

[JOINT COMMITTEE PRINT]

**TAX REFORM PROPOSALS:
TAXATION OF CAPITAL INCOME**

FOR THE USE
OF THE
COMMITTEE ON WAYS AND MEANS
AND THE
COMMITTEE ON FINANCE

PREPARED BY THE STAFF
OF THE
JOINT COMMITTEE ON TAXATION



AUGUST 8, 1985

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1985

50-798 O

JCS-35-85

CONTENTS

	Page
INTRODUCTION	1
I. ECONOMIC ISSUES IN THE TAXATION OF INCOME FROM CAPITAL	2
A. Measurement and Taxation of Income from Capital	2
B. Taxation of Income Versus Consumption	8
C. The Administration's Proposals for Capital Income Taxation	14
II. CAPITAL GAINS AND LOSSES	24
III. BASIC CAPITAL COST RECOVERY PROVISIONS	45
A. Overview	45
B. Depreciation	47
C. Recapture of Excess Accelerated Depreciation Deductions	77
D. Regular Investment Tax Credit	82
E. Measurement of Investment Incentives	85
IV. TAXATION OF ENERGY AND NATURAL RESOURCES	97
A. Overview	97
B. Tax Provisions Relating to Oil and Gas Production	99
1. Intangible drilling and development costs	99
2. Depletion	105
3. Tertiary injectants	110
4. Crude oil windfall profit tax	111
C. Tax Provisions Relating to Mineral Deposits and Timber	113
1. Expensing of hard mineral exploration	113
2. Depletion of hard mineral deposits	114
3. Royalty income from coal and domestic iron ore	118
4. Capital gains rules applicable to timber	119
D. Energy-Related Tax Credits and Other Incentives	120
1. Residential energy tax credits	120
2. Business energy tax credits	123
3. Alternative fuels production tax credit	126

	Page
4. Alcohol fuels tax credit and related provisions	127
V. OTHER CAPITAL-RELATED PROVISIONS.....	130
A. Expensing of Research and Experimentation Expenditures and Tax Credit for Increasing Research Expenditures	130
B. Tax Credit for Rehabilitation Expenditures	140
C. Rapid Amortization Provisions.....	142
1. Special expensing, rapid amortization, and investment credit provisions affecting agriculture and forestry.....	142
2. Other amortization provisions	143
3. Certain "deadwood" provisions.....	146
D. Merchant Marine Capital Construction Fund.....	147
E. Tax Credit for Orphan Drug Clinical Testing	149

INTRODUCTION

This pamphlet¹ is prepared by the staff of the Joint Committee on Taxation for the House Committee on Ways and Means and Senate Committee on Finance in connection with the respective committee review of comprehensive tax reform proposals. This pamphlet is one of a series of tax reform proposal pamphlets, and it describes and analyzes tax provisions and proposals relating to the taxation of capital income, including capital gains and losses, basic capital cost recovery provisions, energy and natural resources, and treatment of certain other capital-related costs.

The pamphlet describes present law tax provisions and the various tax reform proposals made by President Reagan ("The President's Proposals to the Congress for Fairness, Growth, and Simplicity," May 1985, referred to as the "Administration Proposal"), the 1984 Treasury Department Report to the President ("Tax Reform for Fairness, Simplicity, and Economic Growth," November 1984, referred to as the "1984 Treasury Report"), Congressional proposals (identified by the primary sponsors), and other related proposals.

The first part of the pamphlet is a discussion of economic issues in the taxation of income from capital. The second part discusses the tax treatment of capital gains and losses. The third part discusses the tax treatment of basic capital cost recovery provisions (depreciation and the regular investment tax credit), including the measurement of investment incentives. The fourth part discusses the taxation of energy and natural resources. The fifth part discusses the tax treatment of certain other capital-related costs, including research and experimental expenditures, rehabilitation expenditures, rapid amortization provisions, the Merchant Marine Capital Construction Fund, and the tax credit for orphan drug clinical testing.

¹ This pamphlet may be cited as follows: Joint Committee on Taxation, *Tax Reform Proposals: Taxation of Capital Incomes* (JCS-35-85), August 8, 1985.

I. ECONOMIC ISSUES IN THE TAXATION OF INCOME FROM CAPITAL

A. Measurement and Taxation of Income from Capital

Overview

Taxable income from capital assets as measured under present law departs from the concept of "economic" income in a number of respects. Under present law, taxable income can be greater than economic income; often it is less. Thus, assets generating identical amounts of economic income may be liable for widely varying amounts of tax.

A recent study² indicates the disparate tax treatment of corporate income across industries. This study used the 1983 annual reports of 218 large corporations to compute U.S. effective tax rates (the ratio of U.S. income tax expense to pre-tax U.S. income). Table 1 shows that these corporations reported \$90 billion of U.S. income before tax, \$15 billion of current U.S. tax expense, and an average effective tax rate of 16.7 percent. However, at the industry level, effective tax rates ranged from 35.6 percent in the soaps and cosmetics industry to negative 1.0 percent in the chemical industry. Although this study did not measure the taxation of corporate income at the individual shareholder level, it indicates that corporate-level tax liability on a dollar of book income varies significantly across industries.

The lack of uniformity in the taxation of capital shifts the allocation of investment: more capital tends to flow into lightly taxed industries and less is invested in high tax industries. This shift of capital among industries interferes with the ability of the economy to produce the goods and services for which consumers express a preference in the marketplace. The cost to the economy due to the differential taxation of capital within the corporate sector has been estimated to be 3.2 percent of the \$2.05 trillion net corporate capital stock in 1981, representing an estimated loss in national income of over \$5 billion in that year.³ Additional gains would result from eliminating misallocations within the noncorporate sector and between the corporate and noncorporate sectors. These estimates indicate that if income from capital is to be taxed, the loss in output would likely be reduced by taxing all capital income at a more nearly uniform rate.

² *Study of 1983 Effective Tax Rates of Selected Large U.S. Corporations* (JCS-40-84), November 28, 1984, prepared by the staff of the Joint Committee on Taxation at the request of Congressmen Pease and Dorgan. Further discussion of methodology and results appear in that pamphlet.

³ Alan J. Auerbach, "Corporate Taxation in the United States," *Brookings Papers on Economic Activity*, Vol. 2, 1983.

Table 1.—Effective Corporate Tax Rates by Industry, 1983

[Dollar amounts in millions]

Industry	U.S. income before tax	Current U.S. tax expense	Effective U.S. tax rate (percent)
Aerospace.....	\$3,287	\$459	14.0
Beverages.....	1,688	316	18.7
Broadcasting	1,081	200	18.5
Chemicals	1,164	-11	-1.0
Computers and office equipment.....	6,842	1,797	26.3
Construction.....	59	(¹)	0.7
Electronics and appliances	3,953	291	7.4
Financial institutions	2,863	182	6.4
Food processors.....	3,810	987	25.9
Glass and concrete	605	106	17.5
Instruments.....	2,256	740	32.8
Insurance	1,756	174	9.9
Investment companies.....	980	91	9.3
Metal manufacturing	-1,341	25	(²)
Metal products.....	286	43	15.1
Mining.....	-486	-19	(²)
Motor vehicles.....	5,759	202	3.5
Paper and wood products.....	759	-4	-0.5
Petroleum.....	19,256	4,094	21.3
Pharmaceuticals.....	2,302	626	27.2
Retailing	5,067	1,015	20.0
Soaps and cosmetics.....	2,027	721	35.6
Telecommunications.....	11,072	531	4.8
Tobacco.....	3,083	1,042	33.8
Transportation:			
Airlines.....	-212	-59	(²)
Railroads	2,165	72	3.3
Trucking.....	1,284	443	34.5
Utilities (electric and gas).....	7,158	505	7.1
Wholesalers.....	948	329	34.8
All companies.....	90,031	15,022	16.7

¹ Under \$500,000.² Rate not computed.Source: Joint Committee on Taxation, *Study of Effective Tax Rates of Selected Large U.S. Corporations* (JCS-40-84), November 28, 1984.

From the perspective of economic efficiency, the concept of economic income serves as a useful frame of reference for analyzing an income tax system. However, efficiency objectives often conflict with tax simplification and with other objectives of government policy. As discussed below, some argue that consumption rather than income should be used to measure the tax base.

Definition of Economic Income

A taxpayer's economic income during a period may be defined as the sum of realized income (such as rents, royalties, interest and dividends) and any unrealized change in the value of assets between the beginning and end of the period. To illustrate, suppose that a computer is purchased for \$100,000 at the beginning of the year, rented out for \$24,000 for the year, has a resale value of \$80,000 at the end of the year, and there is no inflation. Realized annual income is the rent of \$24,000. Unrealized income is negative \$20,000, the reduction in the computer's market value from \$100,000 to \$80,000. Annual capital income is \$4,000, the sum of realized income less unrealized loss.

Capital Gains

Certain types of assets do not predictably rise or fall in value with age. Land, inventory, and corporate stock are common examples. Accrual taxation of gain or loss on such assets would require annual determinations of market value, which in many cases would be a complex and uncertain undertaking. While assets such as gold and publicly traded securities have determinable values, other assets such as paintings and antiques may have no readily ascertainable value until sold. For this and other reasons, accrued capital gains generally are not taxed until realized under present law.⁴

Taxation of capital gains on a realization rather than an accrual basis allows the tax on such gain to be deferred until the time of realization. For example, suppose undeveloped land is purchased for \$100,000 and at the end of one year has a resale value of \$104,000. If the property is held for 10 years prior to disposition, then under current law the \$4,000 gain accrued in the first year generally would not be taxed for 10 years. Present law contains complex rules intended to limit the benefit of deferral to eligible assets and provide that certain transactions (e.g., reorganizations, liquidations, like-kind exchanges, involuntary conversions, bequests, etc.) do not trigger tax on accumulated gain.

Inflation affects the real economic value of realized capital gains. In the absence of inflation, a taxpayer who purchases land at \$100,000 and sells it for \$104,000 at year-end realizes a real capital gain of \$4,000. However, if the general price level increases by 4 percent over the year, then the taxpayer has experienced no increase in real wealth: the purchasing power sacrificed in order to buy the land is exactly equal to the purchasing power represented by the sale of the land. If the burden of the tax system is intended to fall on inflation-adjusted dollars, then changes in the value of assets attributable to general inflation would not be subject to tax. Some view present-law provisions which defer tax on capital gains

⁴ Gain on certain regulated futures contracts, foreign currency contracts, nonequity options, and dealer equity options held by a taxpayer at year-end is taxed on an accrual basis, i.e., is marked-to-market. Unrealized gain or loss is computed by treating the contract as if it were sold for its fair market value on the last business day of the year. In addition, under the original issue discount rules, certain debt obligations are taxed on an accrual basis to the extent that accrued interest is not paid currently.

and then impose tax at reduced effective rates as offsets to the lack of indexing.

Depreciation

As with capital assets, present law does not require taxpayers to determine annual changes in the market value of depreciable assets. Neither does it require taxpayers to dispose of depreciable assets before making any allowance for those changes. Instead, deductions are allowed beginning in the year the asset is placed in service upon the expectation that the property will lose value as it ages due to physical deterioration or economic obsolescence.

A tax on annual economic income would allow a deduction equal to the expected decline in the value of an asset during the taxable year due to wear and tear or obsolescence. Studies indicate that the rate of this economic depreciation varies considerably from one type of asset to another.

Inflation can complicate the measurement of depreciation. When costs are incurred in one year and the corresponding depreciation deductions are taken in the future after there has been inflation, the purchasing power represented by the deductions will be less than the purchasing power represented by the money used to acquire the asset. If the burden of tax is intended to fall on inflation-adjusted dollars and depreciation allowances are constructed to approximate actual depreciation in the absence of inflation, then those allowances could be indexed for inflation, although the indexing rules would increase the complexity of tax compliance and administration. Alternatively, there could be an acceleration of depreciation deductions to provide the same benefit as indexing under some assumed inflation rates.

