## I. 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
I. 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
3. Real property--credit for rehabilitations
II. Proposals for change
A. Jones-Conable bill (10-5-3)
I. 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
4. Real property
a. 10 year life (except residential); vintage accounts
b. Accelerated method
c. Full recapture for 10 year class
5. 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)
6. Personal proderty
a. Amalgamation of $A D R$ 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
7. Real property
a. General rule--optional 20 year SL composite
b. Special rules--low-income housing, owner-occupied structures
8. Special rules
a. Small business-- $\$ 25,000$ expensing for personal property
b. Depreciation on progress payments
c. Utilities--ADR with 30 多 variance
d. 25\% investment credit for rehabilitations of structures e. Computation of earnings and profits
C. Constant rate depreciation
9. 10\% ITC for all personal property (offset by less depreciation)
10. Open-ended accounts for assets grouped into classes
11. Full administrative discretion
III. Simplification issues
A. Personal property
12. Open-ended accounts
13. Number of asset classes
14. Advantage of uniform ITC with no recapture
15. Advantage of restricting taxpayer options
16. Limited expensing
B. Real property
17. Administrative problems with "facts and circumstances" rule
18. Composite vs. component depreciation
19. 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 5400. The depreciation allowance under straight line, declining balance, and sum of the years-digits methods is determined as follows:

## Straight Line (S/L)



1/ Depreciable cost is cost reduced by estimated salvage value.
2/ Rate is $100 \%$ divided by number of vears of original useful Iife (8 years).
3/ Depreciation allowed For personal property is recaptured upon disposition to the extent of gain.

| Year | $\begin{gathered} \text { Depreciable } \\ \text { Cost } \end{gathered}$ |  | $\text { Rate }{ }^{\frac{2}{(8)}}$ | Allowance ${ }^{\text {3/ }}$ | Excess $4 /$ <br> (deficit) <br> Allowance <br> Over S/L |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | \$4,000.00 | 25 | (200\% $\div 8)$ | \$1,000.00 | \$550.00 |
| 2 | $3,000.00$ | 25 | (200\% $\div 8)$ | 750.00 | 300.00 |
| 3 | 2,250.00 | 25 | $(200 \%) 8$ ) | 562.50 | 112.50 |
| 4 | 1,687.50 | 25 | (200\% $\div 8)$ | 421.88 | (28.12) |
| 5 | 2,265.62 | 25 | (200\% $\div 8)$ | 316.41 | (133.59) |
| 6 | 949.21 | 25 | (200\% $\div 8)$ | 237.30 | (212.70) |
| 7 | 711.91 | 25 | (200\% $\div 8)$ | 177.98 | (272.02) |
| 8 | 533.93 | 25 | $(2,0 \% \div 8)$ | 133.48 | (316.52) |
|  |  |  | Total | \$3,599.55 | (\$0.45) 5/ |

[^0]3/ Depreciation allowed for personal property is recapiured upon disposition to extant ō̄ gain.

4/ For real proderty, acceleratec portion oi depreciation allowed is recapturec upon disposition to the extent of gain.

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

## 150\% Declining Balance

| $\underline{Y e} \underline{\underline{r}}$ | $\begin{aligned} & \text { Depreciable } \\ & \text { Cost } \end{aligned}$ | $\underline{\text { Rate }}\left(\frac{2 /}{2 /}^{\text {2/ }}\right.$ |  |  | Allowance | Excess $\leq /$ <br> (Deficit) <br> Allowance <br> over S/L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | \$4,000.00 | 18.75 | (150\% | $\div 8)$ | \$ 750.00 | 300.00 |
| 2 | 3,250.00 | 18.75 | (150\% | $\div 8)$ | 609.38 | 159.38 |
| 3 | 2,640.62 | 18.75 | (150\% | $\div 8)$ | 495.12 | 45.12. |
| 4 | 2,145.50 | 18.75 | (150\% | $\div 8)$ | 402.28 | (47.72) |
| 5 | 1.743 .22 | 18.75 | (150\% | $\div 8)$ | 326.85 | (123.15) |
| 6 | 1,416.37 | 18.75 | (150\% | $\div 8)$ | 265.57 | (184.43) |
| 7 | $1,150.80$ | 18.75 | (150\% | $\div 8)$ | 215.78 | (234.22) |
| 8 | 935.02 | 18.75 | (150\% | $\div 8)$ | 175.32 | (274.68) |
|  |  |  |  |  |  | $(5359.70) 5$ |

[^1]3/ Depreaiation allowed for personal property is recapturec 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/ In this example, more than 8 years is recuired to recover cost less salvage. To recover that amount in 8 years the taxpayer may change to the straight line method. The straight line rate will be based on remaining useful life. This rate will be apolied to the remaining uncepreciated cost less salvage. In this example, if the texpayer changed to straight line beginning in year 5 , a depreciation raia oí 25 名 (based on remaining use三̄ul life of a years) woula apply to ST, 343.22 (the unrecovered cost less $\$ 400$ saivace) thus, $\$ 335.81$ would be allowed in each of the last 4 years, resulting in recovery of entire $\$ 3,600$ over the 8 year period.

