

Private Activity Tax-Exempt Bonds, 1986

By Gerald Auten and Edward Chung*

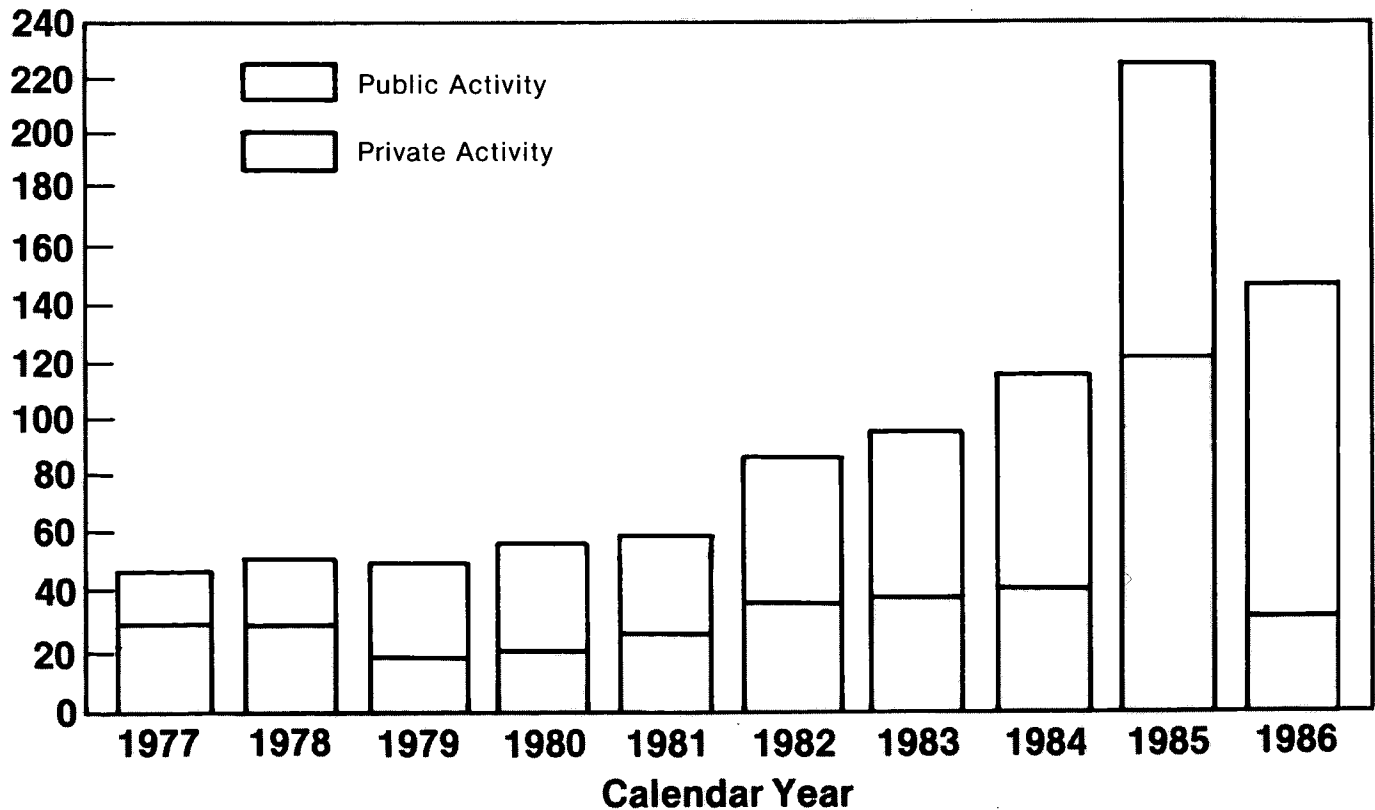
In a reversal of the rapid upward trend of recent years, the face amount of long-term private activity tax-exempt bonds in 1986 decreased to \$29.9 billion. This volume, which represented a 75 percent decrease from the 1985 volume of \$122.0 billion was the smallest since 1981. (Private activity bonds are bonds issued by State and local Governments that provide a benefit for private businesses, organizations, or individuals.) In contrast, the face amount of public purpose tax-exempt bonds continued to increase in 1986 to \$115.5 billion. However, as shown in Figure A, the

total dollar volume of all types of tax-exempt bonds declined by 33 percent in 1986 to \$145.7 billion [1].

The primary factor affecting the issuance of tax-exempt bonds in 1986 was tax reform, which had four main effects:

1. The issuance of a considerable volume of tax-exempt bonds was accelerated in 1985 in anticipation of restrictions included in the House bill that went into effect on December 31, 1985.

Figure A
Long-Term Tax-Exempt Bond Volume, 1977-1986
Billions of dollars



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2. From January 1986 until September 1986, when the Tax Reform Act was passed, there was considerable uncertainty as to how tax reform would affect tax-exempt bonds issued in 1986 and later years. This uncertainty discouraged the issuance of all tax-exempt bonds, especially private activity bonds.
3. Uncertainty about the regulations implementing the bill discouraged issuances in the last quarter of 1986.
4. Some of the provisions of the Tax Reform Act that restricted issuance of tax-exempt bonds took effect as soon as the bill was signed into law on October 22, 1986.