Under present law, depreciation deductions are not adjusted for inflation. Instead, the Accelerated Cost Recovery System ("ACRS") generally provides depreciation deductions of greater value than economic depreciation, in order to stimulate investment in depreciable assets. Present law also contains other depreciation systems that apply to certain property (such as property used predominantly outside the United States) for which Congress has decided that a result closer to actual depreciation is appropriate.⁵

Corporate Assets

Under present law, in the case of sole proprietorships, small business (subchapter S) corporations, and partnerships, the income from business assets generally is allocated to the owners and subject to tax on their returns. In the case of assets owned by taxable shareholders in a subchapter C corporation, income is taxed at the corporate entity level and again at the individual shareholder level when paid out as dividends or when the shareholder realizes gain on the sale of stock. Consequently, individual shareholder income from a business that is organized as a subchapter C corporation

⁵ For certain leased property, ACRS deductions in excess of straight-line depreciation deductions are a tax preference item for the corporate minimum tax. Also, property leased to tax-exempt entities must be depreciated using the straight-line method over specified lives. In addition, for purposes of measuring corporate earnings and profits, the Code requires the use of straight line depreciation over extended recovery lives.

may be taxed twice. Depending on the rates of tax applicable to various types of income, the current tax system may in some circumstances favor the ownership of assets through noncorporate forms of organization such as partnerships.

Debt Obligations

Absent inflation, economic income from the ownership of a debt obligation that pays interest currently at a market rate (e.g., a savings account) is simply the amount of interest payments earned. Certain assets, such as zero-coupon bonds, do not pay current interest. In effect, the bondholder annually re-lends the accrued interest to the issuer which increases the principal amount of indebtedness. On such obligations, economic income includes the unrealized increase in the principal amount of the obligation. Under the original issue discount rules of present law, accrued but unpaid interest is taxed on certain debt obligations in general conformance with the measurement of economic income.

During periods of inflation, the amount of interest income, even on an obligation that pays interest currently, does not accurately measure inflation-adjusted economic income. For example, consider a one-year certificate of deposit purchased for \$100 at the beginning of the year and paying interest at 9 percent. If the general increase in the price level is 5 percent per year, then the purchasing power of the \$100 certificate declines by \$5 over the year. The certificate holder's ability to consume increases by only \$4—the amount of interest income (\$9) less the decline in purchasing power of the certificate (\$5). Under present law, the holder is taxed on \$9 even though real economic income is only \$4. In this example, the "real" interest rate is 4 percent (\$4 divided by \$100) which is equal to the stated rate of 9 percent less the 5 percent erosion of purchasing power attributable to inflation.

In a tax system based on inflation-adjusted economic income, the holder of debt obligations would be taxed only on real interest income (nominal interest less the decline in the purchasing power of the principal amount due to inflation). Similarly, issuers of debt obligations (borrowers) would only be allowed to deduct real rather than stated interest. In the certificate of deposit example above, the bank must pay \$9 annually for the use of the \$100 principal amount. However, if the general increase in the price level is 5 percent per year, then the bank will be able to pay back the \$100 principal amount with dollars of reduced purchasing power. Thus the borrower's real interest cost is only \$4—the amount of interest paid (\$9) less the gain attributable to repaying principal with dollars of reduced purchasing power (\$5). Present law departs from a tax on real economic income since reductions in the principal amount of indebtedness attributable to inflation are not deducted from the gross income of lenders nor included in the gross income of borrowers. However, many have observed that this is an area in which attempts to measure income more accurately may add substantial complexity to the tax laws.

Under present law, interest payments generally are deductible from the borrower's taxable income and includible in the lender's

taxable income.⁶ Owners of debt-financed assets are not taxed on the portion of income used to service debt: this income generally is taxed on the lender's return. Thus, the present tax treatment of debt serves the function of shifting a portion of the gross income of an investment from the borrower to the lender.

If the lender is subject to tax at the same rate as the asset owner, then debt financing does not change the total amount of tax liability. However, some lenders, including many pension funds and foreign residents, are not subject to U.S. tax on interest income. Where the suppliers of debt financing are exempt from tax, or are subject to tax at relatively low rates, debt financing may reduce the effective rate of U.S. tax on an asset's economic income (because the interest deduction of the high-bracket borrower reduces tax liability by more than the interest inclusion of the low-bracket lender). The tax advantage of debt financing increases during inflationary periods under present law because nominal, rather than real, interest expense is deductible. This may offset the decline in value of unindexed depreciation deductions during such periods and actually may increase investment incentives for nondepreciable assets such as land.

Debt financing of corporate assets may have a tax advantage whether or not all corporations and other taxpayers are taxed at the same rate. Corporate income attributable to debt financing is not taxed at the corporate level. As a result, debt-financed corporate assets are subject to single-level taxation while equity-financed corporate investment may be subject to double-level taxation.

Indexing the Tax Base

As discussed above, the measurement of real economic income from capital would lead to adjustments in the measurement of depreciation allowances, capital gains and debt when inflation is significant. Indexing, converting current dollars into inflation-adjusted dollars, is a device for doing this. In recent years Congress has indexed a number of spending programs, such as social security, and has indexed the individual income tax rate schedule. Indexing of depreciation and capital gains has been considered by both the House and the Senate, but has not been enacted. The reluctance to add indexing provisions to the tax law may be due in part to concerns that the added complexity would not be worth the gain in economic efficiency at the relatively low rates of inflation that have prevailed over most of the period during which the income tax has been in effect.

Choice of a price index

The selection of a single price index to adjust for changes in the general price level is controversial. Some argue that a measure of consumer purchasing power, such as the consumer price index,

⁶ The at-risk rules limit deductions from certain activities to the taxpayer's equity investment and recourse indebtedness. Other rules limit a noncorporate taxpayer's interest deduction on investment indebtedness to investment income plus \$10,000. Except for certain financial institutions, interest is not deductible on debt used to purchase or carry tax-exempt bonds. Also, interest on certain highly subordinated convertible debt used to finance mergers or acquisitions is not deductible. Interest received on bonds issued by State and local governments generally is excluded from taxable income.

would be appropriate. Others prefer an index based on the sources rather than the uses of income, such as the GNP implicit price deflator. (The Administration proposal does not take a position on this issue.) Whatever index is chosen, it might not be possible to use a current price adjustment because of the lag between the end of the taxable period and the availability of the index. Another concern regarding the choice of an index is the possibility that it would be revised which might necessitate the recalculation of prior year tax liability.

Partial indexing

Most indexing proposals do not apply to every type of asset owned by taxpayers. Complete indexing would be complex particularly in the case of financial assets such as foreign currency, options, futures, short sales, preferred stock, and ordinary and convertible debt obligations. If some assets are indexed and others are not, it is possible that indexing could make the income tax less efficient than if no assets were indexed. For example, suppose corporate stock is indexed but not debt, and a taxpayer borrows \$100 at 10 percent to purchase stock that is sold after a period of one year. If all prices rise by 10 percent, including the price of the stock, then the taxpayer has no economic gain or loss (since the increase in the price of the stock from \$100 to \$110 is only sufficient to retire the debt and pay the \$10 of interest, leaving the taxpayer with no change in net worth). With indexing of stock but not debt, the taxpayer's stock basis would be increased to \$110 yielding no gain on sale; however, the \$10 interest deduction would be allowed in full. The net result is that taxable income would be reduced by \$10 (increasing net worth by the amount of tax saved) in a transaction that yields no real gain or loss. In such situations, a partially indexed income tax system may be less accurate than a system that has no provisions for adjusting the tax basis for inflation.

Other issues

Under present law, changes in the actual and anticipated rate of inflation have prompted Congress to readjust the tax treatment of income from capital. Capital recovery allowances and the capital gains exclusion and holding period have been modified several times over the last ten years. It is argued that automatic indexing would reduce the need for Congress to make frequent revisions to offset changes in the inflation rate. Others argue that automatic indexing would restrict Congress's flexibility, and might reduce the public resolve to prevent inflation.

B. Taxation of Income Versus Consumption

A number of analysts believe that the tax base should be defined as consumption rather than income; income that is saved would be excluded from the tax base until it is consumed. Two taxes that have been discussed in this regard are a cashflow tax and a value-added tax.⁷

⁷ For further discussion of consumption taxation, see Joint Committee on Taxation, *Analysis of Proposals Relating to Comprehensive Tax Reform* (JCS-3-85), February 26, 1985.

Cashflow Tax

Overview

Under a cashflow tax, such as that discussed in a 1977 Treasury study,⁸ tax would be based exclusively on current transactions. Thus, changes in the market value of assets that give rise to capital gains and losses and depreciation allowances would be irrelevant, and inflation adjustments would not be necessary. Individuals would not be required to add up all their purchases of consumer goods and services. Rather, consumption would be computed using the arithmetic result that consumption is equal to economic income less change in net worth (i.e., the change in the market value of the individual's assets).

A consumption tax base could be implemented by starting with current net income (wages, interest, dividends, rents, royalties, etc., less the cost of earning this income), and subtracting additions to net worth (purchases of investment assets and repayments of debt less proceeds from the sale of investment assets and from borrowing). A graduated rate structure could be applied to this tax base, and any additional personal circumstances (such as family size) that may be deemed relevant to equitable taxation could be taken into account.

Similar rules would apply to the taxation of an individual's business. The tax base would include current net income less change in business net worth, based on the cash method of accounting. Current net income would include current receipts from sales of services and inventory less wages, materials, interest, and other costs of earning income. The change in the net worth of the business would include purchases of capital assets and repayments of debt less proceeds from the sale of capital assets and from borrowing. Under a cashflow tax, the cost of plant and equipment would be recovered in the year of purchase (i.e., expensing treatment) rather than through a system of depreciation allowances. However, since net borrowing would be includible, expensing in effect would be allowed only for the equity-financed portion of investment. Under a cashflow tax, records of the price and year of purchase of assets would not be necessary for purposes of measuring capital gains and depreciation allowances.

The present tax system can be thought of as embodying a mix of consumption and income tax principles. For example, the present tax treatment of Individual Retirement Accounts (IRAs), pension plans, and cash-or-deferred arrangements, generally follows cashflow tax principles. Also, at current rates of inflation, the combined benefits of accelerated depreciation and the investment tax credit under present law are equivalent to, or more generous than, expensing for most types of equipment. It has been argued that this leads to less satisfactory results than either a pure income or consumption tax. For example, the equivalent of expensing for debt-financed equipment under present law is more generous than the depreciation treatment under either a pure income tax (i.e., eco-

⁸ Dept. of the Treasury, *Blueprints for Basic Tax Reform*, (January 17, 1977). See also, David Bradford and U.S. Treasury Tax Policy Staff, *Blueprints for Basic Tax Reform*, 2d. ed., revised, Tax Analysts, 1984.

conomic depreciation) or a pure consumption tax (i.e., expensing of only the equity-financed portion of investment).

Congressional proposals

S. 321 (Sens. DeConcini and Symms) would tax the cashflow of individuals and businesses (including partnerships and corporations) at a uniform 19-percent rate of tax. The bill would exclude both interest and principal amounts from the definition of cashflow: there would be no deduction for interest expense and no inclusion for amounts borrowed.

The "Cash Flow Income Tax Act of 1985," H.R. 1165 (Mr. Heftel), would tax individuals on their consumed income according to a 3-bracket schedule.

The "Broad-Based Enhancement Savings Tax Act of 1985," H.R. 373 (Mr. Moore) and S. 243 (Sen. Roth), would allow individuals to make deductible contributions up to \$10,000 per year to special savings accounts. Following cashflow tax principles, tax would be imposed on such accounts only to the extent distributions are made. (These accounts would be similar to present-law IRAs except that there would be no penalty for early withdrawal.) The bill also would permit taxpayers other than subchapter C corporations to deduct the full cost of certain personal property used in a business in the year of purchase. This is more generous than a cashflow-type tax because net borrowed amounts are not included in income (and the interest deduction is retained).

