Joint Committee on Taxation
February 13, 1981
JCX-4-81

Overview of Depreciation Reform

Present law

A. Background--Capitalization vs. expensing

B. Depreciation

1. Personal property

a. Method of depreciation (DDB, 150DB, SYD, SL)
b. Useful life (ADR or facts and circumstances)
c. Salvage value
d. Recapture of all depreciation as ordinary income
e. Deductions start when placed in service
f. Bonus depreciation for small business
g. Computation of earnings and profits

2. Real property

a. Method of depreciation (residential, commercial and industrial used buildings)
b. Useful life--facts and circumstances component method
c. Recapture of accelerated portion of depreciation as ordinary income
d. Special rules for low-income housing

C. Investment credit

1. Personal property
a. Reduction for short-lived equipment (and recapture)
b. Limit to $25,000 plus 90% of remaining tax liability
c. Carrybacks and carryovers
d. Progress payment rule
e. Availability of credit for $100,000 of used property

2. Real property--credit for rehabilitations

. Proposals for change

A. Jones-Conable bill (10-5-3)

1. Personal property

a. 5-3 tax lives (vintage accounts)
b. Accelerated method
c. 10% ITC for 5-year class, 6% for 3-year class
d. Retains recapture as under present law
e. "Banked" depreciation
f. Elimination of salvage value
g. Half-year convention (built into rate)
h. Elimination of first year bonus depreciation
i. Available to normalizing utilities

2. Real property

a. 10 year life (except residential); vintage accounts
b. Accelerated method
c. Full recapture for 10 year class

3. Special rules

   a. Depreciation on progress payments
   b. Computation of earnings and profits
   c. Phase-in

B. Senate Finance Committee bill (2-4-7-10)

1. Personal property

   a. Amalgamation of ADR classes into 4 classes--6-1/2 years and under goes to 2, 7 to 11-1/2 yrs goes to 4, 12 to 16-1/2 yrs goes to 7, over 16-1/2 yrs goes to 10
   b. Open-ended accounts
   c. Reduced investment credit in 2- and 4-year classes
   d. Elimination of salvage value
   e. Half-year convention
   f. Elimination of first year bonus depreciation

2. Real property

   a. General rule--optional 20 year SL composite
   b. Special rules--low-income housing, owner-occupied structures

3. Special rules

   a. Small business--$25,000 expensing for personal property
   b. Depreciation on progress payments
   c. Utilities--ADR with 30% variance
   d. 25% investment credit for rehabilitations of structures
   e. Computation of earnings and profits

C. Constant rate depreciation

1. 10% ITC for all personal property (offset by less depreciation)
2. Open-ended accounts for assets grouped into classes
3. Full administrative discretion

. Simplification issues

A. Personal property

1. Open-ended accounts
2. Number of asset classes
3. Advantage of uniform ITC with no recapture
4. Advantage of restricting taxpayer options
5. Limited expensing

B. Real property

1. Administrative problems with "facts and circumstances" rule
2. Composite vs. component depreciation
3. Distinctions between different kinds of structures

Illustration of Depreciation Methods

Example: Corporation X buys a machine for $4,000. The machine has an estimated useful life of 8 years. After 8 years, the estimated resale or salvage value of the machine is $400. The depreciation allowance under straight line, declining balance, and sum of the years-digits methods is determined as follows:

Straight Line (S/L)

Year	Depreciable Cost 1/	Rate (%) 2/		Allowance 3/
1	$3,600	12.5 (100% ÷ 8)		$ 450
2	3,600	12.5 (100% ÷ 8)		450
3	3,600	12.5 (100% ÷ 8)		450
4	3,600	12.5 (100% ÷ 8)		450
5	3,600	12.5 (100% ÷ 8)		450
6	3,600	12.5 (100% ÷ 8)		450
7	3,600	12.5 (100% ÷ 8)		450
8	3,600	12.5 (100% ÷ 8)		450
			Total	$3,600

1/ Depreciable cost is cost reduced by estimated salvage value.

2/ Rate is 100% divided by number of years of original useful life (8 years).

3/ Depreciation allowed for personal property is recaptured upon disposition to the extent of gain.

200 Percent Declining Balance

Year	Depreciable Cost 1/		Rate 2/ (%)	Allowance 3/	Excess 4/ (deficit) Allowance Over S/L
1	$4,000.00	25	(200% ÷ 8)	$1,000.00	$550.00
2	3,000.00	25	(200% ÷ 8)	750.00	300.00
3	2,250.00	25	(200% ÷ 8)	562.50	112.50
4	1,687.50	25	(200% ÷ 8)	421.88	(28.12)
5	1,265.62	25	(200% ÷ 8)	316.41	(133.59)
6	949.21	25	(200% ÷ 8)	237.30	(212.70)
7	711.91	25	(200% ÷8)	177.98	(272.02)
8	533.93	25	(200% ÷8)	133.48	(316.52)
			Total	$3,599.55	($0.45) 5/

1/ Under declining balance methods, depreciable cost is cost unreduced by salvage value, but property cannot be depreciated below estimated salvage value.

2/ Rate is 200% of the S/L rate.

3/ Depreciation allowed for personal property is recaptured upon disposition to extent of gain.

4/ For real property, accelerated portion of depreciation allowed is recaptured upon disposition to the extent of gain.

5/ The remaining $.45 would have been recovered in year 8 if the taxpayer had switched to straight line in year 8.