New Issues of Private Activity Bonds by Purpose

There are four main categories of tax-exempt private activity bonds: student loan bonds; private exempt entity bonds; mortgage revenue bonds; and industrial development bonds (IDB's), including bonds for multi-family rental housing. The total volume of private activity bonds includes the face amount of both new issues and refunding issues.

As shown in Figure B, the volume of new issues of long-term private activity bonds in 1986 totaled \$17.2 billion [2]. The largest category was the \$6.8 billion of small-issue IDB's, which further regional economic development by providing subsidized financing for construction and improvement of private business facilities that range from manufacturing plants to shopping centers. Small-issue IDB's are limited to issues of up to \$1 million or up to \$10 million over a 6-year period for facilities for the same principal user in the same municipality or unincorporated areas of a county. Congress limited the issuance of tax-exempt small-issue IDB's after December 31, 1986, to manufacturing facilities and repealed the tax-exemption altogether for bonds issued after December 31, 1988.

Two types of tax-exempt bonds are intended to provide subsidies for low-income housing. Qualified mortgage

bonds (also called mortgage revenue bonds or mortgage subsidy bonds) are issued to fund mortgages for first-time home buyers with low and middle incomes and home buyers in certain designated low-income areas at below-market interest rates. Mortgage loans were required to be made for houses costing no more than 110 percent of the average area purchase price (120 percent in targeted areas). New issues of qualified mortgage bonds amounted to only \$1.3 billion in 1986, compared with \$13.9 billion and \$13.6 billion in 1984 and 1985, respectively. The provision permitting these bonds to be tax-exempt was to expire on December 31, 1988 [3].

In addition tax-exempt bonds valued at \$1.5 billion were issued to finance multi-family rental housing. Tax-exempt IDB's could be used to finance multi-family housing projects if at least 20 percent of the units (15 percent in targeted areas) were set aside for low- or moderate-income households with incomes below 80 percent of median gross family income. The relatively small volume of new issues in 1986 reflects the acceleration into 1985 (when the volume amounted to \$25.2 billion) of issues that would normally have been made later.

Tax-exempt student loan bonds could be issued to finance loans for financing post-secondary education expenses in connection with Guaranteed Student Loans and Parent Loans for Undergraduate Students programs of the U.S. Department of Education. In 1986, \$1.7 billion of these bonds were issued, a decline of 65 percent from 1985, but still 24 percent more than in 1984.

Private exempt entity bonds are issued by State and local Governments to finance the activities of charitable, educational, religious, and similar organizations that are tax-exempt under section 501(c)(3) of the Internal Revenue Code. The primary beneficiaries of these bonds are private, nonprofit hospitals, colleges, and universities. In 1986, the volume of new issues of private exempt entity bonds was \$2.5 billion, down from \$25.7 billion in 1985.

Other industrial development bonds are issued to finance certain other exempt activities, including airports, docks,

Figure B. — New Issue Private Activity Bond Volume, Calendar Years 1983-86

[Money amounts in millions of dollars]

Type of bond	1983	1984	r1985	1986
	(1)	(2)	(3)	(4)
Total.....	49,911	65,816	99,770	17,215
Student loan bonds.....	3,086	1,370	2,803	1,696
Private exempt entity bonds.....	8,202	9,037	25,737	2,545
Qualified mortgage bonds ¹	10,800	13,900	13,561	1,319
Industrial development bonds, total.....	27,823	41,509	57,669	11,656
Small-issue.....	13,791	16,967	17,058	6,781
Multi-family rental housing.....	5,349	5,346	25,216	1,501
Airports, docks, etc. ²	2,109	3,713	3,554	463
Sewage and waste disposal.....	1,442	6,314	5,073	1,307
Pollution control.....	3,411	7,599	5,230	1,274
Other.....	1,721	1,570	1,538	330

¹ Qualified mortgage figures for 1983 and 1984 are based on estimates developed by the Office of Tax Analysis, U. S. Department of the Treasury

² Volume for new issues is the purchase price of the bond minus any amount used to refund earlier obligations.

r — Revised

and wharves; sewage and waste disposal facilities; pollution control facilities; and mass transit, water, and heating and cooling facilities. The volume of new issues of these types of bonds declined in 1986.

future years, however, so that the end-of-the-year increase in volume may simply reflect a normal seasonal pattern [4].

