
United States General Accounting Office

GAO

Fact Sheet for the Honorable
John Melcher,
United States Senate

June 1987

TAX POLICY

Selected Tax Provisions Affecting the Hard Minerals Mining and Timber Industries





United States
General Accounting Office
Washington, D.C. 20548

General Government Division

B-226646

June 3, 1987

The Honorable John Melcher
United States Senate

Dear Senator Melcher:

In May 1986, you asked us to review how the proposed Tax Reform Act of 1986 would affect the hard minerals mining and timber industries. We did so, and in September we briefed your representative on our results. Subsequently, your office asked us to provide you with a written document that would reflect the major points discussed in the briefing.

The scope of this document includes background information and the latest available statistical data on each industry. It identifies relevant provisions in the Tax Reform Act of 1986, both general and industry-specific, that affect taxpayers engaged in hard minerals mining and/or timber activities. It does not attempt to estimate the net effect of tax reform on these industries. As requested at the briefing, it also presents a discussion of the arguments, both for and against, special timber tax provisions. We obtained our information by reviewing available literature and analyzing published statistical data which we did not attempt to verify. We also interviewed representatives from the Internal Revenue Service, the U.S. Bureau of Mines, and the U.S. Forest Service to discuss data related issues.

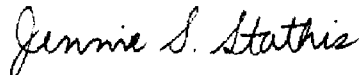
The background information and statistical data show that the two industries are undergoing adjustments. The domestic hard minerals mining industry has, in general, endured a period of declining production and continued mine closings, due in part to the 1980-82 recession and increased international competition. Tax return data from the IRS indicate that many of these firms are reporting negative taxable income. The domestic timber industry is confronted with a declining acreage base and a recognized need to develop more efficient and effective harvesting practices.

Some general changes brought about by the Tax Reform Act of 1986 will affect most industries, including timber and mining. Prominent among these changes are the repeal of capital gains treatment of income, which generally raises

the tax rate on capital, and the repeal of the investment tax credit, which raises the cost of acquiring capital. While these changes tend to increase the tax burden on business, they will be somewhat offset by a reduction in corporate tax rates. Also, for timber and mining, certain favorable industry-specific provisions are retained. These include the expensing of mining exploration and development costs, which generally allows deduction of the cost in the year incurred rather than writing it off over several years, and the special tax credit for reforestation expenses.

As arranged with your office, we will send copies of this fact sheet to the Department of Agriculture, Department of the Interior, the Department of the Treasury, and congressional committees that oversee the tax area. Copies will also be made available to others who request them. If you or your staff have questions regarding this information, please contact Charles Vehorn of my staff on 376-0023.

Sincerely yours,



Jennie S. Stathis
Associate Director

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ABBREVIATIONS

IRS	Internal Revenue Service
ITC	Investment Tax Credit
ACRS	Accelerated Cost Recovery System

BACKGROUND INFORMATION ON THE HARD MINERALS
MINING INDUSTRY AND RELATED PROVISIONS
OF THE TAX REFORM ACT OF 1986¹

DOMESTIC HARD MINERAL MINES IN 1980 AND 1983
(TABLE I.1)

The number of operating U.S. hard minerals mines in 1983 dropped from the number of mines operating in 1980, according to U.S. Department of the Interior statistics. In 1980, there were 580 operating hard minerals mines in this country. In 1983, the number of operating mines was 389, a 33-percent decline. Tungsten and uranium mines experienced the greatest percentage of closings, with respective rates of 72 percent and 62 percent during the 1980 to 1983 period. Gold (lode, i.e., mined from rock rather than washed or dredged) and silver mines were the only types of mines to increase in number with increases of 98 percent and 21 percent, respectively.

¹While it appears that the mining industry uses the term "hardrock mining," the Tax Reform Act of 1986 uses the term "hard minerals mining." Since the focus of this report is on taxation, we will use the term used in the act.

Table I.1: Number of Domestic Hard Minerals
Mines in the United States in 1980 and 1983,
by Commodity

<u>Minerals</u>	<u>1980 total number of mines</u>	<u>1983 total number of mines</u>	<u>Percentage change from 1980 to 1983</u>
Bauxite	10	8	-20
Copper	39	26	-33
Gold			
lode	44	87	98
placer	36	34	-6
Iron ore	35	23	-34
Lead	33	16	-52
Silver	43	52	21
Titanium (ilmenite)	5	3	-40
Tungsten	29	8	-72
Uranium	265	102	-62
Zinc	20	13	-35
Other ^a	<u>21</u>	<u>17</u>	<u>-19</u>
Total	580	389	-33

^aOther includes antimony, beryllium, manganiferous ore, mercury, molybdenum, platinum-group metals, rare-earth metals, and tin. The 1980 figure also includes nickel and vanadium.

Source: U. S. Department of the Interior, Bureau of Mines.

DOMESTIC AND INTERNATIONAL HARD MINERALS
PRODUCTION (TABLE I.2)

While U.S. production of gold and silver increased between 1976 and 1984, production of copper, iron ore, lead, and zinc declined both in absolute terms and as a share of world production. Production of lead and zinc dropped by more than 40 percent, followed by a 36-percent decline in iron ore, and a 25-percent decline in copper.

