

## Corporate Medium-Term Notes, 1997

U.S. corporations issued \$114.4 billion of medium-term notes (MTNs) in 1997, up from \$93.7 billion in 1996 (table 1.A). The faster pace of issuance is mainly attributable to financial firms, which sold \$98.9 billion in 1997, \$16.9 billion more than in 1996. Issuance by nonfinancial firms also increased, but by only \$3.9 billion. A total of 158 firms sold MTNs in 1997, down from 165 in 1996 (table 1.B). During 1997, total MTNs outstanding rose \$30.2 billion, to \$317.5 billion (tables 2.A and 3). This increase was more than accounted for by financial firms, for which outstandings increased \$48.2 billion, to \$242.7 billion. Outstandings for nonfinancial firms fell \$18.0 billion, to \$74.8 billion.

Corporations that issued MTNs in 1997 continued to have good credit ratings (table 5.A). As in 1996, almost 99 percent of the total amount of MTNs issued had an investment-grade rating of Baa or better. Single-A-rated issuers were again the most common, and their issuance accounted for 60 percent of total gross issuance, down from 65 percent in 1996. Issuers with a AA rating saw their share of gross issuance rise, from 13 percent to 25 percent. Only six issuers had a speculative-grade credit rating last year (table 5.B). As the amount of speculative-grade issuance has always been small, outstanding MTN debt is predominantly investment grade (table 6.A).

The MTN market accounts for a sizable share of intermediate- and long-term borrowing by U.S. companies. One measure of the MTN market share is the volume of MTN issuance as a percent of total public issuance of investment-grade debt (MTNs plus corporate bonds). As shown in table 7, in 1997 this share was 47 percent for all U.S. corporations, with a higher share of 62 percent for financial firms and a lower share of 18 percent for nonfinancial firms. For both

financial and nonfinancial firms the MTN share increased from 1996 levels. Similarly, the ratio of outstanding MTN debt as a percent of total corporate outstanding debt (MTNs plus corporate bonds) edged up, from 18 percent to 19 percent (table 8).

Table 1

## Gross Borrowing by U.S. Corporations in the U.S. Medium-Term Note Market

A. Millions of Dollars

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	23,153	30,676	34,008	46,617	72,018	74,539	86,062	87,845	98,916	93,676	114,437
Financial Corporations	20,338	22,232	26,294	29,936	45,773	50,626	57,842	70,074	79,462	81,954	98,879
Auto Finance Companies	9,930	6,699	8,575	9,874	12,380	13,450	10,755	11,219	11,631	8,642	12,076
Banking Firms	2,258	3,795	3,610	3,162	11,157	6,603	7,561	8,103	13,945	12,136	14,815
Finance Companies*	4,674	6,562	8,500	12,289	14,802	18,635	19,305	30,386	34,017	32,948	31,969
Real Estate, Insurance and Other Financial Companies	384	677	900	1,186	1,027	1,129	1,422	846	1,671	2,391	3,646
Savings and Loans	1,396	2,651	2,312	25	0	67	861	500	1,285	1,518	180
Securities Brokers	1,695	1,848	2,397	3,399	6,408	10,741	17,937	19,320	16,912	24,319	36,192
Nonfinancial Corporations	2,815	8,444	7,713	16,681	26,245	23,913	28,220	17,771	19,455	11,722	15,578
Electric, Gas and Water	494	1,485	2,706	3,221	5,143	7,535	10,858	2,523	2,732	1,877	2,765
Manufacturing	1,064	2,593	2,570	6,497	12,503	9,190	8,394	6,817	7,531	5,221	6,321
Services	691	1,926	961	1,237	2,409	1,747	3,079	3,529	4,691	3,144	4,187
Telephone and Communication	189	514	84	1,221	1,373	1,635	2,729	1,492	1,493	831	838
Transportation, Mining, and Construction	81	752	578	1,933	1,800	1,068	1,740	920	612	405	177
Wholesale and Retail Trade	296	1,175	815	2,573	3,018	2,738	1,420	2,489	2,396	245	1,270

