3.15	1963	3.06	
	30	3.14	1904	3.03	100	27	ر1.د	1900	5.00	

· 原子 中国的经验的特别的特别的特别的 人名英格兰 医克里克氏征

Bond Buyer's 20 Bond Index

			64		Ī			65	
Date		Yield	Date	Yield	Date		Yield	Date	Yield
Jan.	2	3.26	Sept. 3	3.19	Jan.	7	3.07	Sept. 2	3.29
•	.9	3.26	10	3.22	1	14	3.07	9	3.30
	16	3.26	17	3.26	1	21	3.07	16	3.36
	23	3.19	24	3.26		28	3.04	23	3.39
	30	3.13	<b>i</b>	2				30-	3.41
· / '					1	·		1	
Feb.	6	3.13	Oct. 1	3.26	Feb.	4	3.04	Oct. 7	3.41
	13.	3.13	8	3.26	1	11	3.04	14	3.38
	20	3.13	15	3.26	1 .	18	3.10	21	3.40
1	27	3.17	22	3.26		25	3.17	28	3.40
- 1			29	3.23	1		a section in		
					1				
Mar.	5	3.23	Nov. 5	3.21	Mar.	4	3.20	Nov. 4	3.44
- 1	12	3.27	12	3.15		11	3.18	11	3.45
	19	3.32	19	3.15		18	3.16	18	3.46
	26	3.32	26	3.21		25	3.16	25	3.47
									a jarah dari
Apr.	2	3.32	Dec. 3	3.18	Apr.	1	3.16	Dec. 2	3.50
	9	3.27	10	3.13		8	3.16	9	3.56
	16	3.27	17	3.12		15	3.15.	16	3.55
	23	3.26	24	3.12		22	3.15	23	3.55
	.30	3.26	31	3.12		29	3.15	30	3.54
1.5						-		4.0	
May	. 7	3.26			May	6	3.15		
	14	3.22			-	13	3.14		
	21	3.18				20	3.19		1.
	28	3.16				27	3.19		
		200							
June	4	3.16	January	3.22	June	. 3	3.20	January	3.06
	11	3.21	February	3.14		10	3.23	February	3.09
	18	3.21	March	3.29		17	3.25	March	3.18
	25	3.21	April	3.28		24	3.30	April	3.15
			May	3.21				May	3.17
July.	2	3.20	June	3.20	July	1	3.30	June	3.25
	9	3.19	July	3.18	100	8	3.29	July	3.27
	16	.3.18	August	3.19		15	3.26	August	3.24
	23	3.16	September	3.23		22	3.25	September	3.35
	30	3.19	October	3.25		29	3.25	October	3.40
		1	November	3.18				November	3.46
Aug.	6	3.19	December	3.13	Aug.	5	3.25	December	3.54
-	13	3.19		1		12	3.23		
	20	3.19	1964	3.21		19	3.23	1965	3.26
	27	3.19				26	3.25		
1.0		1					1		