The overall decline in U.S. production, according to the U.S. Bureau of Mines' "Minerals Yearbook, 1984," resulted from a complex mix of international and domestic factors, including the shift to foreign countries for the extraction and processing of mineral resources; a global economy characterized by depressed metal prices and increased production by foreign producers; and the 1980-82 recession.

Table I.2: U.S. Hard Minerals Production in Relation to World
Hard Minerals Production, 1976, 1980, and 1984^a

<u>Hard minerals</u>	<u>1976</u>	<u>1980</u>	<u>1984</u>	<u>Percent change 1976-84</u>
Copper, (metric tons)				
U.S. Production	1,456,561	1,181,116	1,091,284	-25.08
World Production	7,525,000	7,405,000	7,838,000	4.16
U.S. % of World Production	19.36%	15.95%	13.92%	-28.10
Exports	101,502	14,489	91,414	-9.94
Imports, refined	346,113	426,948	444,699	28.48
Gold (1,000 troy ounces)				
U.S. Production	1,048	970	2,059	96.47
World Production	39,024	39,179	46,035	17.97
U.S. % of World Production	2.69%	2.48%	4.47%	66.17
Exports	2,879	6,119	4,981	73.01
Imports	2,656	4,542	7,069	196.27
Iron Ore, usable (1,000 long tons)				
U.S. Production	79,993	69,613	51,269	-35.91
World Production	885,098	877,152	789,440	-10.81
U.S. % of World Production	9.04%	7.94%	6.49%	-28.14
Exports	2,913	5,689	4,993	71.40
Imports	44,390	25,058	17,187	-61.28
Lead, recoverable (metric tons)				
U.S. Production	552,971	550,366	321,897	-41.79
World Production	3,344,700	3,469,700	3,190,400	-4.61
U.S. % of World Production	16.53%	15.86%	10.09%	-38.97
Exports (lead content)	5,332	192,073	28,421	n.a.
Imports	207,785	133,386	236,781	13.95
Molybdenum, contained, ore and concentrates (1000 pounds)				
U.S. Production	113,233	150,686	103,664	-8.45
World Production	195,474	243,754	208,665	6.75
U.S. % of World Production	57.93%	61.82%	49.68%	-14.24
Exports	62,474	68,217	63,366	1.43
Imports	2,093	1,825	28	-98.66
Silver (1,000 troy ounces)				
U.S. Production	34,328	32,329	44,440	29.46
World Production	316,384	342,804	398,554	25.97
U.S. % of World Production	10.85%	9.43%	11.15%	2.77
Exports	14,596	80,851	24,448	67.50
Imports	72,700	78,795	114,966	158.14
Zinc, recoverable (metric tons)				
U.S. Production	439,543	317,103	252,768	-42.49
World Production	5,725,000	5,954,000	6,419,000	12.12
U.S. % of World Production	7.68%	5.33%	3.94%	-48.71
Exports, excluding slab	n.a.	54,457	30,579	n.a.
Imports, excluding slab	88,101	182,370	86,172	-2.19

^a1984 World Production data are estimated. Imports are for consumption only. Because of trade agreements and international policies, exports of gold and silver cannot be compared with production data. Silver and gold data exclude coinage. Imports and Exports are for the U.S.

n.a.: not available

Source: U.S. Department of the Interior, Bureau of Mines.

TAX RETURN INFORMATION ON HARD MINERALS
MINING CORPORATIONS (TABLE I.3)

Although aggregate deductions exceeded receipts in 1983, causing net income for the hard minerals mining industry to be negative, not all firms reported losses, according to IRS statistics. Based on IRS statistics, 93 percent of the receipts for the hard minerals mining industry come from business receipts. Gains from sales of assets (capital and noncapital), which will be affected, in part, by the repeal of the capital gains provision, made up 1.4 percent of the industry's receipts. IRS statistics further showed that deductions for costs of sales, operations, and compensation made up approximately 61 percent of the deductions claimed by the industry. Certain tax deduction items affected by the Tax Reform Act--interest paid, depreciation, and depletion--comprised 17.3 percent of the hard minerals mining industry's deductions. Finally, "other deductions," such as bad debts, advertising, travel, and entertainment made up 14.3 percent of the industry's reported deductions.

Note: Similar IRS tax return data are not included in the section of this document on timber because such data were not readily available.

Table I.3: Tax Return Information on Active
Hard Minerals Mining Corporations, Tax Year 1983

(All figures are IRS estimates based on samples;
dollars are in thousands)

	<u>Total Amounts</u>	<u>Percent</u>
<u>RECEIPTS</u>		
Business receipts	\$4,713,764	93.0%
Interest	130,608	2.6%
Gains from sales of assets	72,780	1.4%
Dividends (from domestic & foreign corporations)	44,972	0.9%
Rents & Royalties	20,274	0.4%
Other receipts	87,236	1.7%
<u>Total Receipts</u>	<u>5,069,634</u>	<u>100.0%</u>
<u>DEDUCTIONS</u>		
Costs of sales, operations, and compensation	3,320,117	61.0%
Interest paid	352,789	6.5%
Depreciation	369,833	6.8%
Taxes paid	259,322	4.8%
Depletion	214,898	4.0%
Pension, profit-sharing, and employee benefit programs	81,968	1.5%
Rent paid on business property	57,998	1.1%
Net loss, noncapital assets	3,314	0.1%
Amortization	3,119	0.1%
Other deductions	775,803	14.3%
<u>Total Deductions</u>	<u>5,439,161</u>	<u>100.0%^a</u>
Total receipts less total deductions	(369,527)	
Constructive taxable income from related foreign corporations	<u>18,243</u>	
Net income (deficit)	(351,284)	
Income subject to tax	46,776	
<u>Income tax, total</u>	32,074	
<u>Tax Credits</u>	6,894	
<u>Number of returns, total</u>	1,428	

^aPercentage does not add due to rounding.