VOLUME OF ISSUES BY MONTH

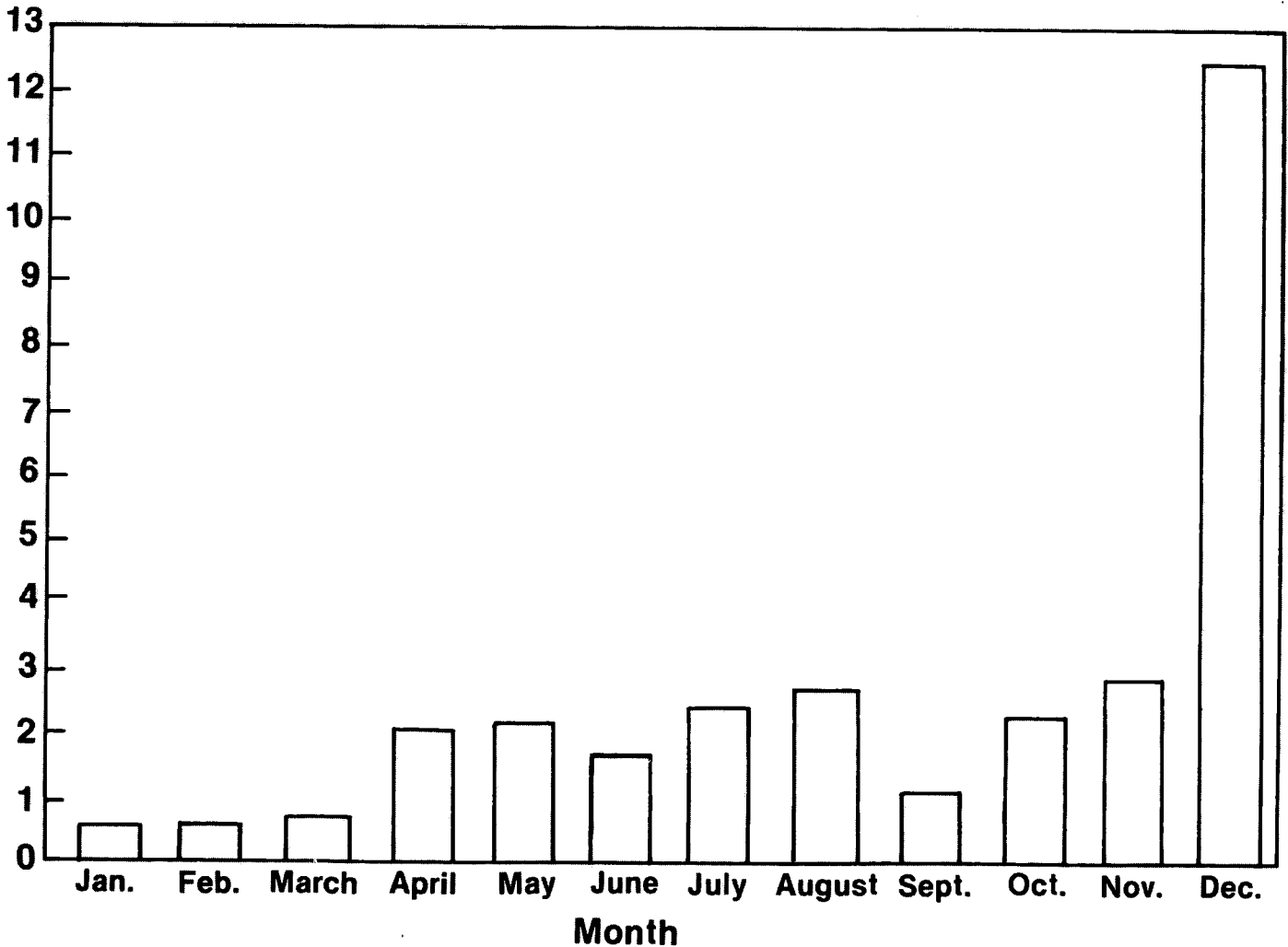
The dollar volume of private activity bonds issued by month in 1986 is shown in Figure C. Less than 5 percent of the bonds were issued in the first 3 months of the year. In contrast, almost 39 percent of the bonds issued in 1986—more than \$12.5 billion—were issued in December. The large volume at the end of 1986 suggests the possibility that some State and local Governments attempted to issue bonds before the stricter volume cap went into effect in 1987. Unused volume caps can be carried forward to

PRIVATE ACTIVITY BONDS BY STATE

The per capita amounts of private activity bonds for the 10 States with the highest per capita volumes of issues are shown in Figure D. Delaware and Alaska had the largest per capita amounts of bonds. Each of these States issued approximately \$240 per capita of private activity bonds, three times the national average of \$71 per capita. Almost all the bonds issued by Delaware were small-issue IDB's; most of the bonds issued by Alaska were qualified mortgage bonds. Table 7 at the end of this article shows the private activity bonds issued by type for each of the States.

Figure C
Private Activity Tax-Exempt Bond Volume By Month, 1986

Millions of Dollars



Private Activity Tax-Exempt Bonds, 1986

Four States issued more than \$1 billion in private activity bonds: California, New York, Pennsylvania, and Texas.

SIZE OF ISSUES

A distribution of the main types of private activity bonds by size of issue is shown in Table 5. The largest issues were student loan and mortgage revenue bonds. The student loan bond issues with face values of \$50 million or more accounted for almost 90 percent of the total volume of student loan bonds. For mortgage revenue bonds, nearly two-thirds of the dollar volume was accounted for by issues of \$50 million or more. Most multi-family housing and private exempt entity bonds were of intermediate size (between \$2 million and \$50 million). The small-issue IDB's were generally the smallest issues. Although two-thirds of the small-issue IDB's were under \$2 million in size, more than two-thirds of the dollar volume was accounted for by bonds with values between \$2 million and \$10 million.

MATURITIES OF ISSUES

Table 6 shows the distribution of the weighted-average maturities of the major types of private activity bonds. Many of the bond issues are serial bonds in which a percentage of the bonds mature each year. Thus the average amount of bonds outstanding over the life of the bond issue is only a fraction of the face amount of the bond. The weighted average maturity is calculated as the average maturity of the new bonds with weights determined by the amount of the bonds outstanding in each maturity class. The shortest maturities are for student loan bonds, which have a mean weighted-average maturity of 14 years. The longest maturities were reported for qualified mortgage revenue bonds, with 70 percent reporting weighted-average maturities of 20 years or more.