## Bond Buyer's 20 Bond Index

6 13 20 27 3 10 17 24 3 10	Xield 3.53 3.52 3.51 3.51 3.54 3.58 3.70 3.76	Date Sept. 1 8 15 22 29 Oct. 6 13 20 27	Yield 4.24 4.11 4.11 4.03 4.00 3.98 3.93 3.83	Date Jan. Feb.	5 12 19 26 2 9	Yield 3.76 3.59 3.40 3.43	Date Sept. 7 14 21 28	Yield 4.07 4.07 4.14 4.19 4.25 4.33
13 20 27 3 10 17 224	3.52 3.51 3.51 3.54 3.58 3.70 3.76	8 15 22 29 Oct. 6 13 20 27	4.11 4.11 4.11 4.03 4.00 3.98 3.93		12 19 26	3.59 3.40 3.43 3.40 3.41	14 21 28 Oct. 5 12	4.07 4.14 4.19 4.25 4.33
13 20 27 3 10 17 224	3.52 3.51 3.51 3.54 3.58 3.70 3.76	8 15 22 29 Oct. 6 13 20 27	4.11 4.11 4.03 4.00 3.98 3.93	Feb.	19 26 2 9	3.40 3.43 3.40 3.41	21 28 Oct. 5 12	4.14 4.19 4.25 4.33
20 27 3 10 17 24 3 10	3.51 3.54 3.58 3.70 3.76	15 22 29 Oct. 6 13 20 27	4.11 4.03 4.00 3.98 3.93	Feb.	26 2 9	3.43 3.40 3.41	28 Oct. 5 12	4.19 4.25 4.33
3 10 17 24 3 10	3.54 3.58 3.70 3.76	22 29 Oct. 6 13 20 27	4.11 4.03 4.00 3.98 3.93	Feb.	26 2 9	3.43 3.40 3.41	Oct. 5	4.19 4.25 4.33
3 10 17 24 3	3.54 3.58 3.70 3.76	29 Oct. 6 13 20 27	4.03 4.00 3.98 3.93	Feb.	2 9	3.40 3.41	12	4.33
10 17 24 3 10	3.58 3.70 3.76	Oct. 6 13 20 27	4.00 3.98 3.93	Feb.	9	3.41	12	4.33
10 17 24 3 10	3.58 3.70 3.76	13 20 27	3.98 3.93	Feb.	9	3.41	12	4.33
10 17 24 3 10	3.58 3.70 3.76	13 20 27	3.98 3.93		9	3.41	12	
17 24 3 10	3.70 3.76 3.83	20 27	3.93					
24 3 10	3.76 3.83	27		1		3.62	19	4.33
3 10	3.83		3.03		23	3.66	26	4.27
10		1		1		3.00		
10			3.74	Mar.	2	3.60	Nov. 2	4.27
	3.//			Mar.			NOV. 2	4.31
1/								4.33
0.4								4.37
		24	4.00					4.42
31	3.59				30	3.34	30	4.42
				1	٠,	2 54	Dag 7	4.45
				Apr.	-			4.41
								4.41
								4.44
28	3.62				2.1	3.09	20	4.44
	Y	29	3.//					
5	3 63			May	4	3.79		
			No.	1,				
20	3.72							
2	3 78	Tanuary	3.52	Tune	. 1	3.96	January	3.55
					8 -	3.90	February	3.52
					15	3.92	March	3.55
					22	3.98	April	3.60
					29	4.06	May	3.89
50	3.03						June	3.96
7	3 92			July	. 6	4.07	Julv .	4.02
				07			August	3.99
							September	4.12
								4.29
20	3.70							4.32
4	3 00			Aug.	3	3.91	December	4.43
		December	J					
		1966	3.81				1967	3.94
		1900	3.02		24	4.04		
ر 2	7.27			100	31	4.06		
	1	-						
	1.5			100	5 - 5		1	
		17 3.73 24 3.66 31 3.59 7 3.55 14 3.53 21 3.54 28 3.62 15 3.63 12 3.62 19 3.64 26 3.72 2 3.78 9 3.78 16 3.74 23 3.73 30 3.83 7 3.92 14 3.98 21 3.94 22 3.99 14 4.08 18 4.17	17 3.73 17 24 3.66 31 3.59 Dec. 1 4 3.53 8 15 22 29 29 29 5 3.62 22 29 29 5 3.62 22 29 29 29 29 29 29 29 29 29 29 29 29	17	17	17	17	17 3.73

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Bond Buyer's 20 Bond Index

1968					1969					
Date		Yield	Date	Yield	Date		Yield	Date	Yiel	
Jan.	4	4.38	Sept. 5	4.44	Jan.	2	4.85	Sept. 4	6.3	
	11	4.27	12	4.43		9	4.85	11	6.33	
	18	4.25	19	4.35		16	4.83	18	6.2	
2.5	25	4.25	26	4.30		23	4.82	_25	6.08	
٠.					1	30	4.91	1		
							44.4			
Feb.	1	4.16	Oct. 3	4.36	Feb.	6	4.96	Oct. 2	6.19	
	8	4.24	10	4.49		13	4.96	9	6.14	
	15	4.32	17	4.51		20	4.95	16	5.9	
	21	4.38	24	4.52		27	5.04	23	6.0	
	29	4.44	31	4.56				30	6.13	
						1.00				
Mar.	7	4.49	Nov. 7	4.56	Mar.	6	5.19	Nov. 6	6.11	
	14	4.62	14	4.58		13	5.26	13	6.17	
	21	4.50	21	4.62		20	5.29	20	6.30	
	28	4.54	28	4.64	1	27	5.30	27	6.58	
			1					1:		
Apr.	4	4.31	Dec. 5	4.76	Apr.	3	5 <b>.2</b> 5	Dec. 4	6.72	
	11	4.29	12	4.82	_	10	5.29	11	6.88	
	18	4.33	19	4.84		17	5.13	18	6.90	
	25	4.43	26	4.85		24	5.09	25	6.79	
			1		1					
lay	2	4.44			May	1	5.10			
	9	4.37				8	5.17			
	16	4.52				15	5.31	1		
	23	4.71	1	1.0		22	5.46			
	30	4.64				29	5.60	1		
							1 2 2	•	4.85	
June	6	4.51	January	4.29	June	5	5 <b>.73</b>	January	4.98	
	13	4.56	February	4.31		12	5.82	February	5.26	
	20	4.43	March	4.54		19	5.79	March	5.19	
	27	4.48	April	4.34		26	5.68	April	5.33	
			May	4.54				May	5.76	
Tuly	3	4.48	June	4.49	July	3	5.68	June	5.75	
	11	4.36	July	4.33		10	5.65	July	5.98	
	18	4.33	August	4.21		17	5.62	August	6.26	
	25	4.16	September	4.38		24	5.86	September October	6.09	
	4 4 4		October	4.49		31	5.93	November	6.35	
ug.	1	4.11	November	4.60		_		December		
	8	4.07	December	4.82	Aug.	7	5.80	December	6.82	
. • .	15	4.22				14	5.91			
	22	4.27	1968	4.45		21	6.02	1969	5.72	
	29	4.38		*		28	6.26			
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	10 miles									