\* Excluding auto finance companies

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 1

## Gross Borrowing by U.S. Corporations in the U.S. Medium-Term Note Market

## B. Number of Issuers

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	86	132	139	165	224	211	210	171	195	165	158
Financial Corporations	61	80	72	65	76	66	71	68	78	87	84
Auto Finance Companies	3	3	3	3	2	2	3	3	3	3	5
Banking Firms	14	16	15	13	23	16	19	16	19	21	20
Finance Companies*	25	30	30	37	38	31	28	27	31	33	33
Real Estate, Insurance and Other Financial Companies	5	9	8	5	7	10	12	11	14	18	14
Savings and Loans	11	18	11	1	0	1	2	1	3	2	1
Securities Brokers	3	4	5	6	6	6	7	10	8	10	11
Nonfinancial Corporations	25	52	67	100	148	145	139	103	117	78	74
Electric, Gas and Water	5	12	25	30	44	56	60	37	42	31	32
Manufacturing	9	21	25	41	62	51	47	39	46	29	20
Services	7	8	7	7	10	7	7	8	7	7	6
Telephone and Communication	2	2	1	9	11	10	8	6	8	5	4
Transportation, Mining, and Construction	1	5	6	8	11	8	9	7	7	3	4
Wholesale and Retail Trade	1	4	3	5	10	13	8	6	7	3	8

\* Excluding auto finance companies

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 2

## Medium-Term Notes Outstanding

A. Millions of Dollars

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	142,416	176,855	210,894	235,485	267,501	287,324	317,516
Financial Corporations	89,823	108,277	125,404	145,858	171,096	194,536	242,685
Auto Finance Companies	29,526	33,657	33,270	33,753	37,076	37,541	39,573
Banking Firms	15,794	17,988	19,558	21,468	27,964	33,569	41,103
Finance Companies*	31,645	39,306	45,257	57,686	70,542	78,197	83,141
Real Estate, Insurance and Other Financial Companies	2,783	3,442	4,567	4,757	6,083	8,002	12,628
Savings and Loans	1,398	805	1,002	1,250	2,255	2,670	490
Securities Brokers	8,678	13,078	21,751	26,944	27,176	34,556	65,639
Nonfinancial Corporations	52,593	68,578	85,490	89,627	96,405	92,788	74,832
Electric, Gas and Water	12,414	18,895	28,178	28,771	29,658	28,288	21,788
Manufacturing	21,793	27,384	30,885	31,959	33,945	34,204	25,405
Services	4,953	5,211	6,182	7,453	10,091	10,944	10,365
Telephone and Communication	2,610	3,841	5,841	6,731	7,414	5,538	6,335
Transportation, Mining, and Construction	4,482	5,097	6,482	6,233	6,094	5,713	4,028
Wholesale and Retail Trade	6,341	8,150	7,922	8,482	9,203	8,101	6,909

\* Excluding auto finance companies

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 2

## Medium-Term Notes Outstanding

## B. Number of Issuers with MTNs Outstanding

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	315	354	367	376	401	411	448
Financial Corporations	114	119	115	114	121	126	175
Auto Finance Companies	3	3	3	3	3	3	8
Banking Firms	29	29	32	30	31	32	39
Finance Companies*	45	47	47	48	47	46	69
Real Estate, Insurance and Other Financial Companies	13	17	17	18	24	29	39
Savings and Loans	18	17	9	5	6	6	4
Securities Brokers	6	6	7	10	10	10	16
Nonfinancial Corporations	201	235	252	262	280	285	273
Electric, Gas and Water	62	74	83	83	90	91	86
Manufacturing	85	99	104	111	117	117	97
Services	14	13	13	13	14	14	19
Telephone and Communication	14	16	16	17	17	18	22
Transportation, Mining, and Construction	15	16	19	19	21	23	24
Wholesale and Retail Trade	11	17	17	19	21	22	25

\* Excluding auto finance companies

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 3  
Net Borrowing in the Medium-Term Note Market

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	42,375	34,440	34,039	24,592	32,015	19,823	30,192
Financial Corporations	20,677	18,454	17,127	20,454	25,238	23,440	48,149
Auto Finance Companies	5,115	4,131	-387	483	3,323	465	2,032
Banking Firms	6,766	2,194	1,569	1,910	6,496	5,605	7,534
Finance Companies*	6,897	7,661	5,950	12,429	12,856	7,655	4,944
Real Estate, Insurance and Other Financial Companies	694	660	1,125	190	1,326	1,919	4,626
Savings and Loans	-2,727	-593	197	248	1,005	415	-2,180
Securities Brokers	3,932	4,401	8,673	5,194	231	7,380	31,083
Nonfinancial Corporations	21,699	15,985	16,912	4,138	6,777	-3,616	-17,965
Electric, Gas and Water	4,631	6,481	9,283	593	887	-1,370	-6,500
Manufacturing	10,840	5,591	3,501	1,074	1,986	259	-8,799
Services	1,424	259	971	1,270	2,639	852	-579
Telephone and Communication	1,034	1,232	2,000	890	684	-1,876	797
Transportation, Mining, and Construction	1,210	614	1,385	-249	-139	-381	-1,685
Wholesale and Retail Trade	2,560	1,809	-228	560	721	-1,102	-1,192