THE TAX REFORM ACT OF 1986

The Tax Reform Act of 1986 included a number of provisions that restrict both the supply of and the demand

Figure D.—States with the Largest Per Capita New Issues of Private Activity Bonds, 1986

Selected States	New issues of private activity bonds	
	Per capita (dollars)	Total issues (million dollars)
United States, total	\$71.41	\$17,215
Delaware	240.13	152
Alaska	239.70	128
Maine	169.65	199
Montana	123.32	101
Georgia	117.63	720
Pennsylvania	117.51	1,397
Mississippi	116.57	306
Colorado	114.78	375
Missouri	99.49	504
South Dakota	98.87	70

Source: U.S. Department of Commerce, Bureau of the Census — Resident population for 1986; Table 7.

for tax-exempt State and local securities. These restrictions reflect congressional concern about four undesirable effects stemming from the large and increasing volume of tax-exempt bonds that were being issued under prior law: [5]:

1. The large volume of tax-exempt issues increased the interest rates that State and local governments had to pay to issue bonds for traditional governmental purposes.
2. The issuance of large volumes of private activity bonds resulted in an inefficient allocation of capital, because subsidized activities may be less productive than competitive but unsubsidized activities.
3. The equity of the tax system was harmed as high-income individual and corporations limited their tax liabilities by investing in tax-exempt bonds.
4. The increasing volume of private activity bonds resulted in mounting revenue losses to the Federal Government. Because the tax rates are progressive and because the large volume of tax-exempt bonds had narrowed the interest rate spread between taxable and tax-exempt bonds, the revenue loss to the Federal Government was considerably greater than the interest saving to the State and local Governments.

The major provisions of the Tax Reform Act of 1986 that restricted the issuance of tax-exempt bonds dealt with —

- tightening the definition of governmental use as opposed to private activity bonds. The percentage of proceeds of a governmental purpose bond that could be used by a non-governmental person in any trade or business, or secured by payments or property used in a trade or business, was reduced from 25 percent to 10 percent.
- restricting the purposes for which tax-exempt private activity bonds could be issued. Tax-exempt private activity bonds can no longer be used to finance pollution control facilities, sports stadiums, convention facilities, or parking facilities.
- imposing a single, unified volume cap by State for most private activity tax-exempt bonds. The annual State volume cap was the greater of \$75 per capita or \$150 million (face amount) in 1987 and \$50 per capita or \$100 million (face amount) in 1988 and thereafter. The volume cap applied to all private activity bonds except those issued for tax-exempt nonprofit hospitals and private universities and colleges; qualified veterans' mortgages; and publicly owned airports, docks and wharfs, and solid waste facilities.

- restricting advance refundings to governmental use and private exempt entity bonds, and imposing a limit of two advance refundings for issues for which tax-exempt refundings are permitted.
- tightening a number of restrictions on the ability of State and local Governments to profit by issuing tax-exempt bonds and investing the proceeds in taxable investments with higher yields.
- not extending the December 31, 1986, cutoff date for small-issue IDB's other than manufacturing facilities. The cutoff date for issuing tax-exempt IDB's for manufacturing facilities was extended for 1 year to December 31, 1989.

A number of provisions in the Tax Reform Act of 1986 tended to reduce the demand for tax-exempt securities. Most important, the reductions in marginal tax rates for both individuals and corporations reduced the advantage of holding tax-exempt securities. Another provision subjected the interest on certain private activity bonds, otherwise tax-exempt, to the alternative minimum tax at a 21 percent tax rate for individuals and a 20 percent rate for corporations. This minimum tax would only be paid, however, if the interest on these bonds plus other forms of "tax preferences" subject to this tax amounted to a significant percentage of total taxable income. Finally, banks were no longer able to deduct the interest they pay when they borrowed to finance the purchase of tax-exempt municipal bonds.

Conversely, the elimination of many other ways of sheltering income from tax under the 1986 tax reform caused some investors to increase their purchases of tax-exempt bonds. Similarly, the broadening of the corporate income tax base could tend to induce some businesses to purchase tax-exempt bonds.

Other provisions of the Tax Reform Act of 1986 improved the reporting of information on tax-exempt bonds beginning in 1987. State and local Governments are required to file Form 8038 information returns with the Internal Revenue Service (IRS) for public purpose bonds issued after December 31, 1986, as well as for private purpose bonds. In addition, individual taxpayers were required to report tax-exempt interest on their individual income tax returns (Form 1040) beginning with 1987 returns. These two requirements will substantially improve and expand the information available about tax-exempt bonds.

Several private activity bond provisions are scheduled to expire in 1988 and 1989. The provision permitting issuance of tax-exempt bonds for qualified mortgage subsidy bonds was extended for 1 year by the Tax Reform Act of 1986, but it is currently set to expire on December 31, 1988 [6]. The exception permitting tax-exempt small IDB's for manufac-

turing facilities is set to expire on December 31, 1989. If these provisions are allowed to expire, the volume of private activity bonds can be expected to decline further after 1988.

HIGHLIGHTS FOR 1986

A total of 5,220 information returns were filed for private activity bonds issued in 1986. Some returns included descriptions of more than one activity (multiple-lot issues), thereby reducing the number of returns. But multiple returns may be filed for a single activity when a bond is refunded, especially in the case of short-term obligations that have maturities as short as 1 day.