Value-Added Tax

Overview

Businesses would be the tax filing unit under a value-added tax (VAT). The value added by a business, and the base of the consumption-type value-added tax, is the difference between its sales proceeds and the cost of raw materials, semi-finished goods, capital goods, and other items that it has purchased from other businesses. Thus, if a business has sales of \$100, and purchases \$80 of goods and services from other businesses, its value added is \$20. Under the "subtractive" method of computation, the business would apply the tax rate to this base and remit the tax. Under the "credit" method, tax liability on sales proceeds is reduced by a credit for tax on purchases from other businesses, and the tax net of credit is remitted. Since the value-added tax on all sales to other businesses would be offset by subsequent tax credits, the only value-added tax that matters from the standpoint of overall revenues is the tax collected at the retail level, where there is no offsetting credit. (Thus, a third alternative would be to impose a national retail sales tax.) European-type VATs follow the destination principle: imports are subject to tax while export sales are exempt.

In a consumption-type value-added tax, the full cost of capital goods reduces value added in the year purchased by a business. This type of value-added tax is used in European countries, where standard tax rates cluster between 15 and 20 percent. In many countries, exemptions or reduced tax rates are provided for numerous items (e.g., food, housing rent, medical services, insurance, etc.), while higher tax rates may apply to luxury items.

Consumption taxes may be levied on a more limited basis for purposes of raising revenue, discouraging consumption of specific products, or financing public expenditures related to the consumption of specific products. For example, the Federal Government currently imposes taxes on the consumption of communications services, alcoholic beverages, cigarettes, air transportation, highway motor fuels, and certain other products. State and local governments also impose selective excise and general retail sales taxes.⁹

Congressional proposals

The "Business Transfer Tax Act of 1985," S. 1102 (Sen. Roth), would impose a 10-percent value-added tax computed according to the subtractive method. Liability for this tax would be reduced by the taxpayer's Federal Insurance Contribution Act (FICA) tax liability.

The "Superfund Revenue Act of 1985," Title II of S. 51 as reported by the Senate Committee on Finance,¹⁰ would impose a 0.08 percent tax on value-added. This tax would be imposed on manufacturers and producers, but not on wholesalers, retailers, or other nonmanufacturing businesses. Revenues from this tax would be dedicated to the Hazardous Substance Response Trust Fund (Superfund).

Analysis of Income vs. Consumption Base

Economic efficiency

Proponents of a consumption tax base argue that savings are taxed twice under an income tax, first when income is earned and second when it is invested. Under an income tax, income that it is consumed rather than invested is not subject to further income tax. As a result, it is argued that taxing income instead of consumption reduces savings, investment, and economic growth.

Opponents of a consumption tax base respond that the the efficiency effect is unclear. Expenditure taxes (like income taxes) may affect workers' decisions about how much labor to supply, and these distortions may be of greater consequence than the reduction in the savings rate attributable to an income tax.¹¹ It is also noted that the Federal Government can influence the savings rate directly through the level of the budget deficit.

Equity

Advocates of the consumption tax contend that it is more equitable than the income tax. Consider a simple example in which two taxpayers each earn \$100. One consumes his after-tax income immediately, while the other invests it at 10 percent and consumes the proceeds the next year. Under an income tax with a 50-percent rate, both taxpayers would pay \$50 in the first year, but the saver would pay an additional \$2.50 on his \$5 of interest income in the

⁹ Michigan and West Virginia have imposed business transaction-type taxes, similar in nature to a value-added tax.

¹⁰ S. Rep. No. 99-73, May 23, 1985.

¹¹ See, Mervyn King, "Savings and Taxation," National Bureau of Economic Research, Working Paper No. 428, (January 1980).

second year. Thus, the present value of the saver's tax liability exceeds that of the nonsaver. By contrast, under a cashflow tax, the saver would pay no tax in the first year and \$55 in the second year; thus, the present value of the saver's tax liability is the same as that of the nonsaver (\$50). (Under an income tax limited to personal service income, they both would pay \$50 in the first year, so that their tax burdens would be identical in each year.) Proponents of a consumption tax argue that these two taxpayers are similarly situated because they have exactly the same opportunities over the two-year period and that it is equitable for them to pay the same tax either directly (as in an income tax on personal service income) or in present value terms (as in a consumption tax).

Critics of a consumption tax base argue that a year-by-year comparison is more appropriate than a lifetime perspective. From this standpoint, the two taxpayers are only similarly situated in the first year, with the saver better off in the second year and, hence, able to pay more tax that year. They also argue that the equity argument in favor of a consumption tax hinges on treating bequests as consumption and taxing them as such when a person dies.¹² However, this would be a controversial aspect of any consumption tax, since bequests would be taxed twice to the extent consumed by the heirs. Moreover, taxpayers whose consumption is large relative to their income, as a result of poverty, unemployment, retirement, serious illness or large family size, would tend to fare worse under a consumption tax than under an income tax, which may not be considered a fair result. Perhaps most fundamentally, critics doubt that vertical equity in the distribution of tax burdens between persons of greater and lesser abilities to pay taxes can be achieved under a consumption tax, except at unacceptably high marginal tax rates.

International competitiveness

Some proponents of a consumption base favor this approach because under the General Agreement on Tariffs and Trade (GATT) it is not permissible to impose direct taxes (such as income taxes) on a destination-principle basis: direct taxes may not be rebated on exports nor imposed on imports. It is argued that our trading partners in Western Europe have a substantial advantage over the United States since a higher portion of their tax revenue (including Federal, State, and local taxes) is derived from indirect taxes such as retail sales, value-added, and excise taxes.

Critics of consumption tax proposals are skeptical that switching from an income to a value-added tax would improve the U.S. trade balance significantly. First it is noted that a VAT would increase domestic prices to the extent that it is passed through to consumers. In this case, rebate of tax on exports would leave the dollar price of exports at exactly their pre-VAT level, while the imposition of tax on imports would raise the dollar price of imports to the domestic level. Thus, to the extent that the domestic price level adjusts to reflect the VAT, border tax adjustments (i.e., rebate of tax on exports and imposition of tax on imports) would not subsidize

¹² See Henry J. Aaron and Harvey Galper, *Assessing Tax Reform*, The Brookings Institution, Washington, D.C., (1985).

exports nor penalize imports. Nevertheless, use of a VAT as a substitute for an existing tax, such as the corporate income tax, could reduce the dollar price of exports to the extent that corporate income taxes are passed through to consumers.

Second, the dollar floats against other currencies under a system of flexible exchange rates. The 1984 Treasury report concluded that the increase in demand for dollars, accompanying a tax-induced expansion of U.S. exports, would raise the price of the dollar relative to foreign currencies and thereby diminish the effectiveness of such a policy. Third, U.S. trading partners could respond by increasing their VATs and reducing direct taxes. Last, critics of consumption taxation note that in Japan, a country that is extremely competitive in international trade, indirect taxes comprise a smaller portion of total revenue than in the United States, Canada, and Western European countries.

Problems with the income tax

The 1977 Treasury study argued that one of the main advantages of a cashflow tax is simplicity. A cashflow tax would require no special rules for capital gains and losses, depreciation, inventory accounting, or indexing the definition of income from capital for inflation.¹³

However, some structural issues relevant to the income tax, like the treatment of fringe benefits and personal use of business property, would remain. Moreover, a consumption tax would create some new issues, like the treatment of gifts and bequests, and differential tax rates (as between necessities, standard goods, and luxuries) that may be deemed necessary for furthering equity goals or other social policies. In addition, a consumption tax could present difficult international issues, such as the treatment of accumulated wealth at the time of emigration or immigration. If the wealth were disregarded, for example, then a U.S. citizen could save tax-free and later emigrate to an income tax country to consume the accumulation tax-free, with a consequent revenue loss to the Treasury; whereas, a foreigner who had saved in an income tax country and immigrated to the United States would be taxed on both the accumulation and consumption of his or her savings.

Marginal tax rates

A consumption base would be narrower than a comprehensive income base (although not necessarily narrower than the present income tax base), particularly for higher income people who tend to save a larger percentage of their income than others. Therefore, to raise a given amount of revenue with a given degree of progressivity, the consumption base would require higher marginal tax rates than an income base. These higher rates would increase the adverse effects of whatever distortions remained in the consumption tax system.

¹³ Some of the apparent simplicity would be lost if limits were kept on the deductibility of net capital losses in order to deal with the problem of selective realizations and elimination of tax liability. See D. Bradford and U.S. Treasury Tax Policy Staff, *Blueprints for Basic Tax Reform*, 2d. ed., revised, Tax Analysts, 1984, pp. xviii-xix, and "Capital Gains and Losses," part II of this pamphlet.

Transition issues

There could be difficulties in effecting a transition from an income tax to a consumption tax. It would be unfair, for example, to tax consumption out of wealth which had been accumulated out of after-tax income under the prior income tax. A transition rule to prevent double taxation, such as allowing taxpayers to deduct the basis of assets held on the effective date of the consumption tax, would have a large revenue loss in the early years of the tax and would virtually exempt many wealthy people from tax for a period of years.

C. The Administration's Proposals for Capital Income Taxation

1. Capital Gains¹⁴

Present Law

In general

Under present law, capital gains income is generally taxed at the time it is realized rather than at the time it is accrued. The amount of gain for tax purposes is not adjusted for inflation. Long-term capital gains income generally is taxed at a preferential rate relative to short-term capital gains and ordinary income. Gain realized from an asset held at least 6 months generally is considered to be long-term. Under the installment sale reporting rules, certain gain from a deferred payment sale of property is not taxed at the time of sale, but is instead taxed only when the principal amount of the installment note is paid.

Individuals

Individual taxpayers may exclude 60 percent of capital gains from taxable income. Thus, a taxpayer in the top 50-percent bracket is effectively taxed at a 20-percent rate on capital gains income (50 percent of the 40 percent of included capital gains). Capital losses may be deducted against up to \$3,000 of ordinary income.¹⁵ Excess capital losses may be carried forward indefinitely. At the time of death, income tax on all accrued capital gain on assets owned by the taxpayer is forgiven. In addition, \$125,000 of gain on the sale of a principal residence by a taxpayer who is over 55 years of age is exempt from tax.

Corporations

Corporate taxpayers pay tax on long-term capital gains income at the alternative rate of 28 percent, if less than the tax computed under the ordinary corporate rates. (Corporate income tax rates are graduated, rising from 15 percent up to 46 percent for income in excess of \$100,000.) Capital losses are only deductible against capital gains. Excess capital losses may be carried forward 5 years and carried back 3 years. In a complete liquidation (often pursuant to a corporate acquisition), corporate tax on accrued capital gain is

¹⁴ More detailed analysis of capital gains and losses is included in part II of this pamphlet.

¹⁵ Short-term capital losses reduce ordinary income dollar-for-dollar while long-term capital losses offset 50 cents of ordinary income per dollar.

forgiven (the so-called "*General Utilities*" doctrine as codified in sec. 336).

Section 1231 assets

Depreciable and depletable property held for use in a trade or business (but not primarily for sale to customers) as well as certain other special assets (i.e., land, timber, coal, domestic iron ore, livestock, and unharvested crops) that are used in a trade or business and held for more than a specified period are treated asymmetrically under present law. Net gains (subject to certain recapture rules) are taxed as if the property were a capital asset while net losses are fully deductible against ordinary income.

Administration Proposal

The Administration proposal would retain realization-basis taxation and the preferential treatment of long-term capital gains. Individuals would be allowed to exclude 50 percent of long-term capital gains compared to 60 percent in current law. The alternative 28-percent tax rate on corporate capital gains would not be changed. The rules allowing capital gain treatment for certain non-capital assets would be repealed, except in the case of business-use land. All gain or loss from the sale of depreciable and depletable assets would be subject to tax at ordinary rates; however, such gain or loss would be adjusted for inflation as a result of the provisions that index basis. Beginning in 1991, noncorporate taxpayers annually could elect similar treatment (i.e., indexation of basis with all gain subject to tax at ordinary rates) for capital assets such as land, corporate stock, and collectibles. However, indexed losses on the sale of such capital assets would remain subject to the current law limitations on deductibility. This annual election would be effective for all assets disposed of during the year. The Administration proposal would limit the benefit of installment sale reporting of gain by requiring recognition of all or a portion of such gain when the installment obligation is pledged as security for a loan.