Source: Corporation Returns/1983, the Internal Revenue Service, Statistics of Income, table 2 and Source Book: SOI 1983, Corporation Income Tax Returns, accounting periods ended July 1983-June 1984, p.13.

GENERAL TAX PROVISIONS AFFECTING HARD
MINERALS MINING (TABLE I.4)

Both general and specific provisions in the Tax Reform Act of 1986 will affect the hard minerals mining industry. In its general provisions, the act includes the following changes:

- Decreases top marginal income tax rates for both individuals and corporations.
- Repeals capital gains treatment for individuals and corporations.
- Repeals regular investment tax credit.
- Restructures the accelerated cost recovery system (depreciation) so that it is less generous than prior law for real property and some equipment.
- Generally disallows deduction of passive tax shelter losses against income other than passive income. (Passive income is income received from a trade or business in which the taxpayer does not materially participate.)

Table I.4: General Tax Provisions Affecting
Hard Minerals Mining

<u>GENERAL PROVISIONS</u>	<u>LAW PRIOR TO TAX REFORM</u>	<u>HOUSE BILL</u>	<u>SENATE AMENDMENT</u>	<u>TAX REFORM ACT OF 1986</u>
INDIVIDUAL TAX RATE	15 RATES RANGING FROM 11% TO 50%	15%, 25%, 35%, & 38%	15% & 27%	15% & 28%
CORPORATE TAX RATE (on taxable income)	\$25,000 OR LESS - 15% \$25,000 - \$50,000 - 18% \$50,000 - \$75,000 - 30% \$75,000 - \$100,000 - 40% OVER \$100,000 - 46%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 36%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 33%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 34%
CAPITAL GAINS	MAXIMUM EFFECTIVE RATE 20% FOR INDIVIDUALS & 28% FOR CORPORATIONS	MAXIMUM EFFECTIVE RATE OF 22% FOR INDIVIDUALS; CORPORATE PROVISION REPEALED-TAXED AT REGULAR RATES WITH MAXIMUM RATE OF 36%	REPEALS INDIVIDUAL PROVI- SION-TAXED AT REGULAR RATE WITH MAXIMUM RATE OF 27%; CORPORATE PROVI- SION RETAINED WITH MAXIMUM RATE OF 28%	REPEALS PREFERENTIAL CAPITAL GAIN RATES WITH MAXIMUM RATES OF 28% FOR INDIVIDUALS AND 34% FOR CORPORATIONS
INVESTMENT TAX CREDIT	6% TO 10%	REPEALED	REPEALED	REPEALED
DEPRECIATION	ACCELERATED COST RECOVERY SYSTEM WRITE-OFF PERIOD 3-19 YEARS	INCENTIVE DEPRECIATION SYSTEM WRITE-OFF PERIOD 3-30 YEARS	ACCELERATED COST RECOVERY SYSTEM WRITE-OFF PERIOD 3-31.5 YEARS	SIMILAR TO SENATE BUT WITH SOME CHANGES IN ASSET CLASS DEFINITIONS AND DEPRECIATION SCHEDULES
PASSIVE TAX SHELTER LOSSES	INVESTMENT LOSSES IN EXCESS OF INCOME LIMITED FOR SOME ACTIVITIES	NO PROVISION	DEDUCTION GENERALLY DISALLOWED AGAINST INCOME OTHER THAN PASSIVE INCOME (EXCEPTIONS FOR CERTAIN REAL ESTATE AND OIL AND GAS TRANSACTIONS)	SIMILAR TO SENATE WITH SOME SPECIAL EXCEPTIONS FOR REHABILITATION AND LOW INCOME HOUSING

SPECIFIC TAX PROVISIONS AFFECTING HARD
MINERALS MINING (TABLE I.5)

The Tax Reform Act of 1986 provides the following industry-specific changes:

- Repeals capital gains treatment of domestic iron ore royalties for both individuals and corporations.
- Retains, generally, the provision to expense domestic exploration and development costs, but repeals the investment tax credit (ITC) for these costs. Also, places stricter limits on corporate expensing and the recovery of foreign exploration and development costs.
- Allows percentage depletion of hard mineral deposits, but increases the reduction in excess corporate iron ore percentage depletion from 15 percent to 20 percent.
- Requires expensed exploration and development costs and depletion to be recaptured as ordinary income when there is a gain on the disposition of an interest in mining property.
- Allows certain conservation easement donations to qualify for gift and estate tax deductions even if the conservation purpose requirement for income tax deductions is not met.