\* Excluding auto finance companies

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 4

## Statistics on Firm-Level Outstandings of Medium-Term Notes

## A. Average Outstandings in Millions of Dollars

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	452	500	575	626	667	699	709
Financial Corporations	788	910	1,090	1,279	1,414	1,544	1,387
Auto Finance Companies	9,842	11,219	11,090	11,251	12,359	12,514	4,947
Banking Firms	545	620	611	716	902	1,049	1,054
Finance Companies*	703	836	963	1,202	1,501	1,700	1,205
Real Estate, Insurance and Other Financial Companies	214	202	269	264	253	276	324
Savings and Loans	78	47	111	250	376	445	150
Securities Brokers	1,446	2,180	3,107	2,694	2,718	3,456	4,102
Nonfinancial Corporations	262	292	339	342	344	326	274
Electric, Gas and Water	200	255	339	347	330	311	253
Manufacturing	256	277	297	282	290	292	262
Services	354	401	476	573	721	782	546
Telephone and Communication	186	240	365	396	436	308	288
Transportation, Mining, and Construction	299	319	341	328	290	248	168
Wholesale and Retail Trade	576	479	466	446	438	368	276

\* Excluding auto finance companies

Note. Data source has changed since 1996

Table 4

## Statistics on Firm-Level Outstandings of Medium-Term Notes

## B. Median Outstandings in Millions of Dollars

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	152	167	200	200	200	210	200
Financial Corporations	233	229	260	346	394	323	300
Auto Finance Companies	9,837	10,851	13,660	15,575	15,769	15,653	922
Banking Firms	225	150	225	355	400	323	407
Finance Companies*	350	444	442	477	621	851	504
Real Estate, Insurance and Other Financial Companies	129	133	200	169	121	163	150
Savings and Loans	50	25	26	16	105	135	105
Securities Brokers	1,028	1,316	3,396	2,242	2,575	3,656	1,433
Nonfinancial Corporations	130	157	198	183	185	176	150
Electric, Gas and Water	103	165	185	200	197	208	160
Manufacturing	124	140	193	170	160	150	138
Services	238	300	248	299	345	503	224
Telephone and Communication	148	198	192	198	219	198	157
Transportation, Mining, and Construction	210	174	189	159	145	110	96
Wholesale and Retail Trade	165	150	245	250	250	166	172

\* Excluding auto finance companies

Note. Data source has changed since 1996

Table 5

## Ratings Distribution of Medium-Term Note Issuance

A. Millions of Dollars

	1989	1990	1991	1992	1993	1994	1995	1996	1997
AAA	1,635	1,635	4,250	2,966	4,091	9,274	10,358	4,740	2,065
AA	14,920	14,920	5,441	6,381	4,840	5,292	7,965	12,011	28,688
A	23,731	23,731	51,589	50,652	57,800	58,600	65,440	60,910	68,080
Baa	6,331	633	10,585	13,807	17,759	13,926	14,452	15,126	14,361
Ba	0	0	145	732	1,573	618	573	757	266
B	0	0	1	0	0	134	128	131	1,010

Note. Numbers may not add up due to rounding  
 Data source has changed since 1996

Table 5

## Ratings Distribution of Medium-Term Note Issuance

## B. Number of Issuers

	1989	1990	1991	1992	1993	1994	1995	1996	1997
AAA	14	6	9	9	8	3	2	3	9,733
AA	18	25	27	23	25	14	19	17	58,864
A	71	92	136	111	115	107	119	96	143,294
Baa	36	48	59	69	64	50	53	50	26,439
Ba	2	0	2	7	8	5	4	3	537
B	0	0	1	0	0	2	1	1	1,905

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 6  
Ratings Distribution of Medium-Term Notes  
(Millions of Dollars)