Analysis

In general

In a system based on the taxation of economic income, gains would be taxed as ordinary income on an accrual basis with an adjustment for inflation. The Administration proposal would retain the realization principle but would otherwise treat depreciable and depletable assets according to economic income tax principles. Noncorporate taxpayers would be allowed annually to elect this treatment for capital assets beginning in 1991. Taxpayers that do not elect indexing under the Administration proposal would continue to receive preferential long-term capital gains treatment. Long-term capital gains of individuals would be taxed at 50 percent rather than 40 percent of the ordinary income tax rate (producing a maximum effective rate of 17.5 percent for an individual at the top tax rate of 35 percent). The alternative capital gains rate for corporations would remain at 28 percent, and thus would rise to 85 percent (28/33) of the proposed top corporate rate.

The Administration proposal would simplify present law by treating all gain or loss on the sale of depreciable property used in a trade or business as ordinary income or loss. The proposed repeal of the favorable rules for 18-year real property under ACRS would limit the conversion of ordinary income deductions to capital gain offered by real estate tax shelters under present law.¹⁶ Many of these shelters combine accelerated depreciation, capital gain on sale, installment sale reporting, and large amounts of debt financing to achieve negative effective tax rates. Under the Administration's proposed capital cost recovery system (CCRS), depreciation for real property would be more generous than ACRS depreciation at inflation rates over 4 percent. This plus unindexed debt financing (with fully deductible interest) may continue to provide opportunities for real estate tax shelters.

Preferential rate for long-term capital gains

The 1984 Treasury report would move further in the direction of an economic income tax than the Administration proposal by eliminating preferential capital gains rates. The Administration proposal states that preferential taxation of capital gains should be retained in order to provide an incentive for saving, investment, and capital formation, and to encourage the flow of venture capital into risky, high-technology industries. In this view, assets that generate capital gains are more productive, and should be taxed at a lower rate, than assets that produce ordinary income. Stock, particularly in high technology and start-up companies, is often mentioned in this regard. A second argument for taxing capital gains at a lower rate is to reduce the "lock-in" effect. Without preferential rates, investors may defer the sale of capital assets in order to avoid tax on accrued gain. Proponents contend that reducing the rate of tax on capital gains actually increases tax revenue due to the increased rate of realization.

Opponents argue that retaining preferential capital gains treatment may be an inefficient method for stimulating venture capital investment because much of the projected revenue loss is attributable to other types of investments. In 1981, only 25 percent of net long-term gain was attributable to corporate stock.¹⁷

Another consideration is the large portion of venture capital investments made by pension funds, foundations, and other investors that are exempt or partially exempt from tax on capital gains income.¹⁸ To the extent that the venture capital market is dominated by investors that are not taxed on capital gains income, the incentive effect of preferential rates is reduced.

¹⁶ Other provisions that would tend to limit tax shelter opportunities are the repeal of the exemption of real estate from the at-risk rules, the expansion of the investment interest limitations, and the limitation of installment reporting where the installment note is pledged as collateral for a loan.

¹⁷ This statistic understates the share of stock gains to the extent that taxpayers do not classify capital gain distributions from stock mutual funds as gains from stock. Mismeasurement also may occur as a result of installment sales of stock.

¹⁸ See *Venture Capital Journal*, (January 1985). In 1984, 34 percent of venture capital investment funds (independent private commitments only as defined by *Venture Capital Journal*) came from pension funds, 18 percent from foreign investors, and 6 percent from endowments and foundations. Thus, 58 percent of venture capital investment may have come from investors that generally are exempt from U.S. tax on capital gains.

The proposed retention of preferential capital gains treatment raises a number of tax policy issues. First, under the Administration proposal (and under present law) capital gains income is not taxed until realized and some gain is excluded from taxation altogether (e.g., gain that is not realized during the taxpayer's life). As a result, taxpayers can choose to realize capital losses as they are accrued while deferring tax on net capital gains indefinitely. The selective realization of capital gain and loss permits substantial tax deferral and is a preference for capital gains income apart from the preferential tax rate in the Administration proposal. The Administration's proposal to allow elective indexing for noncorporate taxpayers may exacerbate the selective realization problem. As a result of the indexing election, it could be more advantageous (subject to the limits on deductibility of capital losses) for taxpayers to realize losses than under current law because adjusting for inflation increases the amount of loss recognized.

Second, many tax shelters exploit opportunities to "convert" ordinary income into capital gains income and to defer tax on this income. Retention of preferential capital gains rates in a system with selective realization may provide an incentive for continued tax shelter investments.

Third, a tax system with two options for taxing capital gains, and an annual election between the two options, would appear to increase complexity, tax planning opportunities, and administrative costs. To determine whether indexing is advantageous, taxpayers would need to compute the indexing adjustment even if it is not elected.

Fourth, it is argued that one reason for retaining a preferential rate on long-term capital gains is that the taxation of gain at the time of realization results in a "bunching" of income that may push the taxpayer into a higher tax bracket. In this view, the preferential rate serves as a rough income averaging mechanism. (The Administration proposal would repeal income averaging.) In response, it is argued that the tax penalty from bunching is partially offset by the deferral of tax on accrued gain until the time of realization, and that the reduction in the number of tax brackets in the Administration proposal reduces the need for averaging. Also, the argument for preferential rates as an averaging mechanism only applies to gain from property held more than one year, whereas property held for just 6 months would qualify for preferential rates under the Administration proposal (as under present law).

2. Capital Cost Recovery System¹⁹

Present Law

Under present law, depreciation deductions are computed according to the Accelerated Cost Recovery System (ACRS), as enacted in the Economic Recovery Tax Act of 1981 and modified by the Tax Equity and Fiscal Reform Act of 1982 and the Deficit Reduction Act of 1984. Under ACRS, equipment is assigned to one of four

¹⁹ More detailed discussion of present law and proposals relating to capital cost recovery is included in part III of this pamphlet.

classes (3-year, 5-year, 10-year, and 15-year), and may be depreciated over the corresponding recovery period according to a schedule based on the 150-percent declining balance method, switching to straight line. Depreciable real property (other than low income housing) is assigned to the 18-year class and depreciated according to a schedule based on the 175-percent declining balance method, switching to straight line. In addition, up to \$5,000 of certain equipment purchases may be deducted in the year of purchase ("expensed") rather than depreciated.

Present law also provides a 10-percent investment credit for equipment (6 percent for equipment in the 3-year class). The basis of depreciable property must be reduced by one-half of the amount of the investment credit claimed, unless a reduced credit is elected.

ACRS was adopted in 1981 in part to compensate for unusually high rates of inflation that had eroded the value of depreciation deductions under the previous Asset Depreciation Range (ADR) system. As a result of the sharp decline in inflation since 1981, ACRS depreciation schedules generally are now significantly more accelerated than is necessary to achieve parity with the ADR system at the rate of inflation which prevailed when it was adopted in 1971. Consequently, the combined benefits of ACRS and the investment credit for many types of equipment are equivalent to, or better than, expensing (i.e., allowing the investor to deduct the entire cost of an asset in the year that the investment is made).

Administration Proposal

The Administration's proposal would provide an indexed depreciation system, Capital Cost Recovery System (CCRS), that would accelerate depreciation deductions relative to estimated economic depreciation.²⁰ Depreciable assets would be assigned to one of 6 classes according to their estimated economic depreciation rate, and no investment credit would be allowed. The Administration calculates that the marginal "effective" rate of corporate income tax on most types of equipment would be approximately 18 percent, slightly over half of the proposed top statutory rate of 33 percent.²¹ This may be interpreted as providing investment incentives equivalent to exempting from tax about half of the income from equipment. The Administration states that the effective corporate tax rate on structures would be approximately 25 percent (i.e., 76 percent of the proposed statutory rate).

²⁰ The 1984 Treasury report proposes a new depreciation system, Real Cost Recovery System (RCRS), based on estimates of economic depreciation. RCRS deductions would be indexed for inflation using a general price index provided by the Secretary. A system similar to RCRS would be used in the Administration proposal to (1) to measure the tax preference component of CCRS for purposes of the proposed alternative minimum tax, (2) depreciate property used outside of the United States, (3) measure corporate earnings and profits, and (4) recover the cost of tax-exempt use property.

²¹ The marginal "effective tax rate" is computed from a theoretical model of investment. It is the present value of tax expected to be paid on income from an asset over its lifetime (taking into account cost recovery rules and the investor's tax bracket), divided by the present value of economic income from that asset. This is not the same effective tax rate as computed in empirical studies (such as the Pease-Dorgan study, discussed above) which use a company's financial data to relate the tax it paid in a year to the pre-tax income it earned in the year.

Analysis

Investment incentive

The investment incentives imparted by the cost recovery system under CCRS appear to be more uniform than under ACRS across different types of equipment (since assets in the 5-year ACRS class would be assigned to four CCRS classes based primarily on estimated useful life) and between equipment and structures (primarily as a result of repealing the investment credit).

CCRS is an incentive depreciation system in that it would accelerate deductions relative to economic depreciation. For example, aircraft would be depreciated in just 6 years although useful service lives frequently exceed 20 years. Some argue that it is important to retain a tax incentive for business equipment in order to increase manufacturing investment, productivity, and international competitiveness. Accelerated depreciation has also been defended on the grounds that it reduces the flow of capital from business assets to owner-occupied housing. In this view, too great a portion of the nation's savings and investment is being devoted to housing as a result of the favorable Federal income tax treatment accorded to owner-occupied homes.²²

Others contend that the market is a more efficient mechanism for allocating investment among equipment, structures, and other business assets, than is the tax Code. It is also noted that the Federal income tax incentive for owner-occupied housing is offset, to some extent, by local property taxes that tend to be higher on household realty than business equipment and structures.²³ Another argument is that tax incentives for investment may not have the desired effect. This can occur because part of the tax incentives provided for investments may be capitalized in higher asset prices. If tax benefits are capitalized, the incentive to purchase these assets is reduced, and the tax preference creates a windfall for the producers and existing owners of tax-favored assets. Investment incentives may also be blunted if increased demand for capital drives up the interest rate and the cost of equity financing.

A recent study²⁴ examined the composition of U.S. investment before and after the enactment of ACRS in 1981. It found no correlation between the change in tax incentives, as measured by theoretically-derived effective tax rates, and the change in investment by type of asset. The author did not conclude that changes in tax incentives are inconsequential for investment, rather that they can be overwhelmed by changes in other factors such as the cost of capital and the acquisition price of capital goods. Another suggested explanation for the lack of correlation was that theoretically-de-

²² Under a pure economic income tax, homeowners would be taxed annually on the rental value of their house ("imputed rent"). If imputed rent is not included in income then it can be argued that interest and property taxes should not be deductible (as is the case in Canada and Australia).

²³ Don Fullerton and Yolanda Kodrzycki Henderson, "Incentive Effects of Taxes on Income from Capital: Alternative Policies in the 1980's," Princeton University, Discussion Paper No. 61, (December 1983). It is estimated that the average property tax rate is 0.8 percent for business equipment and inventory, 1.1 percent for business land and structures, 1.6 percent for public utilities, and 1.8 percent for household realty (land and structures).

²⁴ Barry P. Bosworth, "Taxes and the Investment Recovery," *Brookings Papers on Economic Activity*, 1985: 1.

rived effective tax rates are wrong measures of the relative taxation of different assets, because as customarily computed they ignore variations in the reliance on debt financing (and hence variations in the tax benefits of debt financing) among different kinds of assets.