Table 1 (columns 4, 5, and 6) shows the total face amount of new issues by type of private activity bond. The bonds are further categorized into short-term obligations (with maturities of 1 year or less) and long-term obligations. In some cases, bonds issued to refund previous issues may include a component of new-issue funding; this is included in the new-issue columns in Table 1. For example, a bond issue with a \$100 million purchase price sold to refund a \$95 million outstanding obligation would have \$5 million of new-issue volume. New-issue volume, therefore, represents the net increase in private activity bonds excluding non-refunded retirements.

Table 2 shows the relationship between the aggregate face amount and lendable proceeds for long-term private activity bonds. It also shows the purchase price allocations to issuance costs and reserve or replacement funds as well as the allocation of the lendable proceeds between refundings and non-refunding (new issue) proceeds. Issuance costs averaged 1.3 percent of the purchase price for all private activity bonds in 1986, compared with 2.6 percent in 1985 [7]. In 1986, more than 45 percent of the lendable proceeds were used to refund prior issues. Refunding volume was most important for private exempt entity bonds and qualified mortgage bonds, which accounted for more than 60 percent of the total volume in both cases.

Table 3 shows the uses of the non-refunding lendable proceeds for each of the types of IDB's. Almost 90 percent of the proceeds were used for depreciable property. The remainder was used for land and other property.

Table 4 shows the volume of industrial development bonds and private exempt entity bonds by industry grouping. Table 5 shows private activity bonds by size of face amount and by type of bond. Table 6 shows the distribution of average maturities by type of bond issue.

Table 7 shows the new-issue volume by type of bond for each State. No one type of bond was issued by every State, and most States issued bonds in all the major categories.

The States with the largest total volumes were California with \$1.7 billion, New York with \$1.5 billion, and Pennsylvania with \$1.4 billion.

DATA SOURCES AND LIMITATIONS

Form 8038, Information Return for Private Activity Bond Issues, has been required for all student loan bonds, private exempt entity bonds, and IDB's since 1983. The reporting of qualified mortgage bonds has been required since 1984. The data in this article on private activity bonds were extracted from the 5,219 returns filed with IRS for 1986.

Because the entire population of Forms 8038 was used for this study, there is no sampling error. A number of checks were performed to ensure that each return was internally consistent and to exclude duplicate and amended returns. A certain amount of filer and processing error may remain, however.

DEFINITIONS

Private Activity Bonds.—Includes four types of tax-exempt, State or local Government bonds issued for other than public purposes: industrial development bonds, private exempt entity bonds, student loan bonds, and qualified mortgage bonds. Private activity bonds were classified as short-term if their final maturity was 1 year or less from their date of issue.

Industrial Development Bonds (IDB's).—State or local Government obligations, all or a major portion of the proceeds of which are used in a private trade or business, with payments of principal and interest secured by the property used in a private trade or business. Under the small-issue exemption in effect in 1986, virtually any private trade or business could finance depreciable property or land with an IDB, if the bond's face amount did not exceed \$1 million or \$10 million including related capital expenditures during a 6-year period beginning 3 years before and ending 3 years after the date of issue.

Private Exempt Entity Bonds.—State or local Government obligations issued for use by tax-exempt charitable, religious, educational, and similar organizations (described in Internal Revenue Code section 501[c](3)). Most were for use by private, nonprofit medical facilities, colleges, and universities.

Qualified Mortgage Bonds.—State and local Government obligations issued to finance mortgages for owner-occupied residences. In general, the loans had to be made to new homeowners and purchasers of homes in designated low-income areas. Restrictions also applied to the

purchase price of the residence and the income of the recipients of the mortgage loans.

Residential Rental Housing Industrial Revenue Bonds.—IDB's issued to finance multi-family residential rental projects. In general, at least 20 percent of the units in the project financed (15 percent in certain targeted areas) had to be set aside for lower-income individuals or families with incomes below 80 percent of median family income.

Student Loan Bonds.—State or local Government obligations issued to finance the post-secondary education expenses of individuals.

NOTES AND REFERENCES:

- [1] Estimate made by the Office of Tax Analysis, U.S. Department of the Treasury. See U.S. Office of Management and Budget, *Special Analyses: Budget of the United States Government, FY 1989*, Special Analysis F, Table F-17.
- [2] Although Figure B shows only new issues of private activity bonds, the volume of current and advance refunding issues is nearly equal to the volume of new issues. Such refundings are generally undertaken to refinance at interest rates lower than those specified by the original issue. The dollar value of refunding issues can be computed as the difference between total issues and new issues as shown in Table 1.
- [3] U.S. General Accounting Office, Resources, Community and Economic Development Division, *Home Ownership: Mortgage Bonds Are Costly and Provide Little Assistance to Those in Need*, Report to the Chairman, Joint Committee on Taxation, U.S. Congress, March 1988.
- [4] This monthly pattern may be similar for prior years as well. For 1983, when the only other year for which this information was tabulated, nearly one-fourth of the total volume occurred in December. See Clark, Philip, and Neubig, Tom, "Private Activity Tax-Exempt Bonds, 1983," *Statistics of Income Bulletin*, Summer 1984, Vol. 4, No. 1.
- [5] U.S. Congress, Joint Committee on Taxation, *General Explanation of the Tax Reform Act of 1986*, May 4, 1987.
- [6] As this article was in preparation, Congress was considering a 2-year extension of tax-exempt mortgage revenue bonds.
- [7] See Clark, Philip, "Private Activity Tax-Exempt Bonds, 1985," *Statistics of Income Bulletin*, Spring 1987, Vol. 7, No.1, Table 2.