Table I.5: Specific Tax Provisions Affecting
Hard Minerals Mining

<u>MINING SPECIFIC PROVISIONS</u>	<u>LAW PRIOR TO TAX REFORM</u>	<u>HOUSE BILL</u>	<u>SENATE AMENDMENT</u>	<u>TAX REFORM ACT OF 1986</u>
CAPITAL GAIN TREATMENT FOR COAL AND DOMESTIC IRON ORE ROYALTIES	ROYALTIES QUALIFY IF COAL OR IRON ORE HELD MORE THAN 6 MONTHS BEFORE MINING	PHASE OUT OVER A 3-YEAR PERIOD	REPEAL INDIVIDUAL PROVISION—TAXED AS REGULAR INCOME WITH MAXIMUM RATE OF 27%; CORPORATE PROVISION RETAINED WITH RATE OF 28%	REPEALS PREFERENTIAL CAPITAL GAIN RATES WITH MAXIMUM RATES OF 28% FOR INDIVIDUALS AND 34% FOR CORPORATIONS
HARD MINERAL EXPLORATION AND DEVELOPMENT COSTS	CORPORATIONS CAN EXPENSE 80% OF COST, 20% RECOVERED OVER 5 YEARS THROUGH ACRS INVESTMENT TAX CREDIT FOR DOMESTIC COSTS FOREIGN EXPLORATION COSTS CAPITALIZED	RECAPTURE COSTS THROUGH DEPRECIATION OVER 3- & 5-YEAR PERIODS FOREIGN EXPLORATION AND DEVELOPMENT COSTS TO BE RECOVERED OVER A 10-YEAR STRAIGHT LINE AMORTIZATION OR AS PART OF BASIS FOR COST DEPLETION	GENERALLY RETAIN PRIOR LAW BUT REPEAL INVESTMENT TAX CREDIT FOREIGN EXPLORATION AND DEVELOPMENT COSTS TREATED AS IN THE HOUSE BILL	GENERALLY RETAINS PRIOR LAW BUT REPEALS ITC 30% OF CORP. EXPLORATION AND DEVELOPMENT COSTS TO BE RECOVERED OVER 5-YEAR STRAIGHT LINE PERIOD FOREIGN EXP. AND DEV. COSTS ARE TREATED AS IN THE HOUSE BILL
DEPLETION OF HARD MINERAL DEPOSITS	COSTS RECOVERED USING THE GREATER OF COST DEPLETION OR PERCENTAGE DEPLETION; THE LATTER GENERALLY LIMITED TO 50% OF NET INCOME	DEPLETION RATES REDUCED TO 5% & 0, ALSO THE 50% OF NET INCOME LIMITATION PHASED DOWN TO 25%	RETAIN PRIOR LAW	GENERALLY RETAINS PRIOR LAW, BUT INCREASES THE REDUCTION IN EXCESS CORPORATE COAL AND IRON ORE PERCENTAGE DEPLETION FROM 15% TO 20%
GAIN ON DISPOSITION OF INTEREST IN MINING PROPERTY	ADJUSTED EXPLORATION EXPENDITURES RECAPTURED AS ORDINARY INCOME	EXPENSED EXPLORATION AND DEVELOPMENT EXPENSES AND DEPLETION RECAPTURED AS ORDINARY INCOME	RETAIN PRIOR LAW	SAME AS HOUSE BILL
GIFT & ESTATE TAX DEDUCTIONS FOR CERTAIN CONSERVATION EASEMENT DONATIONS	CONTRIBUTIONS FOR CONSERVATION PURPOSES QUALIFY FOR INCOME, GIFT, & ESTATE TAX DEDUCTIONS SUBJECT TO GIFT OR ESTATE TAX IF CONSERVATION INTENT FOR INCOME TAX DEDUCTION NOT MET	RETAIN PRIOR LAW	STILL QUALIFY FOR ESTATE AND GIFT TAX DEDUCTIONS EVEN IF CONSERVATION INTENT FOR INCOME TAX PURPOSES NOT MET	SAME AS SENATE BILL
MINING AND SOLID WASTE RECLAMATION COSTS ^a	MAY ELECT TO USE A SPECIAL RESERVE METHOD FOR DEDUCTING COSTS PRIOR TO ECONOMIC PERFORMANCE, OTHERWISE, DEDUCT EXPENSES AFTER ECONOMIC PERFORMANCE	RETAIN PRIOR LAW	RETAIN PRIOR LAW	RETAIN PRIOR LAW

^aAlthough this provision was not changed in either the House or Senate bills, it was slated for repeal in the President's proposal and was considered during congressional deliberations.

BACKGROUND INFORMATION ON THE
TIMBER INDUSTRY AND RELATED PROVISIONS OF
THE TAX REFORM ACT OF 1986

COMMERCIAL TIMBERLAND OWNERSHIP (TABLE II.1)

According to the U.S. Forest Service, approximately 33 percent of the land area in the United States is classified as forest land.¹ Nearly 66 percent of forest land is comprised of commercial timberland.² As shown in table II.1, 72 percent of commercial timberland is privately owned. Most of this is owned by farms and other private owners who have a typical holding of 40 acres. The largest single owner, however, is the federal government, which owns about 21 percent of all commercial timberland in the United States.

¹Forest land is land stocked with at least 10 percent of forest trees of any size.

²Commercial timberland is forest land which is producing or can produce crops of industrial wood in excess of 20 cubic feet per acre per year. This excludes timber stands set aside from commercial timber activity such as wilderness areas and parks.