Another study²⁵ compared the tax systems, as of 1980, in the United States, United Kingdom, Sweden, and West Germany, and found that the country with the highest overall effective tax rate on capital (West Germany, 48.1 percent) had the most rapid rates of investment (5.1 percent) and economic growth (3.7 percent) over the 1960-1980 period. Conversely, the country with the lowest overall effective tax rate on capital (United Kingdom, 3.7 percent) had the lowest rates of investment (2.6 percent) and economic growth (2.6 percent). In Japan, which is frequently noted for its high savings rate, corporate taxes are a much larger portion of total revenues (19.7 percent in 1982) and gross domestic product (5.4 percent in 1982) than in other industrialized countries.²⁶

International competitiveness

There is also considerable controversy over the effect of tax incentives for investment on international competitiveness. Capital costs account for one-fourth of total value added by nonfinancial corporations, and equipment costs account for only a fraction of this amount. Therefore, if the Administration proposal were to increase the effective tax rate on equipment from 0 to 18 percent, the cut in tax incentives would translate into an increase in final product prices of less than 1 percent.²⁷ By comparison, the value of the dollar against a group of 11 major foreign currencies increased by about 10 percent over the last 6 months of 1984, effectively raising the price of U.S. exports, and decreasing the price of imports, by that amount. Thus, the macroeconomic factors influencing the exchange rate, such as monetary policy and the Federal budget deficit, may be more important determinants of U.S. competitiveness in world markets than income tax incentives for particular assets. Also, if the economic health of a particular industry is of concern, an incentive depreciation system, applicable to all industries, may be an untargeted remedy.

It is argued that even if tax incentives for investment were an effective trade incentive for profitable companies, they have a negligible impact on companies with losses. For example, many companies in trade sensitive basic industries, such as the steel industry, have little or no taxable income and thus do not benefit currently from the investment tax credit and accelerated depreciation provisions of present law (except to the extent these tax benefits are passed through on leased property).²⁸ It is also argued that foreign-

²⁵ Mervyn A. King and Don Fullerton (eds.), *The Taxation of Income from Capital: A Comparative Study of the U.S., U.K., Sweden, and West Germany*, Chapter 7.

²⁶ *Revenue Statistics of OECD Member Countries, 1965-1983*, (1984).

²⁷ Assuming a 4-percent real after-tax rate of return on capital, the return on equipment investment comprises 2.6 percent of the net domestic product of nonfinancial corporations. All other factors remaining constant, an increase in the effective tax rate on equipment to 18 percent would increase the pre-tax rate of return by 22 percent (.18/(1-.18)), increasing prices by 0.6 percent (22 percent times 2.6 percent). Substitution of labor for capital would tend to keep the price increases below this level.

²⁸ Under present law and the Administration proposal, net operating losses may be carried back to offset tax liability in the 3 prior years, and carried forward for up to 15 years.

owned companies with U.S. operations will be able to take full advantage of any tax incentives provided for domestic investment. To the extent that tax incentives encourage additional foreign investment in the United States, the value of the dollar would tend to increase. This would reduce the competitiveness of U.S. exports.

3. Corporate Assets²⁹

Present Law

Under present law, corporate dividends paid to individual shareholders are taxed at both the corporate level and at the shareholder level. The double tax on corporate dividends is relieved, in part, by exempting the first \$100 (\$200 on a joint return) from shareholder tax.

Administration Proposal

Under the Administration proposal, the \$100 dividend exclusion would be eliminated. Partial relief from double taxation of corporate dividends would instead be provided by allowing a 10-percent dividend paid deduction to the payor.

Analysis

Under present law, the maximum combined tax on dividend income is 73 percent.³⁰ Under the Administration proposal, the top individual rate would be reduced from 50 to 35 percent and the top corporate rate would be reduced from 46 to 33 percent. In addition, 10 percent of corporate dividends (to the extent paid out of taxable income) would be deductible. As a result, the maximum combined tax rate on dividend income under the Administration proposal would be reduced to 54 percent.³¹ Thus, the Administration proposal would reduce the tax rate disparity between corporate and non-corporate equity-financed investment from 23 percent (73 percent minus 50 percent) under present law to 19 percent (54 percent minus 35 percent).

4. Debt Obligations

Present Law

Under present law, interest income is includible in taxable income (except in the case of certain bonds issued by State and local governments) and interest expense generally is deductible in computing taxable income subject to certain limitations. Gain or loss on debt obligations is generally taxed at realization except for

²⁹ More detailed discussion of present law and proposals appears in a forthcoming staff pamphlet relating to the taxation of corporate assets.

³⁰ After corporate tax at 46 percent, 54 cents on a dollar of corporate income is available for dividends. For an individual shareholder in the top 50-percent bracket, tax on this 54-cent dividend is 27 cents (50 percent of 54 cents). Thus, the highest combined corporate and shareholder tax is 73 cents (46 cents plus 27 cents) on each dollar of pre-tax corporate income.

³¹ After the 10-percent dividend deduction, the tax on a dollar of corporate income would be approximately 30 cents (90 cents of taxable income at a 33-percent rate), leaving 70 cents for dividends. Shareholder tax on dividends is approximately 24 cents (35 percent of 70 cents). Thus, the combined dividend tax is 54 cents (30 cents of corporate tax plus 24 cents of individual tax).

original issue discount obligations. Interest inclusions and deductions are not adjusted for inflation.

Administration Proposal

The Administration proposal would tighten the present law limitation on investment interest deducted by taxpayers other than corporations. Interest on most debt obligations, other than debt secured by the taxpayer's principal residence or incurred in a trade or business, would be limited to the taxpayer's investment income plus \$5,000. Thus, consumer interest would be subject to these limitations. Disallowed interest deductions would be carried forward indefinitely. The Administration proposal also would extend the at-risk rules to real estate. Thus, interest on debt secured by real estate for which the taxpayer is not personally liable would generally not be deductible. In addition, financial institutions would no longer be exempt from the general rule which denies a deduction for interest on debt used to carry or purchase tax-exempt bonds.

Analysis

The 1984 Treasury report would adjust interest income and expense for inflation (except interest expense on debt secured by the taxpayer's principal residence). This provision is intended to measure more accurately real interest income and expense during periods of inflation, and to reduce the tax incentive for debt financing in situations where the lender is in a lower tax bracket than the borrower ("bracket arbitrage"). Neither the Administration proposal nor other current reform proposals provide for interest indexing on an accrual basis, although all proposals, by lowering marginal tax rates, would tend to reduce opportunities for bracket arbitrage. Under the Administration proposal, noncorporate taxpayers could elect to index the basis of debt obligations for inflation. Thus, a lender could recognize the capital loss due to inflation when his principal is repaid. This loss would offset the inflation component of interest income recognized in prior years. However, if the borrower is a corporation or does not elect indexing, then there would be a mismatch since the inflation component of interest payments would be deducted by the borrower but, in effect, excluded by the lender.

The Administration proposal would limit the extent to which interest is deductible on debt used to finance consumption and tax-exempt and tax-deferred investment. Under present law, deductibility is denied in situations where the incurrence of debt can be traced to the purchase of tax-exempt bonds; however, it is often impossible to trace the use of borrowed funds. Consequently, many taxpayers deduct interest on debt that effectively is used to purchase tax-exempt bonds. Similarly, interest on vacation homes, automobiles, and other consumer durables used by the taxpayer is deductible even though these investments generate no taxable income. Arbitrage opportunities also arise where taxpayers borrow to invest in property which generates capital gains rather than current income, since the tax on capital gains may be deferred until realization. The interest limitation in the Administration proposal would substantially limit the ability of taxpayers to reduce

taxable income below economic income as a result of arbitrage activities. However, because the Administration proposal would continue to allow full deductibility of interest on debt secured by a taxpayer's principal residence, a significant tax incentive for home ownership (and borrowing against home equity) would be retained.

II. CAPITAL GAINS AND LOSSES

Present Law

In general, gain or loss reflected in the value of an asset is not recognized for income tax purposes until a taxpayer disposes of the asset. On disposition of a capital asset, long-term capital gain is taxed more lightly than ordinary income.³² Long-term capital loss is deductible against capital gain, but not against ordinary income except to a limited extent. For depreciable property used in a trade or business and not held for sale to customers, and for certain other noncapital assets, net gain can be treated as capital gain, while net loss is an ordinary loss.

A complex set of statutory provisions limits the ability of taxpayers to recharacterize ordinary income assets as assets eligible for capital gain treatment, and also requires recharacterization of capital gain as ordinary income to the extent of certain prior deductions from ordinary income.

In addition, certain judicial interpretations of the statute require gain or loss to be characterized as ordinary, rather than capital, in certain circumstances.

Statutory provisions

Capital gains tax and holding period

Noncorporate taxpayers may deduct from gross income 60 percent of the amount of any net capital gain for the taxable year, i.e., 60 percent of the excess of net long-term capital gain over net short-term capital loss. As a result, the highest tax rate applicable to a noncorporate taxpayer's net capital gain is 20 percent (the 50 percent maximum individual tax rate times the 40 percent of net capital gain included in adjusted gross income).

An alternative tax rate of 28 percent applies to a corporation's net capital gain (the excess of net long-term capital gain over net short-term capital loss) if the tax computed using that rate is lower than the corporation's regular tax. The highest regular corporate tax rate is 46 percent for taxable income over \$100,000.

Long-term capital gain is defined as gain from the sale or exchange of a capital asset held for more than six months.³³ Net long-term capital gain is the excess of long-term capital gains over long-term capital losses.

³² This preference is included in the minimum tax base.

³³ The holding period is scheduled to increase to one year, effective January 1, 1988. The present six-months holding period was enacted in the Deficit Reduction Act of 1984 (P.L. 98-369), effective for property acquired after June 22, 1984 and before January 1, 1988.

Minimum taxes

Noncorporate taxpayers are subject to an alternative minimum tax to the extent that it exceeds their regular income tax. The alternative minimum tax is based on the taxpayer's adjusted gross income and increased by tax preference items, including the 60 percent of net capital gains deducted in computing the regular tax. The alternative minimum tax rate is 20 percent for amounts in excess of a specified exemption amount.

An "add-on" minimum tax applies to corporations on certain tax preference items. 18/46ths of a corporation's net capital gain is a tax preference subject to the minimum tax.

Capital losses

Capital losses of noncorporate taxpayers are generally deductible in full against capital gains.³⁴ However, such losses may be deducted against a maximum of \$3,000 (or, if lower, taxable income computed generally without regard to capital gains and losses) of ordinary income in each year. In determining the amount of capital losses which may be deducted from ordinary income, only 50 percent of net long-term capital losses in excess of net short-term capital gains (i.e., gains on property held for less than six months) may be taken into account. Capital losses in excess of these limitations may be carried over to future years indefinitely, but may not be carried back to prior years.

A corporation may deduct capital losses only against capital gains. Net capital losses of corporations may generally be carried back for 3 taxable years and carried forward for 5 taxable years.

Capital assets

A "capital asset" generally means any property held by the taxpayer except certain specified classes. Capital assets generally do not include (1) inventory, stock in trade, or property held primarily for sale to customers in the ordinary course of the taxpayer's trade or business, (2) depreciable or real property used in the taxpayer's trade or business, (3) specified literary or artistic property, (4) business accounts or notes receivable, or (5) certain U.S. publications.

Certain depreciable property, nondepreciable business property, and special assets

A special rule (sec. 1231) applies to gains and losses on the sale, exchange, or involuntary conversion of certain noncapital assets. Net gains from such assets (in excess of depreciation recapture) are treated as long-term capital gains but net losses are treated as ordinary losses. However, net gain from such property is converted into ordinary income to the extent net losses from such property in the previous 5 years were treated as ordinary losses. The assets eligible for this treatment include depreciable property or land held for more than six months and used in a trade or business (if not includible in inventory or held primarily for sale to customers in the ordinary course of business). Also included are certain special

³⁴ However, section 165 generally denies individuals a deduction for losses not incurred in a trade or business unless such losses are incurred in a transaction entered into for profit or qualify as deductible casualty losses.

assets important in particular industries, such as interests in timber, coal, domestic iron ore, certain livestock and certain unharvested crops.

Patents

Under certain circumstances, the creator of a patented invention may transfer his or her rights to the patent and treat amounts received as proceeds from the sale of a capital asset, whether or not the proceeds are contingent on the use or productivity of the patent (sec. 1235).

Regulated futures contracts

Under present law, unlike most assets (with respect to which no gain or loss is realized until a disposition) regulated futures contracts, foreign currency contracts, nonequity options and dealer equity options are "marked-to-market" as gain or loss accrues (sec. 1256). 40 percent of the gain or loss is short-term gain or loss and 60 percent of the gain or loss is long-term gain or loss. This results in a maximum tax rate of 32 percent. Individuals who have a net loss regarding such contracts may elect to carry it back three years against prior net gain regarding such contracts.