Sum of the Years Digits (SYD)

| Year | DepreciableCost $1 /$ | $\operatorname{Rate}^{\frac{2 /}{(\%)}}$ | Allowance | Excess (Reficit) Allowance Over. S/L |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 1 | \$3,600 | 22.22 ( $8 \div 36$ ) | \$800 | \$350 |
| 2 | 3,600 | 19.44 (7 $\div 36)$ | 700 | 250 |
| 3 | 3,600 | 16.67 (6 $\div 36)$ | 600 | 150 |
| 4 | 3,600 | 13.89 (5 $\div 36$ ) | 500 | 50 |
| 5 | 3,600 | 11.11 ( $4 \div 36$ ) | 400 | (50) |
| 6 | 3,600 | $8.33(3 \div 36)$ | 300 | (150) |
| 7 | 3,600 | $5.56(2 \div 36)$ | 200 | (250) |
| 8 | 3,600 | $2.78(1 \div 36)$ | 100 | (350) |
|  |  | Total | \$3,600 | -0- |

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

2/ Rate is a fraction, the numerator of which is remaining years Of useiul life, and the denominator of which is the sum of the digits for the years of original useful life ( $1+2+3+4$, etc.).

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

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

## Summery Comparison of First 8 Years

|  |  | Allowan |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | S/L | 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 |
|  | , 600 | \$3,240.30 | \$3,599.55 | \$3,600 |

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Table 1.-ADR Useful Lives of Various Assets
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| Description of assets in guideline class | Asset depreciation range (in years) |  |  |
| :---: | :---: | :---: | :---: |
|  | Lower <br> limit | Asset guideline period | Upper <br> limit |
| ```Certain short-lived assets: Manufacture of fabricated metal products-special tools__-_-_-_-_-_-_--- 2. - 3.5``` |  |  |  |
|  |  |  |  |
| Manufacture of motor vehiclesspecial tools $\qquad$ Breeding hogs | 2.5 | 3 | 3.5 |
| Breeding hogs <br> Manufacture of ēectricà equip= ment-special tools $\qquad$ | 2.5 4.0 | 3 5 | 3.5 6.0 |
| Certain intermediate-lived assets: |  |  |  |
| Data handiing equipment except computers $\qquad$ | 5.0 | 6 | 7.0 |
| Assets used in drīin̄g of oil and land gas wells | 5.0 | 6 | 7.0 |
| Manufacture ós electronic products | 6.5 | 8 | 9.5 |
| Certain 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 $\qquad$ | 17.5 | 22 | 26.5 |
| Telephone central office equipment | 16.0 | 20 | 24.0 |

Source: Revenue Procedure 77-10, 1977-1 C.B. 548, as modified by Rev. Proc. 79-26, 1979-18 I.R.B. 21.

# Table 2.--Guidelines Lives for Certain Buildings Under 

 Revenue Procedure 62-21Useful life
(years)
Type of Building
Apartments ..... 40
Banks ..... 50
Dwellings ..... 45
 ..... 45
Garages ..... 45
Grain Elevators ..... 60
Hotels ..... 40
Loft Buildings ..... 50
Machine Shops ..... 45
Office Buildings ..... 45
Stores ..... 50
 ..... 40
Warehouses ..... 60

Table 3.--Comparison of 1962 Guidelines and Lives Claimed for Certain Building Types
[In years]

|  | Guideline <br> lives under <br> revenue pro- <br> cedure $62-21$ | Average lives <br> claimed by <br> taxpayers <br> (new build- <br> ings only) |
| :--- | :--- | :--- | | Percentage of |
| :---: |
| taxpayers |
| claiming lives |
| shorter than |
| guideline lives |

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

Table 4.--Capital Cost Recovery Table



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.

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Joint Committee on Taxation
February 13, 1981
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[^0]:    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.

[^1]:    1/ Depreciable cost is cost unreciuced by estimatec salvage value, but the property cannot be cepreciated below estinated salvage value.

    2/ Rate is $150 \%$ of the straisht line rate.