Table II.1: Commercial Timberland Ownership in the
United States as of January 1, 1977^a
 (in 1,000 acres)

<u>Privately owned</u>	<u>Acres</u>	<u>Percent of total</u>
Forest Industry	68,782.2	14.3
Farms and Other		
Privately Owned	277,982.1	57.6
Sub-Total	<u>346,764.3</u>	<u>71.9</u>
<u>Publicly owned</u>		
National Forests	88,718.3	18.4
Other Federal	10,692.1	2.2
Other Public	36,311.2	7.5
Sub-Total	<u>135,721.6</u>	<u>28.1</u>
Total	<u>482,485.9</u>	<u>100.0</u>

^a1977 is the latest year for which these data are available.

Source: U.S. Department of Agriculture, Forest Service.

COMMERCIAL TIMBERLAND ACREAGE (TABLE II.2)

The U.S. Forest Service projects that total available commercial timberland acreage will decline because the two largest owners of commercial timberland, farms and other owners in the private sector and national forests in the public sector, have seen and will continue to see a reduction in commercial acreage. The Forest Service attributes declining commercial timberland owned by farms and other owners to changes in land use and sale of land to forest industry interests. It attributes the decline in national forest acreage, in large part, to switching commercial timberland to preservation and recreational purposes. The Forest Service also predicts that other public timberlands acreage will remain relatively constant due to limited commercial activity but that forest industry acreage will continue to increase due to the purchasing and leasing of land, primarily from farms and other owners. This increase, however, will not completely offset the declines in the other ownership categories.

Table II.2: Actual and Projected U.S. Commercial Timberland
Acreage by ownership from 1952 through 2030
(Million acres)

<u>Year^a</u>	<u>Total</u>	<u>Public</u>		<u>Private</u>	
		<u>National forest</u>	<u>Other public</u>	<u>Forest industry</u>	<u>Farms & others</u>
1952	499.3	94.7	49.0	59.5	296.1
1962	509.4	96.9	46.8	61.6	304.1
1970	496.4	94.7	46.9	67.0	287.8
1977	482.5	88.7	47.0	68.8	278.0
1990	467.6	81.3	46.6	70.9	268.8
2000	461.0	80.4	46.5	72.2	261.9
2010	455.3	79.8	46.4	72.7	256.4
2020	450.1	79.2	46.4	73.0	251.6
2030	446.2	78.8	46.4	73.1	247.9

^aThe years 1952, 1962, 1970, and 1977 represent actual acreage. The years 1990 to 2030 represent projected acreage.

Source: U.S. Department of Agriculture, Forest Service.

LUMBER CONSUMPTION, PRODUCTION, IMPORTS, AND EXPORTS
(TABLE II.3)

Domestic consumption of lumber products is expected to increase through the year 2030, according to U.S. Forest Service estimates. The Forest Service expects the home construction industry will continue to drive the demand for timber products and that alternative and more efficient uses of timber products will help sustain demand. Domestic production will also increase. The increase, however, will not keep up with the level of consumption. To improve domestic production, the Forest Service points out that more attention needs to be devoted to increasing timber growth, upgrading the quality of timber, and utilizing more efficient and effective management and harvesting practices. The Forest Service states that domestic timber producers could partially reduce the prominence of imports by adopting these measures. Imports are projected to peak at 13.9 billion board feet in 1990, and then taper off. Exports are projected to hold constant through the year 2030.

Table II.3: Actual and Projected Lumber Consumption, Production, Imports, and Exports in the United States for 1952-2030
(Billion board feet)

<u>Year^a</u>	<u>Domestic consumption</u>	<u>Domestic production</u>	<u>Imports</u>	<u>Exports</u>
1952	39.2	37.5	2.5	0.7
1962	37.3	33.2	4.9	0.8
1970	39.5	34.7	6.1	1.2
1977	46.9	37.9	10.7	1.7
1979	47.1	37.7	11.5	2.1
1990	57.9	46.2	13.9	2.1
2000	59.9	48.4	13.6	2.1
2010	65.3	53.6	13.8	2.1
2020	66.6	55.3	13.4	2.1
2030	67.3	56.4	13.0	2.1

^a1952 through 1979 data are from the Bureau of the Census. 1990 through 2030 data are based on U.S. Forest Service estimates.

Source: U.S. Department of Agriculture, Forest Service.

GENERAL TAX PROVISIONS AFFECTING TIMBER (TABLE II.4)

Both general and specific provisions in the Tax Reform Act of 1986 will affect the timber industry. Among its general provisions, the act includes the following changes:

- Decreases top marginal income tax rates for both individuals and corporations.
- Repeals capital gains treatment for individuals and corporations.
- Repeals regular investment tax credit.
- Restructures the accelerated cost recovery system (depreciation) so that it is relatively less generous than prior law for real property and some equipment.
- Generally disallows deduction of passive tax shelter losses against income other than passive income.