Losses on small business stock

An individual may deduct as an ordinary loss up to \$50,000 (\$100,000 in the case of a joint return) on the loss from the disposition of small business corporation stock (section 1244 stock) originally issued to the individual, without regard to the \$3000 limit generally applicable to losses. A small business corporation is a corporation engaged in the active conduct of a trade or business whose equity capital does not exceed \$1,000,000.

Certain foreign corporate stock

Special rules recharacterize as ordinary income a portion of gain on the sale or exchange of certain foreign corporate stock, to compensate for the deferral of U.S. tax on corporate earnings and profits accumulated abroad.

Collapsible property

The distinction between capital gains and ordinary income has led to numerous taxpayer attempts to realize the value of an anticipated future ordinary income stream through the sale of a "capital" asset, such as stock in a corporation, or an interest in a partnership, that holds the income-producing asset.

Present law contains statutory rules intended to prevent (in different ways) such use of partnerships and corporations to convert what otherwise would be ordinary income into capital gains from the disposition of stock or a partnership interest. These provisions (secs. 341 and 751) known as the "collapsible" corporation and "collapsible" partnership provisions, are among the most complex provisions of the Internal Revenue Code and have been criticized by some for apparent inconsistencies in application.

Similarly, certain partnership rules relating to basis allocations (secs. 732(c) and 755) attempt to prevent conversion of ordinary income to capital gain by preventing allocations of basis from cap-

ital assets to ordinary income assets in certain partnership transactions. However, because section 1231 assets are generally treated like capital assets under these rules, certain conversion may nevertheless occur.

Recapture provisions

Depreciation recapture rules recharacterize as ordinary income a portion of gain upon dispositions of depreciable property. These rules vary with respect to the type of depreciable property. Under ACRS, for personal property, previously allowed depreciation (up to the amount of realized gain) is generally recaptured as ordinary income. In the case of nonresidential real property, if ACRS accelerated depreciation has been taken then all depreciation (up to the amount of realized gain) is similarly recaptured on disposition. However, if a taxpayer elects straight-line depreciation for nonresidential real property, there is no depreciation recapture upon disposition if the asset is held more than one year. In the case of residential rental property held more than one year, only the excess of ACRS deductions over the straight-line method is recaptured as ordinary income. Recapture for qualified low-income housing is phased out beginning after such property has been held for a specified number of months, at the rate of one percentage point per month.

Similar recapture rules apply to dispositions of oil, gas, or geothermal property. These rules require ordinary income recapture (up to the amount of realized gain) of previously deducted intangible drilling and development costs that, if capitalized rather than deducted, would have been reflected in adjusted basis (not including amounts that would have been deductible as cost depletion, if capitalized).

The recapture rules require the recognition of ordinary income in some situations that are otherwise tax-free or tax-deferred. For example, recaptured ordinary income is recognized in a corporate liquidation or pre-liquidation sale³⁵ that is otherwise generally tax-free to the corporation. Similarly, though recognition of gain on an installment sale is otherwise deferred, recaptured ordinary income with respect to depreciated real or personal property is recognized in the year of the sale.

Recapture is imputed to a partner who sells a partnership interest if recapture would have been imposed upon the disposition by the partnership of the recapture property. Except in the case of previously deducted intangible drilling and development costs, there is no comparable imputation to a shareholder of an S corporation who sells his or her stock, nor is there a comparable imputation to a corporation that sells the stock of a subsidiary with which it has filed consolidated returns, even though in these cases the shareholder may have enjoyed ordinary income deductions with re-

³⁵ The amount of ordinary income recaptured in a liquidation would not exceed the difference between the adjusted basis of the recapture property and its fair market value at the time of the liquidation. In a sale, the amount would not exceed the difference between the adjusted basis of the recapture property and the price paid for it.

spect to assets held by the S corporation or consolidated subsidiary.³⁶

Realization events

In general, property appreciation is not taxed until the property is disposed of in a taxable transaction. There are certain exceptions to this approach; for example, the present law treatment of regulated futures contracts and certain other items which are "marked to market" as gain or loss accrues even though there has been no disposition of the asset.

Nonrecognition events

Under various nonrecognition provisions, realized gains and losses in certain transactions are deferred for tax purposes. Examples of such nonrecognition transactions include corporate reorganizations, certain like-kind exchanges or property, involuntary conversions followed by an acquisition of replacement property, and the sale of a principal residence within two years of the acquisition of a new principal residence. Generally, nonrecognition treatment defers gain or loss for tax purposes by providing a carryover basis from the old holder to the new holder or a substitution of basis from the old property to the new property.

Certain exemptions

Present law effectively forgives income tax on accrued appreciation on the occurrence of certain events. For example:

Basis step-up at death.—At death, income tax on unrealized capital gains on an individual taxpayer's assets is forgiven, due to the step-up in basis such assets receive.

Corporate liquidation.—In a complete liquidation, corporate tax on unrealized capital gains is forgiven (though recapture rules recharacterize a portion of any gain as ordinary income to the extent of certain prior deductions).

Sale of principal residence.—\$125,000 of gain on the sale of a principal residence by a taxpayer over age 55 is exempt from tax.

Statutory interpretations

The statutory provisions described above have led to numerous disputes about the characterization of gain or loss as capital or ordinary. The issues that have been litigated and the principles asserted in particular cases include the following:

Property held primarily for sale to customers

Inventory and property held primarily for sale to customers in the ordinary course of the taxpayer's trade or business are excluded from the definition of a capital asset. The object of this exclusion is to preclude capital gains treatment for receipts obtained in the routine conduct of the taxpayer's enterprises.

³⁶ However, if a purchaser of such stock wished to obtain a stepped-up basis in the corporate assets for future depreciation, to reflect the value of the assets at the time of the stock purchase, there would be a recapture event in the purchaser's hands. Presumably the price paid for the stock in that situation would be reduced to reflect the tax cost associated with such recapture.

A host of cases have been litigated over whether gain received by the taxpayer was attributable to the sale of property held *primarily* for sale to customers in the ordinary course of the taxpayer's trade or business. The majority of these cases have involved real estate sales, and the sale of equipment held for rental (or for rental and then sale). In both instances, the litigation generally revolves around the question of the "primary" purpose for which the property was held. The resolution of this question, in turn, has generated an intricate web of subordinate rules and exceptions relating (1) to the existence of business (ordinary income) and investment (capital gain) purposes and (2) to the acquisition of property for one purpose and its disposition for another.

Corn Products doctrine

In *Corn Products Refining Co. v. Commissioner*, 350 U.S. 46 (1955), the Supreme Court held that property otherwise within the definition of a capital asset may have such an important and integral relationship to the ordinary conduct of the taxpayer's business that it loses its identity as a capital asset.³⁷ In 1975, the Internal Revenue Service stated that if a taxpayer acquired and held property with a "predominant" business (as opposed to investment) purpose, gain or loss on disposition would be ordinary; conversely, a "predominant" investment purpose would cause gain or loss to be capital. (Rev. Rul. 75-13, 1975-1 C.B. 67.) Later, following several Tax Court decisions,³⁸ the Internal Revenue Service took the position that even a "predominant" business motive cannot preclude capital gain or loss treatment, as long as there was a "substantial" investment motive for acquiring or holding the property. (Rev. Rul. 78-94, 1978-1 C.B. 58). Of course, it is to the taxpayer's advantage to have gains characterized as capital, and losses as ordinary.

Arrowsmith doctrine

In *Arrowsmith v. Commissioner*, 344 U.S. 6 (1952), the Supreme Court held that amounts paid by former corporate shareholders (as the transferees of corporate assets received in a prior year corporate liquidation) to satisfy liabilities of the liquidated corporation were capital, rather than ordinary losses. The Court related the payments to the earlier receipt (at capital gains rates) of corporate assets in the liquidation. Pursuant to *Arrowsmith*, the characterization of a transaction in one year may depend upon its relationship to another transaction in a prior year.

Tax benefit rule

The Internal Revenue Service has occasionally asserted the "tax benefit rule" in attempts to recharacterize as ordinary income a portion of the gain from the disposition of property otherwise enti-

³⁷ In the *Corn Products* case, the property in question was corn futures, acquired by a manufacturer of products made from grain corn to assure the needed supply of corn at a fixed price against a history of drought and fluctuating prices. The Supreme Court rejected the taxpayer's arguments that these futures were capital assets under the circumstances.

³⁸ *W. W. Windle Co. v. Commissioner*, 65 T.C. 694 (1976), *aff'd. on other grounds*, 550 F.2d 43 (1st Cir. 1977); cert. denied 431 U.S. 966 (1977); *Bell Fibre Products Corporation*, T.C. Memo 1977-42 (1977). Compare *Union Pacific Railroad Co., Inc. v. United States*, 524 F.2d 1343 (Ct.Cl. 1975), cert. denied 429 U.S. 827 (1976).

tled to capital gain treatment. The amount to be recharacterized reflects the extent to which the basis of such property was reduced by deductions taken from ordinary income, to which no specific statutory recapture provision applies on disposition of the property. For example, in the *First National Bank of Lawrence County*, 16 T.C. 147 (1951), the Internal Revenue Service successfully asserted that net proceeds received on the retirement of certain bonds that had previously been written off by a bank against ordinary income as worthless were taxable as ordinary income rather than as capital gain.

The Internal Revenue Service has indicated in a revenue ruling and in a technical advice memorandum that it may assert that deductions previously taken for research and experimental expenditures (sec. 174) should be recaptured as ordinary income on a disposition of patents or technology otherwise eligible for capital gains treatment under the special rules applicable to patents or under other provisions (Revenue Ruling 72-528, 1972-2 C.B. 481; TAM 8409009 (1983)). Commentators and tax advisors have questioned the validity under the present statute of this position regarding research and experimental expenditures and no reported judicial decision has addressed the specific question.

In *United States v. Bliss Dairy, Inc.*, 460 U.S. 370 (1983), the Supreme Court held that the tax benefit rule required corporate recognition of income in a corporate liquidation with respect to certain previously expensed assets distributed to shareholders.

The extent to which the Internal Revenue Service might successfully assert the tax benefit rule to attack the conversion of ordinary income to capital gain or the nonrecognition of income in situations not covered by specific statutory recapture provisions is unclear.

Legislative History

Reduced tax rate for capital gains

Noncorporate capital gains have been taxable at reduced rates since the Revenue Act of 1921. That Act provided for a maximum 12.5 percent tax on property held for profit or investment for more than 2 years (excluding inventory or property held for personal use). Because of the relatively low tax rates on ordinary income in this period, this provision benefited only higher bracket taxpayers. Since that time Congress has, on several occasions, adjusted the holding period required for reduced capital gains taxation.³⁹

The present system of capital gains taxation dates largely from the Revenue Act of 1942. The 1942 Act provided for a 50 percent exclusion for noncorporate capital gains or losses on property held for more than 6 months. The Act also included alternative ceiling rates on capital gains taxes for noncorporate and corporate taxpay-

³⁹ From the Revenue Act of 1934 until the Revenue Act of 1942, there were various sliding-scale exclusions depending upon the length of time an asset was held. A single six-month holding period remained in effect from 1942 through 1976, when the holding period was increased to 9 months for 1977 and 1 year for 1978 and thereafter. The present six-months holding period was enacted in the Deficit Reduction Act of 1984 (P.L. 98-369) as a temporary reduction in the one-year holding period for property acquired after June 22, 1984 and before January 1, 1988.

ers. The basic structure of the 1942 Act was retained under the Internal Revenue Code of 1954.

The Revenue Act of 1978 increased the exclusion for noncorporate long-term capital gains from 50 to the present 60 percent. Together with concurrent changes in the noncorporate minimum tax, this had the effect of reducing the highest effective rate on noncorporate capital gains from approximately 49 percent⁴⁰ to 28 percent. (The reduction in the maximum rate on income from 70 to 50 percent under the Economic Recovery Tax Act of 1981 (ERTA) reduced the maximum effective noncorporate capital gains rate from 28 percent to 20 percent.) The 1978 Act also reduced the alternative capital gains tax for corporations from 30 percent to its present level of 28 percent.