150% Declining Balance

ear	Depreciable Cost 1/	Rate (%) 2/	3/ Allowance	Excess 4 (Deficit Allowance over S/L
1	$4,000.00	18.75 (150% ÷ 8)	$ 750.00	300.00
2	3,250.00	18.75 (150% ÷ 8)	609.38	159.38
3	2,640.62	18.75 (150% ÷ 8)	495.12	45.12
4	2,145.50	18.75 (150% ÷ 8)	402.28	(47.72)
5	1,743.22	18.75 (150% ÷ 8)	326.85	(123.15)
6	1,416.37	18.75 (150% ÷ 8)	265.57	(184.43)
7	1,150.80	18.75 (150% ÷ 8)	215.78	(234.22)
8	935.02	18.75 (150% ÷ 8)	175.32	(274.68)
			$3,240.30	($359.70)

/ Depreciable cost is cost unreduced by estimated salvage value, ut the property cannot be depreciated below estimated salvage alue.

/ Rate is 150% of the straight line rate.

/ Depreciation allowed for personal property is recaptured upon disosition to extent of gain.

/ For real property, accelerated portion of depreciation allowed s recaptured upon disposition to the extent of gain.

/ In this example, more than 8 years is required to recover cost less alvage. To recover that amount in 8 years the taxpayer may change to he straight line method. The straight line rate will be based on emaining useful life. This rate will be applied to the remaining ndepreciated cost less salvage. In this example, if the taxpayer hanged to straight line beginning in year 5, a depreciation rate of 5% (based on remaining useful life of 4 years) would apply to 1,343.22 (the unrecovered cost less $400 salvage) thus, $335.81 would be llowed in each of the last 4 years, resulting in recovery of entire 3,600 over the 8 year period.

Summary Comparison of First 8 Years

Year	S/L	Allowance 150% DB	200% DB	SYD
1	$450	$750.00	$1,000.00	$800
2	450	609.38	750.00	700
3	450	495.12	562.50	600
4	450	402.28	421.88	500
5	450	326.85	316.41	400
6	450	265.57	237.30	300
7	450	215.78	177.98	200
8	450	175.32	133.48	100
	$3,600	$3,240.30	$3,599.55	$3,600

Table 1.-ADR Useful Lives of Various Assets

cription of assets in guideline class	Asset depreciation range (in years) Lower limit	Asset guide-line period	Upper limit
tain short-lived assets:			
Manufacture of fabricated metal products—special tools	2.5	3	3.5
Manufacture of motor vehicles—special tools	2.5	3	3.5
Breeding hogs	2.5	3	3.5
Manufacture of electrical equipment—special tools	4.0	5	6.0
tain intermediate-lived assets:			
Data handling equipment except computers	5.0	6	7.0
Assets used in drilling of oil and land gas wells	5.0	6	7.0
Manufacture of electronic products	6.5	8	9.5
tain long-lived assets:			
Railroad cars and locomotives, except those owned by railroad transportation companies	12.0	15	18.0
Vessels, barges, tugs, and similar water transportation equipment, except those used in marine contract construction	14.5	18	21.5
Industrial steam and electric generation and/or distribution systems	17.5	22	26.5
Telephone central office equipment	16.0	20	24.0

rce: Revenue Procedure 77-10, 1977-1 C.B. 548, as modified by Rev. Proc. 6, 1979-18 I.R.B. 21.

Table 2.--Guidelines Lives for Certain Buildings Under Revenue Procedure 62-21

Type of Building	Useful life (years)
Apartments	40
Banks	50
Dwellings	45
Factories	45
Garages	45
Grain Elevators	60
Hotels	40
Loft Buildings	50
Machine Shops	45
Office Buildings	45
Stores	50
Theaters	40
Warehouses	60

Table 3.--Comparison of 1962 Guidelines and Lives Claimed for Certain Building Types

[In years]

Building type	Guideline lives under revenue procedure 62-21	Average lives claimed by taxpayers (new buildings only)	Percentage of taxpayers claiming lives shorter than guideline lives
Retail (including shopping centers)	50	36	93
Warehouses	60	37	99
Factories	45	37	77
Office buildings	45	41	91
Banks	50	43	79
Apartments	40	32	78

Source: Office of Industrial Economics, Department of the Treasury, Business Building Statistics (GPO, Washington, 1975).

Table 4.--Capital Cost Recovery Table

If the recovery year is--	The applicable percentage for the class of property is: Class 1	Class 2	Class 3
1	10	20	33
2	18	32	45
3	16	24	22
4	14	16	
5	12	8	
6	10		
7	8		
8	6		
9	4		
10	2		

Depreciation Methods and The Investment Tax Credit 1/

Table 5.

	Calendar Years (billions of dollars)					
	1981	1982	1983	1984	1985	1986
"10-5-3"						
Equipment	5.6	14.1	24.6	36.2	50.0	60.8
Structures	.8	2.6	4.9	8.0	11.7	16.5
Total	6.4	16.7	29.5	44.2	61.7	77.3
"10-5-3" No phase-in						
Equipment	11.3	27.8	40.7	48.6	53.1	53.3
Structures	1.9	5.5	8.7	12.2	15.7	19.3
Total	13.2	33.3	49.4	60.8	68.8	72.6
Senate Finance Committee						
Equipment	9.2	16.7	15.9	14.9	14.2	13.5
Structures	.9	1.8	2.5	3.4	4.4	5.4
Total	10.1	18.5	18.4	18.3	18.6	18.9

1/ All estimates have been made without allowing for the new Commerce Dept. benchmarks. The new benchmarks may increase the revenue loss of each of the above proposals, and may not have the same relative effect on each proposal.

Joint Committee on Taxation
February 13, 1981