Table 1.—Volume of Private Activity Bonds by Type of Activity

[Money amounts in millions of dollars]

Type of activity	All issues ¹			New issues ²		
	Total	Short-term	Long-term	Total	Short-term	Long-term
	(1)	(2)	(3)	(4)	(5)	(6)
Total.....	32,472	2,535	29,937	17,215	433	16,782
Student loan bonds.....	2,557	570	1,987	1,696	244	1,452
Private exempt entity bonds.....	6,554	201	6,353	2,545	58	2,487
Qualified mortgage bonds ³	5,325	—	5,325	1,319	—	1,319
Industrial development bonds:						
Industrial park.....	53	—	53	51	—	51
Small issue.....	7,853	34	7,819	6,781	27	6,754
Multi-family rental housing.....	2,301	2	2,299	1,501	—	1,501
Sports facilities.....	68	—	68	60	—	60
Convention facilities.....	1	—	1	1	—	1
Airports, docks, etc. ⁴	2,588	1,521	1,067	463	46	417
Sewage and waste disposal facilities.....	2,222	46	2,176	1,307	44	1,262
Pollution control facilities.....	2,380	13	2,367	1,274	12	1,262
Water furnishing facilities.....	154	3	151	38	2	37
Hydroelectric generating facilities.....	63	—	63	44	—	44
Mass commuting vehicles.....	5	—	5	(5)	—	(5)
Local heating and cooling facilities.....	77	—	77	11	—	11
Electric energy and gas facilities.....	272	146	126	125	(7)	125

¹ Volume for all issues is the face amount of the bond.

² Volume for new issues is the purchase price of the bond minus any amount used to refund earlier obligations.

³ Includes qualified veterans' mortgage bonds.

⁴ Includes wharves, mass commuting facilities, parking facilities, or storage facilities directly related to any of the preceding.

⁵ Less than \$500,000.

NOTE: Detail may not add to totals because of rounding.

Table 2.—Computation of Nonrefunding Lendable Proceeds for Long-Term Private Activity Bonds, by Type of Bonds

[Money amounts in millions of dollars]

Item	Total	Type of bond				
		Student loan	Private exempt entity	Qualified mortgage bonds	Industrial development bonds	
					Small issue	Other
(1)	(2)	(3)	(4)	(5)	(6)	
Face amount.....	29,937	1,987	6,353	5,325	7,819	8,453
Purchase price.....	29,849	1,953	6,317	5,322	7,812	8,446
Bond issuance costs.....	404	17	133	15	138	101
Allocations to reserve or replacement funds.....	688	81	218	124	89	176
Lendable proceeds.....	28,746	1,856	5,966	5,113	7,587	8,224
Proceeds used to refund prior issues.....	13,067	501	3,830	4,003	1,058	3,676
Nonrefunding lendable proceeds.....	15,679	1,356	2,136	1,110	6,529	4,549

¹ Includes qualified veterans' mortgage bonds.

NOTE: Detail may not add to totals because of rounding.

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Table 3.—Nonrefunding Lendable Proceeds from Sales of Long-Term Bonds, by Type of Property Financed

[Money amounts in millions of dollars]

Type of property financed	Total		Type of industrial development bond					
			Private exempt entity		Small issue		Multi-family rental housing	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total	14,139	100	1,758	100	6,486	100	1,377	100
Depreciable property:								
3-year ACRS	91	1	6	(¹)	67	1	6	(¹)
5-year ACRS	2,041	14	233	13	996	15	37	3
10-year ACRS	962	7	42	2	115	2	14	1
15-year ACRS	2,736	19	162	9	310	5	131	10
18-year ACRS	6,803	48	1,032	59	4,121	64	1,021	74
Land	834	6	81	5	570	9	122	9
Other property	552	4	156	9	257	4	30	2
Other uses	120	1	46	3	50	1	16	1

Type of property financed	Type of industrial development bond—Continued							
	Sports and convention		Sewage, waste disposal and pollution control		Airport and dock		Other exempt activity ²	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total	60	100	1,732	100	230	100	2,495	100
Depreciable property:								
3-year ACRS	1	2	9	1	1	—	2	—
5-year ACRS	10	17	13	1	12	5	740	30
10-year ACRS	—	—	20	1	3	1	769	31
15-year ACRS	4	7	1,293	75	167	72	668	27
18-year ACRS	32	54	295	17	5	2	295	12
Land	8	13	35	2	8	4	9	0
Other property	5	8	58	3	33	14	13	1
Other uses	(³)	(¹)	7	(¹)	1	(¹)	(³)	(¹)

¹ Includes wharves, mass commuting facilities, or storage facilities directly related to any of the preceding.² Consists of industrial parks, water furnishing facilities, hydroelectric generating facilities, mass commuting vehicles, local heating and cooling facilities, and facilities for the local furnishing of electrical energy or gas.³ Less than \$500,000.