Noncorporate capital losses

In the early years of the income tax, losses from investments not connected with a trade or business were not deductible even against gains from similar transactions. This rule was changed in 1916 to allow deductions for transactions entered into for profit (but only to the extent of gains from similar transactions). The rule was further adjusted by the Revenue Act of 1918.

The Revenue Act of 1921 provided that net capital losses were deductible in full against capital gains or ordinary income. Because capital gains at this time were taxable at a maximum 12.5-percent rate, but capital losses could be used to offset income taxable at higher rates, this rule resulted in substantial revenue loss. Accordingly, the rule was amended by the Revenue Act of 1924 to limit the tax benefit from capital losses to 12.5 percent of the amount of such losses. The 1924 Act also repealed the previously existing carryforward for excess capital losses.

Under the Revenue Act of 1934, the percentage exclusion for net capital gains was made dependent upon the length of time for which the property was held. In conjunction with this change, the Act allowed equivalent percentages of capital losses to be deducted against capital gains and, in the event of any excess, against \$2,000 of ordinary income. The \$2,000 limit on the amount of ordinary income against which capital losses could be deducted was motivated by the fact that some very wealthy investors had been able to eliminate all their income tax liability by deducting losses incurred in the stock market crash against ordinary income.

Subsequent changes have provided varying limitations on the extent to which capital losses can be deducted and varying carry-over provisions for excess capital losses.

Corporate capital losses

Prior to the Revenue Act of 1942, corporate capital gains did not enjoy reduced taxation. Corporate capital losses were subject at different times to different deduction rules, ranging from the allowance of a full deduction against both capital gains and ordinary income to the allowance of a full deduction against capital gains but only a limited deduction against ordinary income.

⁴⁰ The 49 percent rate resulted in certain cases where the taxpayer was subject to the individual "add-on" minimum tax and the maximum tax "earned income" limitation also applied.

The Revenue Act of 1942 provided the first reduced taxation for corporate capital gains, in the form of an alternative maximum tax. Under the 1942 Act, no capital losses of corporations could be used to offset ordinary income. However, the Act allowed corporations to carry forward net capital losses for a 5-year period.

The Tax Reform Act of 1969 allowed excess net capital losses of corporations to be carried back to the 3 preceding taxable years as well as forward to each of the 5 succeeding taxable years. In each case, the loss carryback or carryover is to be treated as a short-term capital loss. The allowance of carrybacks has the effect of providing corporations with immediate refunds for excess losses and thus partially compensates corporations for being unable to deduct capital losses against ordinary income.

Treatment of gain and loss on depreciable assets and land used in trade or business

Depreciable property used in a trade or business was excluded from the definition of a capital asset by the Revenue Act of 1938, principally because of the limitation on deductibility of losses imposed by the Revenue Act of 1934. This step was motivated in part by the desire to remove possible tax deterrents to the replacement of antiquated or obsolete assets such as equipment, where depreciation would be fully deductible against ordinary income if the asset were retained, but loss would be subject to the capital loss limitations if the asset were sold.

The availability of capital gain treatment for gains from sales of depreciable assets stems from the implementation of excess profits taxes during World War II. Many depreciable assets, including manufacturing plants and transportation equipment, had appreciated substantially in value when they became subject to condemnation or requisition for military use. Congress determined that it was unfair to tax the entire appreciation at the high rates applicable to wartime profits. Accordingly, in the Revenue Act of 1942, gains from wartime involuntary conversions were taxed as capital gains. The provision was extended to voluntary dispositions of assets since it was not practical to distinguish condemnations and involuntary dispositions from sales forced upon taxpayers by the implicit threat of condemnation or wartime shortages and restrictions.

The Revenue Act of 1938 did not exclude land used in a trade or business from the capital asset definition. Since basis would have to be allocated between land and other property for purposes of depreciation in any event, the differing treatment of land used in a trade or business and depreciable property used in a trade or business was not viewed as creating serious allocation difficulties.

However, in the Revenue Act of 1942, Congress excluded land used in a trade or business from the definition of a capital asset and extended to such property the same special capital gain/ordinary loss treatment afforded to depreciable trade or business property.

Indexing

In connection with the Revenue Act of 1978, the House passed a proposal (the "House bill") to index the basis of certain assets for

purposes of determining gain or loss upon a taxable sale; however the proposal did not become law. Under the House bill, the assets generally eligible for indexing were common stock, tangible personal property and real property, provided such assets were either capital assets or assets used in a trade or business and were held for more than a year.

No indexing was proposed for debt instruments. Indexing debt was viewed as producing complex adjustments that would not produce additional revenues where both the borrower and the lender have the same marginal tax rate. The House Committee report (apparently still addressing the situation in which a borrower and a lender have the same marginal rate) suggested that to the extent inflation is anticipated correctly and interest rates are free to rise, interest rates would tend to rise to a rate that would compensate for inflation on an after-tax basis.

The House bill contained numerous exceptions and other provisions intended to deal with an array of issues. These issues included the differentiation of common stock eligible for indexing from preferred stock (considered more like non-indexable debt); possible abuses such as incorporation of non-indexed assets to obtain indexing with respect to stock; problems regarding the appropriate treatment of interests in different types of flow-through entities (such as regulated investment companies, real estate investment trusts, partnerships and subchapter S corporations); and concerns related to application of the short sale and collapsible corporation provisions of existing law.

A proposal similar to the 1978 House bill passed the Senate in 1982 (as a floor amendment to H.R. 4961), but was not enacted.

Administration Proposal

Effective on July 1, 1986, the proposal would reduce the exclusion rate for net capital gains of individuals and noncorporate taxpayers from 60 percent to 50 percent.⁴¹ This would produce a tax of 50 percent (rather than the present law 40 percent) of the otherwise applicable rate. Combined with the Administration proposal to reduce the maximum marginal tax rate to 35 percent, the maximum tax rate under the regular income tax on noncorporate capital gain would be 17.5 percent. Taxpayers subject to the alternative minimum tax would continue to be subject to a 20 percent rate on long-term capital gains.

The present law tax rate on net capital gain of corporations would remain at 28 percent, which would be approximately 85 percent (rather than the present 61 percent) of the maximum corporate rate.

Only capital assets, as defined under present law, and land held for use in a trade or business (but not primarily for sale to customers) would be eligible for capital gains treatment. Such business-use land would retain its present-law (sec. 1231) capital gain/ordinary loss treatment (however, the proposal states that consideration

⁴¹ The proposal does not specify the manner in which the exclusion would be applied in the case of a taxpayer using a taxable year that includes but does not begin on July 1, 1986. If the change in the exclusion were viewed as a "rate" change subject to section 15 of the Code, the exclusion for a calendar year taxpayer for 1986 would be 55 percent.

would be given to treating such land in the same manner as depreciable or depletable property.)

Depreciable property held for use in a trade or business and placed in service by the taxpayer on or after January 1, 1986, would no longer receive section 1231 capital gain/ordinary loss treatment. Instead, the basis of such assets would generally be indexed and disposition of such assets would produce ordinary gain or loss. The special additional rules under section 1231 for interests in timber, coal, iron ore, livestock and unharvested crops would be phased out over three years.⁴² Such assets would qualify for capital gains treatment only if they satisfied the present law definition of a capital asset.

The present law rules for regulated futures contracts, foreign currency contracts, nonequity options and dealer equity options would be retained.

Individual taxpayers (but not corporations) could elect, beginning in 1991, to index the basis of their capital assets for inflation occurring after January 1, 1991.⁴³ The election would be in lieu of eligibility for the preferential tax rate on capital gains. An election would be effective for all capital assets disposed of in a particular year. Indexed capital losses would remain subject to current law limitations on deductibility. Capital assets would be required to be held more than 12 months to be eligible for indexing. If capital assets are held by a taxpayer who employs a functional currency other than the U.S. dollar, the measure of inflation generally would be based on the inflation rate in the functional currency.

1984 Treasury Report

The 1984 Treasury Report proposes to repeal the preferential tax rates for long-term capital gains. Although gains and losses from sales of property would no longer be classified as either capital or ordinary under the rules of present law, losses from sales of investment property would remain subject to limitations. In general, investment property would be defined as all nonpersonal use property other than (1) property used in a trade or business, (2) inventory property and property held primarily for sale to customers in the ordinary course of business, (3) a general partnership interest, or (4) an interest in an S corporation in which the holder actively participates in management of the entity.

For noncorporate taxpayers, losses from sales of investment property would offset gains from such property, with any excess loss deductible up to a maximum of \$3,000 in each taxable year. For corporate taxpayers, investment property losses would offset gains from such property but would not otherwise be deductible. Both noncorporate and corporate taxpayers could carry forward losses exceeding these limitations indefinitely.

The basis of property (other than debt instruments) would be indexed for inflation during the period the taxpayer holds the property. Inflation adjustments would generally be made for debt instru-

⁴² The treatment of coal, iron ore and timber is discussed in greater detail in Part IV of this pamphlet dealing with energy and natural resources.

⁴³ Apparently the basis of a debt instrument otherwise qualifying as a capital asset could electively be indexed under the proposal.

ments (other than a borrower's home mortgage) but would be accomplished by indexing interest rather than basis in the indebtedness. A portion of amounts otherwise considered interest would thus be treated for tax purposes as a return of principal, which the lender would not include in income and the borrower would not deduct. Corporations would index all interest income and expense. An individual would net aggregate gross interest expense (excluding home mortgage interest) against aggregate gross interest income (excluding tax-exempt interest). An individual with net interest expense would index the amount of such net expense exceeding \$5,000. An individual with net interest income would index that income.

The effective date for eliminating the capital gains preference and indexing basis would be January 1, 1986 for assets purchased on or after that date (except assets purchased pursuant to a binding contract entered into before that date). Different transition rules would apply to depreciable and nondepreciable assets purchased before January 1, 1986. Interest indexing would be effective January 1, 1988, regardless of when the debt was incurred.

Other Proposals

S. 409 and H.R. 800 (Bradley-Gephardt)

For taxable years beginning after December 31, 1986, the preferential rates for long-term capital gains would be repealed.

H.R. 2222 and S. 1006 (Kemp-Kasten)

With certain exceptions (including creditor's interests), the basis of capital assets and other property qualifying for capital gains treatment under present law section 1231 (but without regard to holding period) would be indexed for inflation for taxable years beginning after December 31, 1985. Taxpayers could elect to use either preferential capital gains rate treatment (without indexing) or indexing (without preferential rate treatment) for all dispositions during a taxable year.

For noncorporate taxpayers electing capital gains treatment, 40 percent, rather than the present 60 percent, of capital gain would be excluded from income. Although the Kemp-Kasten bill specifies a nominal 24-percent top marginal tax rate for individuals, the top rate is about 28 percent in the range above the social security wage base in which the proposal's special deduction for employment income is phased out. Thus, the maximum effective rate for capital gains is approximately 60 percent of 28 percent, or 17 percent. For corporate taxpayers electing capital gains treatment, the capital gains rate would be 20 percent. The top corporate ordinary income rate would be 35 percent.

Whether or not indexing is elected, the proposal would generally retain present law limitations on the deductibility of capital losses. If one elects to index the basis of property eligible for ordinary loss treatment, the proposal subjects loss in excess of non-indexed loss to the capital loss limitations.

Analysis

Capital gains

Arguments for reduced tax on capital gains

Bunching.—Because capital gain is generally not taxed until a disposition, taxpayers can face large jumps in taxable income when the gain is realized. With graduated tax rates, such bunching could lead to a higher tax burden than if the gain were taxed as it accrued.⁴⁴ If the benefit of deferral is not enough to compensate for the extra tax in some of those cases, then the additional benefit of a preferential tax rate helps to achieve parity (although its availability is not limited to such cases).

The proposed flattening of the marginal tax rate schedule would diminish the amount of bunching and so, presumably, reduce the need for a preferential tax rate as a remedy for it.