Table II.4: General Tax Provisions Affecting Timber

<u>GENERAL PROVISIONS</u>	<u>LAW PRIOR TO TAX REFORM</u>	<u>HOUSE BILL</u>	<u>SENATE AMENDMENT</u>	<u>TAX REFORM ACT OF 1986</u>
INDIVIDUAL TAX RATE	15 RATES RANGING FROM 11% TO 50%	15%, 25%, 35%, & 38%	15% & 27%	15% & 28%
CORPORATE TAX RATE (on taxable income)	\$25,000 OR LESS - 15% \$25,000 - \$50,000 - 18% \$50,000 - \$75,000 - 30% \$75,000 - \$100,000 - 40% OVER \$100,000 - 46%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 36%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 33%	\$50,000 OR LESS - 15% \$50,000 - \$75,000 - 25% OVER \$75,000 - 34%
CAPITAL GAINS	MAXIMUM EFFECTIVE RATE 20% FOR INDIVIDUALS & 28% FOR CORPORATIONS	MAXIMUM EFFECTIVE RATE OF 22% FOR INDIVIDUALS; CORPORATE PROVISION REPEALED-TAXED AT REGULAR RATES WITH MAXIMUM RATE OF 36%	REPEALS INDIVIDUAL PROVISION-TAXED AT REGULAR RATE WITH MAXIMUM RATE OF 27%; CORPORATE PROVISION RETAINED WITH MAXIMUM RATE OF 28%	REPEALS PREFERENTIAL CAPITAL GAIN RATES WITH MAXIMUM RATES OF 28% FOR INDIVIDUALS AND 34% FOR CORPORATIONS
INVESTMENT TAX CREDIT	6% TO 10%	REPEALED	REPEALED	REPEALED
DEPRECIATION	ACCELERATED COST RECOVERY SYSTEM WRITE-OFF PERIOD 3-19 YEARS	INCENTIVE DEPRECIATION SYSTEM WRITE-OFF PERIOD 3-30 YEARS	ACCELERATED COST RECOVERY SYSTEM WRITE-OFF PERIOD 3-31.5 YEARS	SIMILAR TO SENATE BUT WITH SOME CHANGES IN ASSET CLASS DEFINITIONS AND DEPRECIATION SCHEDULES
PASSIVE TAX SHELTER LOSSES	INVESTMENT LOSSES IN EXCESS OF INCOME LIMITED FOR SOME ACTIVITIES	NO PROVISION	DEDUCTION GENERALLY DISALLOWED AGAINST INCOME OTHER THAN PASSIVE INCOME (EXCEPTIONS FOR CERTAIN REAL ESTATE AND OIL AND GAS TRANSACTIONS)	SIMILAR TO SENATE WITH SOME SPECIAL EXCEPTIONS FOR REHABILITATION AND LOW INCOME HOUSING

SPECIFIC TAX PROVISIONS AFFECTING TIMBER (TABLE II.5)

The Tax Reform Act of 1986 has the following specific provisions affecting the timber industry:

- Retains the special investment tax credit and 7-year amortization of up to \$10,000 a year in reforestation expenses.
- Retains the deduction for most nonreproductive costs related to growing timber in the year that the costs are paid or incurred. These include costs for management and protection of established timber stands.
- Repeals the capital gains treatment of timber income.
- Allows certain conservation easement donations to qualify for gift and estate tax deductions even if the conservation purpose requirement for income tax deductions is not met.

Table II.5: Specific Tax Provisions Affecting Timber

<u>TIMBER-SPECIFIC PROVISIONS</u>	<u>LAW PRIOR TO TAX REFORM</u>	<u>HOUSE BILL</u>	<u>SENATE AMENDMENT</u>	<u>TAX REFORM ACT OF 1986</u>
REFORESTATION EXPENSES	AMORTIZE OVER 7 YEARS UP TO \$10,000 OF EXPENSES IN EACH TAXABLE YEAR; 10% INVESTMENT TAX CREDIT ALLOWED	AMORTIZE OVER 7 YEARS; REPEAL 10% INVESTMENT TAX CREDIT	RETAIN PRIOR LAW ON AMORTIZATION BUT REPEAL 10% TAX CREDIT	RETAINS PRIOR LAW (RETAINS 10% INVESTMENT TAX CREDIT)
EXPENSES RELATED TO GROWING TIMBER	MOST NONPREPRODUCTIVE COSTS DEDUCTIBLE IN YEAR PAID OR INCURRED	CAPITALIZE COST OF PRODUCING TIMBER INCLUDING INTEREST COST; SMALL PRODUCERS (75,000 ACRES) AMORTIZE OVER 5 YEARS	RETAIN PRIOR LAW	RETAINS PRIOR LAW
CAPITAL GAIN RULES FOR TIMBER	ROYALTY INCOME QUALIFIES IF TIMBER HELD 6 MONTHS BEFORE CUTTING CUT TIMBER CAN BE TREATED AS A SALE OR EXCHANGE IF HELD 6 MONTHS BEFORE CUTTING	REPEAL CAPITAL GAINS FOR TIMBER FROM FEDERAL LANDS & ORNAMENTAL TREES; ALTERNATIVE CORPORATE TAX RATE AFTER 3 YEARS OF 36%	REPEAL INDIVIDUAL PROVISIONS-TAXED AS REGULAR INCOME AT MAXIMUM RATE OF 27%; RETAIN PRIOR LAW WITH 28% RATE FOR CORPORATIONS	REPEALS PREFERENTIAL CAPITAL GAIN RATES INCOME WITH MAXIMUM RATES OF 28% FOR INDIVIDUALS AND 34% FOR CORPORATIONS
GIFT & ESTATE TAX DEDUCTIONS FOR CERTAIN CONSERVATION EASEMENT DONATIONS	CONTRIBUTIONS FOR CONSERVATION PURPOSES QUALIFY FOR INCOME, GIFT, AND ESTATE TAX DEDUCTIONS SUBJECT TO GIFT OR ESTATE TAX IF CONSERVATION INTENT FOR INCOME TAX DEDUCTION NOT MET	NO PROVISION IN HOUSE BILL.	QUALIFY FOR ESTATE AND GIFT TAX DEDUCTIONS EVEN IF CONSERVATION INTENT FOR INCOME TAX PURPOSES NOT MET	SAME AS SENATE AMENDMENT