NOTE: Detail may not add to totals because of rounding.

ACRS is the Accelerated Cost Recovery System of depreciating property for tax purposes.

Table 4.—Volume of Industrial Development Bonds and Private Exempt Entity Bonds, by Industry¹

[Money amounts in millions of dollars]

Industry	Industrial development bonds				Private exempt entity bonds	
	Small issue		Other		Amount	Percent
	Amount	Percent	Amount	Percent		
(1)	(2)	(3)	(4)	(5)	(6)	
All industries	6,315	100.00	4,486	100.00	2,140	100.00
Agriculture, forestry, and fishing	60	.95	39	.78	17	.88
Mining	18	.29	12	(2)	—	.29
Construction	81	1.28	34	(2)	65	.75
Manufacturing						
Food and kindred products	181	2.86	—	—	—	—
Textile products	84	1.33	1	(2)	—	—
Lumber, wood products, and furniture	157	2.49	2	.03	1	.04
Paper and allied products	73	1.16	9	(2)	—	.20
Printing and publishing	109	1.73	1	(2)	—	.02
Chemicals and allied products	110	1.74	82	(2)	—	1.82
Rubber and miscellaneous plastics products	145	2.29	—	—	—	—
Stone, clay, and glass products	54	.85	—	—	—	—
Primary metal industries	32	.51	3	—	—	.07
Fabricated metal products	199	3.15	2	(2)	—	.04
Machinery, except electrical	69	1.09	65	—	—	1.46
Electrical and electronic equipment	130	2.07	—	—	—	—
Transportation equipment	103	—	104	(2)	—	2.32
Other manufacturing	125	1.93	18	(2)	—	.40
Transportation						
Trucking and warehousing	160	2.53	2	(2)	—	.04
Transportation by air	4	.06	336	(2)	—	7.48
Other transportation	37	.59	45	(2)	—	1.01
Electric, gas, and sanitary service	22,555	.36	2,321	—	—	51.73
Wholesale trade						
Durable goods	236	3.73	2	—	—	.04
Nondurable goods	223	.42	1	.02	—	.02
Retail trade						
General merchandise stores	89	1.40	—	.03	1	(²)
Food stores	80	1.25	—	—	—	—
Other retail trade	242	3.83	1	.06	1	.03
Finance and insurance	94	1.49	—	—	—	—
Real estate	1,485	23.52	1,349	2.40	51	30.07
Services						
Hotels and other lodging places	849	13.44	—	.14	3	—
Personal and business services	95	1.51	1	.19	4	.02
Medical and health services	766	12.13	4	80.75	1,728	.09
Educational services	11	.18	—	10.49	224	—
Other services	164	2.60	36	4.63	99	.81
Other industries	27	.42	15	.49	10	.34

¹ Consists of the nonrefunding lendable proceeds of the bonds.² Less than 0.005 percent.³ Less than \$500,000.

NOTES: Detail may not add to totals because of rounding.

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Table 5.—Number and Face Amount of Private Activity Bond Issuances, by Type and Size of Face Amount

[Money amount in millions of dollars]

Size of face amount	Total number of bond issuances	Face amount by type of bond						
		Total face amount	Student loan	Private exempt entity	Qualified mortgage	Small issue IDB	Rental	All other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	5,220	32,475	2,557	6,554	5,286	7,855	2,301	7,921
Under \$100,000.....	191	11	(¹)	1	—	10	(¹)	(¹)
\$100,000 under \$500,000.....	1,013	285	4	5	600	264	3	8
\$500,000 under \$1,000,000.....	821	580	2	19	—	536	9	14
\$1,000,000 under \$2,000,000.....	919	1,249	2	44	4	1,113	24	62
\$2,000,000 under \$5,000,000.....	1,055	3,384	13	247	16	2,723	136	248
\$5,000,000 under \$10,000,000.....	601	4,225	17	359	49	2,979	483	339
\$10,000,000 under \$20,000,000.....	230	3,142	36	745	475	230	776	879
\$20,000,000 under \$50,000,000.....	235	7,057	196	2,193	1,280	—	676	2,712
\$50,000,000 under \$100,000,000.....	91	6,373	1,237	1,878	1,606	—	194	1,457
\$100,000,000 or more.....	34	6,168	1,049	1,063	1,856	—	—	2,201

¹ Less than \$500,000.

NOTE: Detail may not add to totals because of rounding.

Table 6.—Number and Face Amount of Private Activity Bonds, by Weighted Average Maturity and Type of Bond

[Money amounts in millions of dollars]

Weighted average maturity in years	Total number of bond issuances	Face amount by type of bond						
		Total face amount	Student loan	Private exempt entity	Qualified mortgage	Small issue IDB	Rental	All other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total	5,220	32,475	2,557	6,554	5,286	7,855	2,301	7,921
Less than 5.....	403	2,833	571	286	—	216	7	1,754
5 under 10.....	1,205	2,772	441	487	51	1,624	25	144
10 under 15.....	1,187	4,157	418	873	648	1,598	275	345
15 under 20.....	1,047	6,605	176	1,943	876	1,386	496	1,727
20 under 25.....	810	7,095	380	1,628	1,336	1,598	985	1,167
25 under 30.....	247	3,130	—	498	789	586	166	1,091
30 or more.....	321	5,884	571	840	1,587	846	347	1,693
Mean of the weighted average maturity in years.....	N/A	N/A	14.0	18.9	23.5	16.4	21.3	18.2

N/A Not applicable

NOTE: Detail may not add to totals because of rounding.