A. Year-end Outstandings

	1992	1993	1994	1995	1996	1997
All U.S. Corporations	176,855	210,894	235,485	267,501	287,324	317,516
AAA	6,077	8,799	12,725	17,021	13,599	10,732
AA	13,137	12,860	15,686	22,984	38,027	65,233
A	89,514	122,544	142,543	161,758	168,488	186,203
Baa	64,621	62,232	59,603	61,040	61,449	47,283
Ba	3,005	3,637	4,136	3,723	4,638	3,178
B	53	373	343	500	635	1,956
Other	0	0	0	0	0	2,931
Financial Corporations	108,277	125,404	145,858	171,096	194,536	242,685
AAA	4,930	7,570	12,130	16,621	13,045	9,753
AA	6,596	4,853	9,747	16,185	30,771	58,779
A	55,668	81,172	96,965	107,663	119,131	153,287
Baa	40,042	30,596	25,839	29,410	30,337	26,389
Ba	989	1,213	1,177	1,218	1,251	537
B	52	0	0	0	0	1,905
Other	0	0	0	0	0	1,913
Nonfinancial Corporations	68,578	85,490	89,627	96,405	92,788	74,832
AAA	1,147	1,229	595	400	554	999
AA	6,541	8,007	5,939	6,799	7,256	6,370
A	33,846	41,371	45,579	54,095	49,357	42,910
Baa	24,579	31,636	33,763	31,630	31,111	20,844
Ba	2,016	2,424	2,959	2,506	3,387	2,641
B	1	373	343	500	635	51
Other	0	0	0	0	0	1,018

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 6  
Ratings Distribution of Medium-Term Notes

B. Net Change

	1992	1993	1994	1995	1996	1997
All U.S. Corporations	34,440	34,039	24,592	32,015	19,823	30,192
AAA	-638	2,722	3,926	4,296	-3,422	-2,867
AA	4,384	-277	2,826	7,298	15,043	27,206
A	-11,794	33,030	19,999	19,214	6,731	17,715
Baa	448	-2,388	-2,630	1,437	409	-14,166
Ba	-130	632	500	-412	914	-1,460
B	-75	320	-30	157	135	1,321
Other	0	0	0	0	0	2,931
Financial Corporations	18,454	17,127	20,454	25,238	23,440	48,149
AAA	-579	2,640	4,560	4,491	-3,576	-3,292
AA	3,309	-1,744	4,895	6,438	14,586	28,008
A	-13,488	25,504	15,792	10,698	11,468	34,156
Baa	30,067	-9,446	-4,757	3,570	928	-3,948
Ba	-724	224	-36	40	34	-714
B	-130	-52	0	0	0	1,905
Other	0	0	0	0	0	1,913
Nonfinancial Corporations	15,985	16,912	4,138	6,777	-3,616	-17,965
AAA	-58	81	-634	-195	154	445
AA	1,076	1,467	-2,068	861	457	-886
A	2,144	7,526	4,207	8,516	-4,738	-6,447
Baa	11,727	7,058	2,127	-2,133	-519	-10,267
Ba	1,172	408	536	-453	881	-746
B	0	372	-30	157	135	-584
Other	0	0	0	0	0	1,018

Note. Numbers may not add up due to rounding  
Data source has changed since 1996

Table 7  
Ratio of Medium-Term Note Issuance to the  
Sum of Medium-Term Note and Corporate Bond Issuance  
for Investment-Grade Issuers  
(percent)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporations	23	31	33	42	41	37	35	54	47	43	47
Financial Corporations	36	42	44	58	57	57	51	63	59	57	62
Auto Finance Companies	54	62	61	73	74	73	62	73	77	81	71
Banking Firms	15	28	33	58	64	32	27	34	40	30	47
Finance Companies*	33	40	40	50	48	62	65	69	65	72	73
Real Estate, Insurance and Other Financial Companies	9	19	38	85	38	36	17	21	20	19	20
Savings and Loans	56	40	36	3	0	8	45	49	72	89	12
Securities Brokers	73	58	46	67	54	69	65	84	75	76	75
Nonfinancial Corporations	7	20	18	28	27	21	21	35	26	16	18
Electric, Gas and Water	4	11	24	26	27	18	21	23	24	23	20
Manufacturing	6	14	13	22	25	21	23	49	27	15	18
Services	38	49	56	46	61	40	48	58	45	36	38
Telephone and Communication	9	47	3	25	20	19	13	25	15	12	13
Transportation, Mining, and Construction	6	42	15	37	26	18	16	10	8	4	2
Wholesale and Retail Trade	9	34	29	45	34	29	16	43	35	4	15

Note. In the ratio, the volume of MTNs and corporate bonds does not include convertible bonds, Federal agency bonds, asset backed securities, or private placements.

Table 8

Ratio of Medium-Term Notes Outstanding to the  
Sum of Medium-Term Notes and Corporate Bonds Outstanding  
(percent)

	1991	1992	1993	1994	1995	1996	1997
All U.S. Corporate MTNs and Bonds	14	16	17	19	19	18	19
All U.S. Corporate MTNs and Bonds with Investment-Grade Ratings	17	19	21	23	23	22	23

Source. Moody's Investor Service for corporate bond outstandings. Both Moody's and Federal Reserve figures exclude private placements, asset-backed securities, bonds issued by Federal agencies, Eurobonds, and Yankee bonds. Moody's figures include convertible bonds.