LACK OF AGREEMENT OVER THE
IMPORTANCE OF TAX LAWS IN THE TIMBER
INDUSTRY

In the literature that we reviewed (see app. IV) we found a lack of agreement on the role that tax law provisions (see tables II.4 and II.5) play in ensuring the current and long-term well-being of timber and the timber industry in America. There seems to be agreement in the literature that timber and the timber industry's well-being depend upon investment, timberland conservation, reforestation, and more efficient and effective timber management practices. There is, however, an absence of agreement, as pointed out by Sunley (1976), on the extent to which tax laws have played a role in bringing about the desired effects. Most of the disagreement, as shown in the following two sections, revolves around the effects of three industry-specific provisions: (1) the special investment tax credit for reforestation expenses, (2) the ability to expense costs related to timber growing in the year incurred rather than writing them off over several years, and (3) the special capital gains treatment of timber income. The Tax Reform Act of 1986 retains the first two provisions but repeals the third provision.

The case that tax laws are important to
the timber industry

The Forest Industries Committee for Timber Valuation and Taxation, an association representing various timberland owners, testified at recent Senate hearings. The Committee noted that timberland ownership is a high risk, long-term investment that provides a low rate of return. It may take up to 30 years for a tree to reach maturity, but during the growing period a tree is subject to drought, disease, insects, and fire. The Committee contends that timber owners are philosophically committed to proper management of their lands, but owners could not justify economically that commitment prior to the enactment of certain tax provisions.

The Committee pointed out, for example, that before a 1944 extension of capital gains treatment to timber owners the tax law emphasized extraction instead of conservation, reforestation, and management practices that would encourage sustained yields. In the Committee's view the pre-1944 situation led to indiscriminate cutting; lost soil and watershed values; abandonment of vast acreages for taxes because timber owners could not afford maintenance of the land; and conversion of timberland to marginal farm production.

According to figures from the Committee's testimony, private forest lands were declining at a rate of 7 billion cubic feet a year before 1944. Since the enactment of capital gains benefits, expensing of the costs of growing timber, and the amortization of reforestation expenses (including a 10-percent investment tax credit), the Committee has cited a 195 billion cubic foot increase in standing timber. It claimed that more trees are grown than harvested in a year.

The case that tax laws are not important to the timber industry

A number of studies have produced results that question the claims of the Forest Industries Committee for Timber Valuation and Taxation. In 1981 we issued a report that found little conclusive evidence to support the generally claimed conservation and reforestation benefits from capital gains tax treatment. An economic analysis by Sunley (1976) found that better forest management practices may be due primarily to the great increase in demand for wood products (table II.3) and the disappearance of old-growth timber, rather than favorable tax law. An estimated \$685 million in taxes was foregone in 1982 due to capital gains tax treatment of timber. However, reforestation costs for that year were estimated to be only about \$150 million, according to a 1982 Congressional Research Service study.

Prior to the 1986 tax reform, the Joint Committee on Taxation estimated that the tax expenditure (i.e., revenue foregone) from the capital gains treatment of timber income would have been \$3.9 billion for the 5-year period from 1987 to 1991 (\$3.0 billion to corporations and \$0.9 billion to individuals). The Committee also estimated the tax expenditure from the investment tax credit and 7-year amortization provisions would have been \$500 million for the 5-year period from 1987 to 1991.

BIBLIOGRAPHY

Anders, Gerhard; Gramm, W. Philip; Maurice, S. Charles; and Smithson, Charles W. The Economics of Mineral Extraction. New York: Praeger Publishers. 1980.

Boyd, Roy, and Daniels, Barbara J. "Capital Gains Treatment of Timber Income: Incidence and Welfare Implications." Land Economics. 61 (November 1985): 354-362.

Gorte, Ross W., and Taylor, Jack H. "Impact of the President's Tax Reform Proposal on Timberland Owners and the Forest Products Industry." Congressional Research Service, 85-905 ENR. August 16, 1985. (Mimeographed.)

Joint Committee on Taxation. Comparison of Tax Reform Provisions of H.R. 3838 as Passed by the House and the Senate. July 15, 1986. JCS-15-86.

Joint Committee on Taxation. Estimates of Federal Tax Expenditures for Fiscal Years 1987-1991. March 1, 1986. JCS-7-86.

Lazzari, Salvatore. "The Effects of the Administration's Tax Reform Proposal on the Mining Industry." Congressional Research Service, 85-872 E. July 29, 1985. (Mimeographed.)

Mead, Walter J. "Resource Control as a Basis for Market Power: The Case of Timber." Extractive Resources and Taxation. Edited by Mason Gaffney. Madison, Wisconsin: The University of Wisconsin Press. 1967.

Slade, Margaret E. "Tax Policy and the Supply of Exhaustible Resources: Theory and Practice." Land Economics. 60 (May 1984): 133-147.

Sunley, Emil M. Jr. "Capital Gains Treatment of Timber: Present Law and Proposed Changes." Journal of Forestry. (February 1976): 75-78.