Private Activity Tax-Exempt Bonds, 1986

Table 7.—Volume of New Issue Private Activity Bonds by Type of Bond and State

[Money amounts in millions of dollars]

State	Total	Volume by type of bond									
		Student loan	Private exempt entity	Qualified mortgage bonds ¹	Industrial development bonds						
					Small issue industrial park	Multi-family housing	Sports and convention	Airport and docks ³	Sewage waste disposal	Pollution control	Other exempt activities ⁴
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Total.....	17,215	1,696	2,545	1,319	6,832	1,501	61	463	1,307	1,274	219
Alabama.....	290	3	10	2	216	—	—	—	11	48	—
Alaska.....	128	—	20	49	22	—	—	37	—	—	—
Arizona.....	183	—	19	—	52	42	—	60	10	—	—
Arkansas.....	39	(⁵)	—	(⁵)	36	—	—	3	—	—	—
California.....	1,675	209	127	331	162	294	—	—	46	360	147
Colorado.....	375	57	170	83	46	(⁵)	15	2	—	2	—
Connecticut.....	223	—	10	14	114	13	—	8	45	8	13
Delaware.....	152	—	5	—	140	7	—	—	—	—	—
Florida.....	562	—	198	3	234	70	15	19	19	(⁵)	6
Georgia.....	718	4	162	(⁵)	443	88	—	1	8	12	—
Hawaii.....	62	—	5	—	—	—	—	57	—	—	—
Idaho.....	14	—	5	—	9	—	—	—	—	—	(⁵)
Illinois.....	623	112	61	6	280	14	—	—	—	151	—
Indiana.....	262	—	64	—	153	5	—	1	—	38	—
Iowa.....	99	—	26	—	72	2	—	—	—	—	—
Kansas.....	137	—	13	—	121	4	—	—	—	—	—
Kentucky.....	305	—	6	—	159	43	—	15	16	67	—
Louisiana.....	158	—	16	—	99	2	—	—	25	17	—
Maine.....	199	—	4	—	38	—	—	—	157	—	—
Maryland.....	312	—	90	37	127	59	—	—	—	—	—
Massachusetts.....	420	—	49	(⁵)	136	128	—	—	104	2	—
Michigan.....	807	24	142	—	382	25	—	164	3	67	(⁵)
Minnesota.....	329	—	45	114	110	59	—	(⁵)	—	—	(⁵)
Mississippi.....	306	—	10	150	43	7	—	2	2	91	—
Missouri.....	504	145	53	—	161	145	—	—	—	—	—
Montana.....	101	28	—	—	4	—	—	—	(⁵)	70	—
Nebraska.....	136	104	4	—	28	—	—	—	—	—	—
Nevada.....	26	—	(⁵)	—	14	—	—	12	—	—	—
New Hampshire.....	48	—	—	—	3	1	—	—	30	14	—
New Jersey.....	531	—	76	—	350	12	—	10	83	—	—
New Mexico.....	6	—	4	—	2	—	—	—	—	—	—
New York.....	1,515	376	67	372	628	8	9	2	14	40	—
North Carolina.....	168	(⁵)	60	6	54	—	—	—	48	—	—
North Dakota.....	64	—	27	—	23	13	—	—	—	—	—
Ohio.....	729	80	195	—	392	14	17	31	(⁵)	(⁵)	—
Oklahoma.....	69	19	16	—	30	2	—	—	2	—	(⁵)
Oregon.....	45	—	15	—	30	—	—	—	—	—	—
Pennsylvania.....	1,397	80	197	47	573	24	1	13	444	19	—
Rhode Island.....	49	—	3	—	46	—	—	—	—	—	—
South Carolina.....	237	—	50	—	120	47	—	—	20	—	—
South Dakota.....	70	—	6	7	58	—	—	—	—	—	—
Tennessee.....	412	—	11	—	228	164	—	9	—	—	—
Texas.....	1,194	319	197	20	213	74	4	10	93	263	2
Utah.....	94	—	10	2	73	9	—	—	—	—	—
Vermont.....	48	11	2	—	29	5	—	—	—	—	1
Virginia.....	523	3	92	70	301	39	—	2	15	—	—
Washington.....	297	123	19	2	52	50	—	(⁵)	—	6	44
West Virginia.....	96	—	16	—	72	(⁵)	—	—	7	—	—
Wisconsin.....	402	—	104	—	148	33	—	4	105	—	6
Wyoming.....	6	—	3	(⁵)	2	—	—	—	—	—	—
Others ⁶	70	—	62	4	5	—	—	—	—	—	—

¹ Volume for new issues is the purchase price of the bond minus the amount used to refund earlier obligations.

² Consists of qualified mortgage bonds and qualified veterans' mortgage bonds.

³ Includes wharves, mass commuting facilities, parking facilities, or storage facilities directly related to any of the preceding.

⁴ Consists of water furnishing facilities, hydroelectric facilities, mass commuting vehicles, local district heating and cooling facilities, and facilities for local furnishing of electric energy of gas.

⁵ Less than \$500,000.

⁶ Includes District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

NOTE: Detail may not add to totals because of rounding.