U.S. Department of Agriculture. An Analysis of the Timber Situation in the United States 1952-2030. Forest Service. Forest Resource Report No. 23. December 1982.

U.S. General Accounting Office. New Means of Analysis Required for Policy Decisions Affecting Private Forestry Sector. January 21, 1981. EMD-81-18.

BIBLIOGRAPHY (cont.)

U.S. General Accounting Office. Assessing the Impact of Federal and State Taxes on the Domestic Minerals Industry. June 8, 1981. EMD-81-13.

U.S. Department of the Interior. Minerals Yearbook 1984. Bureau of Mines. Volume 1. Metals and Minerals.

U.S. Department of the Interior. Minerals Yearbook 1980. Bureau of Mines. Volume 1. Metals and Minerals.

U.S. Department of the Interior. Minerals Yearbook 1977. Bureau of Mines. Volume 1. Metals and Minerals.

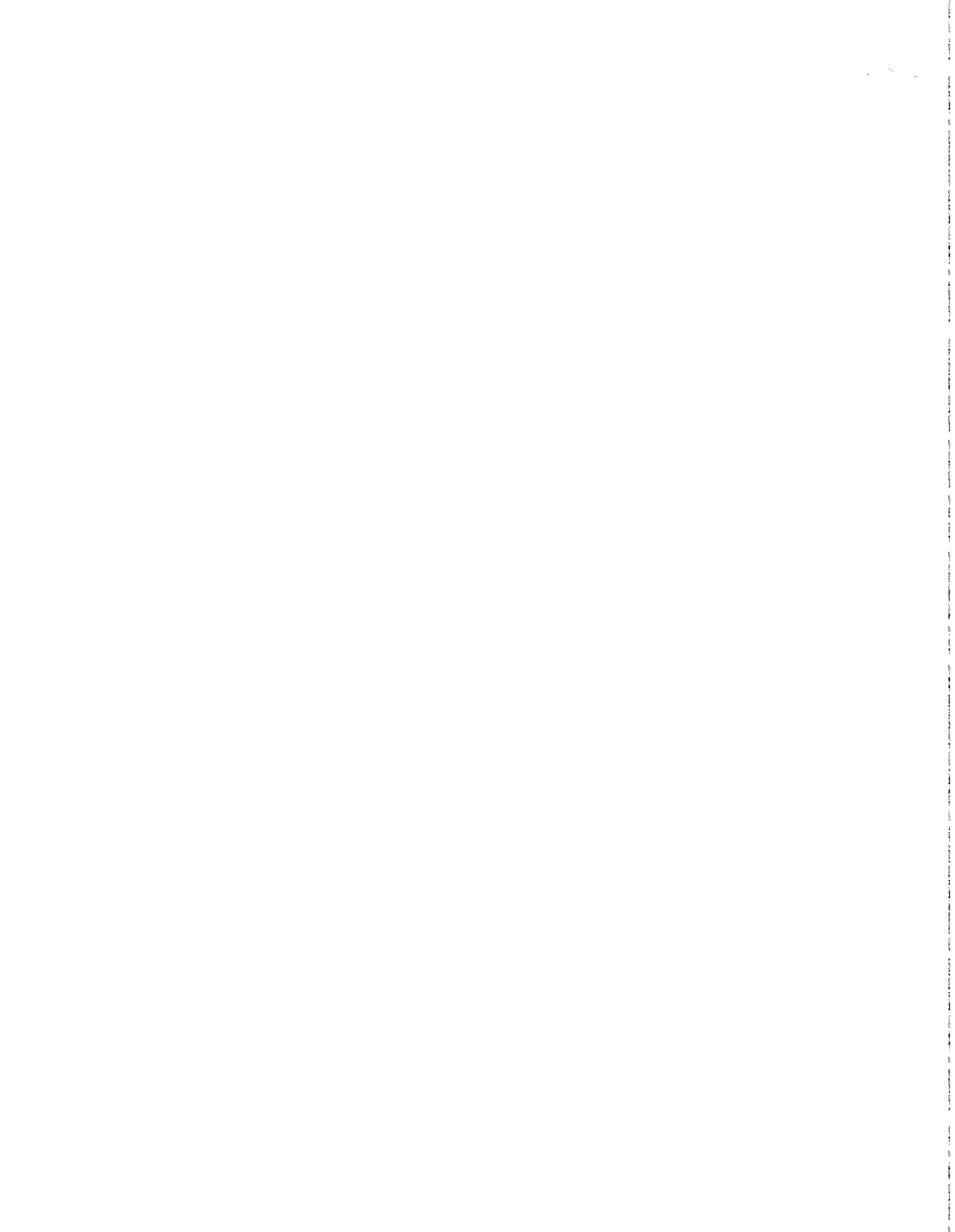
U.S. Department of the Treasury. Federal Tax Policy and Recycling of Solid Waste Materials. Office of Tax Analysis. February 1979.

U.S. Senate. Tax Reform Act of 1986. Report of the Committee on Finance, United States Senate, to Accompany H.R. 3838 together with Additional Views. Report 99-313. May 29, 1986.

U.S. Senate. Tax Reform Proposals-XII: Agriculture, Timber and Small Business. Hearing Before the Committee on Finance, United States Senate. July 10, 1985.

Wolf, Robert E. "Timber Taxation." Congressional Research Service. May 10, 1982. (Mimeographed memorandum.)

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