Lock-in.—A second argument is that high tax rates discourage sales of assets. The legislative history suggests that this lock-in effect was an important consideration in Congress' decision to lower capital gains taxes in 1978. Preferential tax rates impose a smaller tax on redirecting poor investments to projects with better prospects, in that way contributing to a more efficient allocation of capital.

The proposed reduction in marginal tax rates would lessen lock-in effects, and the proposed cut in the top tax rate effectively applicable to capital gains would lessen such effects further. This includes lock-in effects stemming from rules which allow a step-up in basis at death and exempt certain sales of homes.⁴⁵

Incentives for equity investment.—A third argument for preferential capital gains tax rates is that they encourage investors to buy corporate stock, and especially to provide venture capital for new companies, stimulating investment in productive business activities. This argument was important in the 1978 debate over capital gains taxes, and there has been a large growth in the availability of venture capital since 1978.

The Administration bases its proposal principally on the ground that the preference provides an incentive for investment and capital formation, with particular mention of venture capital and high technology projects. "Lock-in" and "bunching" possibilities are raised.

The capital gains preference may be an inefficient mechanism to promote the desired capital formation. The Administration capital gains proposal (like present law) is not targeted toward any particular type of equity investment although promotion of high technology venture capital is apparently a goal. Furthermore, the pro-

⁴⁴ The "bunching" argument would not apply to assets acquired and sold in a single taxable year, as the present 6 month holding period permits.

⁴⁵ Taxing accrued capital gains at death would require taxpayers to retain basis records of all assets subject to tax. The burden of this type of recordkeeping was one of the objections to the carryover basis provisions enacted in 1976 and repealed retroactively in 1980. Some contend that exclusions could be devised to address this concern. It is argued that taxing accrued gains at death could force an estate to liquidate assets under unfavorable circumstances. Others suggest that such concerns could be addressed through rules permitting deferral of tax payments in certain cases. Present law, for example, permits deferral of estate tax payments in certain situations.

posal (like present law) affords capital gains treatment to certain assets other than corporate stock, including assets such as gold, stamps, and other collectibles that are not generally inputs to a productive process. On the other hand, the proposal rejects a preference limited to particular activities or forms of investment because of the complexity involved in defining and enforcing such limits.

To the extent that potential sources of venture capital or other equity investment, or secondary purchasers of corporate stock, are tax-exempt or partially tax-exempt (for example, pension funds and certain insurance companies and foreign investors), a tax preference would seem an ineffective way to encourage investment. On the other hand, it is argued that capital gains treatment for venture capitalists who are taxable has importance.

Inflation.—Another argument for preferential tax treatment of capital gain is that part of the gain simply represents the effects of inflation and does not constitute real income. This argument was also important in 1978. Since the proposal would not allow indexing of capital assets until 1991, and then only for individuals on an elective basis, the Administration does not appear to view the capital gains preference principally as an inflation adjustment. However the Administration observes that the preference may provide some rough compensation for inflation to taxpayers that do not elect (or as in the case of corporations, are ineligible to elect) indexing.

Double taxation of corporate earnings.—Theorists have suggested that capital gains treatment on a disposition of corporate stock might be viewed as ameliorating the double taxation of corporate earnings. The first step of double taxation occurs at the corporate level; the second step occurs at the shareholder level as dividends are paid or as shares assumedly increased in value by retained earnings are sold. However, capital gains treatment is a very inexact means of accomplishing any such benefit. Among other things, the capital gains holding period requirement is unrelated to earnings. Also, any relief that the capital gains preference provides from the burden of double taxation applies only to retained corporate earnings. Distributed earnings are still generally subject to double taxation.

Arguments against reduced tax on capital gains

Opponents of reduced tax on capital gains put forth the following arguments:

Measurement of income.—Appreciating assets already enjoy a tax benefit from the deferral of tax on accrued appreciation until the asset is sold, which benefit reduces in whole or in part any bunching or inflationary effects. In addition, if capital assets are debt-financed, inflation will reduce the real cost of borrowing to the extent interest rates do not rise to compensate for the reduced value of principal repayments and interest is deductible. Thus, financing may further tend to offset any adverse impact of inflation.

Some opponents of the preference have contended that a direct basis adjustment by indexing for inflation would be more accurate and would reduce uncertainty regarding the eventual effective rate of tax on investments that might impair capital formation. On the

other hand, indexing may be viewed as too complex to implement and too generous to couple with present law concepts of taxation at disposition.

Neutrality.—To the extent that preferential rates may encourage investments in stock, opponents have argued that the preference tilts investment decisions toward assets that offer a return in the form of asset appreciation rather than current income such as dividends or interest. Furthermore, because the individual capital gains preference is accomplished by a deduction from income, it provides a greater benefit to high-income than to middle- or low-income taxpayers. Both the 1984 Treasury Report and the Bradley-Gephardt proposal emphasize neutrality as a goal in eliminating the preference. On the other hand, it is argued that neutrality is not an appropriate goal because risky investments that produce a high proportion of their income in the form of capital gains may provide a social benefit not adequately recognized by investors in the marketplace.

Reduction of "conversion" opportunities.—Opponents of the preferential capital gains rate contend that it not only provides a reduced tax rate on gains from the preferred assets but also encourages taxpayers to enter transactions designed to "convert" other, ordinary, income to capital gains. Some provisions of current law specifically offer such benefits for certain types of investments. For example, certain real estate investments offer rapid depreciation deductions that reduce ordinary income, with capital gains and little or no recapture of ordinary income on disposition of the asset.

Conversion can also occur through debt-financing the cost of assets eligible for capital gains rates. For example, if a taxpayer borrows \$100 at 10 percent annual interest to acquire a capital asset that is sold for \$110 a year later, and repays the borrowing with sale proceeds, the taxpayer has an interest deduction of \$10 that can reduce ordinary income⁴⁶ and a capital gain of \$10 subject to preferential rates. The taxpayer thus has a net after-tax positive cash flow even though on a pre-tax basis the transaction was not profitable.

On the other hand, it is argued that such "conversion" opportunities are simply an additional tax incentive for types of investments the capital gains preference is intended to encourage.

Simplification and consistent treatment of taxpayers.—Opponents of the preferential capital gains rate point out that the application of different tax rates to different sources of income inevitably creates disputes over which assets are entitled to the preferential rate and encourages taxpayers to mischaracterize their income as derived from the preferred source. A significant body of law, based both in the tax code and in judicial rules, has developed to deal with these matters. Its principles are complicated in concept and application, typically requiring careful scrutiny of the facts in each case and leaving opportunities for taxpayers to take aggressive tax return positions. It has been argued that the results derived in particular cases lack even rough consistency, notwithstanding the sub-

⁴⁶ Even if an interest deduction is subject to present law investment interest limitations, it can be offset against investment income that is ordinary income, plus an additional \$10,000 in the case of a joint return.

stantial resources consumed in this process by taxpayers and the Internal Revenue Service. Elimination of the preferential rates on capital gains could permit elimination of such complex provisions as the collapsible corporation and collapsible partnership rules, which have been criticized for apparent inconsistencies in application, and certain aspects of the varying recapture provisions for different types of assets. The 1984 Treasury Report and the Bradley-Gephardt proposal emphasize these goals in proposing elimination of the preference.

On the other hand, it is argued that so long as a limitation on deductions of capital or investment loss is retained some areas of uncertainty and dispute under present law would continue to exist (for example, whether property was held primarily for sale to customers in the ordinary course of business, and the application of the *Corn Products* and related doctrines). Since (as discussed further below) limitations on the deductibility of capital or investment losses may be desirable to limit the selective realization of losses without realization of gains, the amount of simplification and consistency that would occur as a result of eliminating the preference for long term capital gains may be limited.

Capital losses

Deductibility against ordinary income

The present limits on the deductibility of capital losses against ordinary income are intended to address problems that arise from the high degree of taxpayer discretion over when to sell certain types of assets. If capital losses were fully deductible against ordinary income, as was the case between 1921 and 1934, a taxpayer owning many assets could selectively sell only those assets with losses and thereby wipe out the tax on ordinary income even if those losses were offset by unrealized capital gains in the taxpayer's portfolio. This concern would support retention of a limitation on the deduction of capital or investment losses, even if capital or investment gains were not subject to preferential tax treatment and even though tax distinctions between investment and non-investment assets tend to generate disputes over the proper characterization of particular assets. Both the 1984 Treasury Report and the Bradley-Gephardt bill would retain limitations on the deduction of capital or investment losses, even though they would eliminate the preferential rate for capital gains.

Some have suggested eliminating the loss limitation entirely in the interests of simplicity, or possibly subjecting otherwise fully deductible investment losses to a minimum tax. However, the minimum tax approach may not produce the desired simplicity since it would still be necessary to define and identify investment losses.

The Administration proposal and the Kemp-Kasten bill, which would generally offer taxpayers an annual election to use either capital gains preferential rates or regular rates with indexing, would similarly retain a limitation on the deductibility of capital or investment losses. However, the indexing election in these proposals appears to permit taxpayers to increase through basis adjustments the ordinary income deductibility of their investment losses, up to the \$3,000 limit. This result could be avoided by pro-

viding that the indexing election could not be used to increase the amount of losses otherwise deductible against ordinary income.

Limits on the deductibility of capital losses may be unfair to taxpayers who have losses in excess of unrealized gains, since they may never get to deduct legitimate losses. The present system—allowing the deduction of losses against up to \$3,000 of ordinary income—is a compromise between the desire to be fair to taxpayers with net losses and the need to protect the tax base from selective realization of losses. In effect, small investors, who are presumed not to have larger portfolios with unrealized gains, are allowed to deduct capital losses against ordinary income; and large investors, for whom \$3,000 is not significant, are not. Arguably, however, large investors may have larger portfolios and lower transactional costs, making it easier selectively to realize accrued gains to offset losses and reduce the adverse impact of the \$3,000 limit.

50-percent reduction of long-term losses

The present rule requiring that long-term losses be reduced by 50 percent when deducted against ordinary income (up to the \$3,000 limit) is also a compromise between the need to protect the tax base and equity to investors with net capital losses. If long-term losses were fully deductible against ordinary income, as was the case before 1969, taxpayers with both long-term gains and losses could realize the gains and losses in alternate years, paying tax on only 40 percent of the gains and fully deducting the losses. A taxpayer who takes care to realize losses before they become long-term can, of course, achieve this result despite the 50-percent reduction. To compensate for the loss limitation, Congress retained a 50-percent cutback, instead of increasing it to 60 percent, when the capital gains exclusion percentage was increased from 50 to 60 percent in 1978.

Treatment of trade or business assets

Depreciable assets used in a trade or business

Though the Administration would retain the capital gains preference for assets that are “capital assets” under present law, it would eliminate the special capital gain/ordinary loss treatment of depreciable assets used in a trade or business. The Administration states that gains and losses from sales or other dispositions of depreciable property should be treated in the same manner as other business income or loss, including gains or losses from sales of other business property (e.g., inventory).⁴⁷ The Administration points out that the capital gain treatment of depreciable business assets arose historically in the wartime context of involuntary condemnations or requisitions coupled with high excess profit taxes, a situation no longer existing. Furthermore, the Administration proposal for a new Capital Cost Recovery System (“CCRS”) would ac-

⁴⁷ It is not clear whether there may be some exceptions to uniformity. For example, under the proposal, gain on dispositions of unpatented technology or certain patents would be ordinary income unless the asset qualified as a capital asset, but might not be in certain other (sec. 1235) patent dispositions. The proposal indicates that consideration would be given to providing ordinary income treatment to the extent that the creator of the patented invention or a holder of the rights to the patent claimed deductions from ordinary income for the costs of developing the invention.

count explicitly for inflation with respect to depreciable property and would provide incentives for investment in such property. Thus, the Administration considers a preferential rate on gain from sales of such property to be unnecessary as an inflation adjustment or as an additional incentive for investment in depreciable property likely to yield significant gains on sale.

Elimination of the present-law favorable statutory capital gains provisions on dispositions of appreciated trade or business property could simplify the varied present law rules in the recapture area⁴⁸ and reduce the tax-shelter benefits that may be offered for certain investments (such as real estate) that offer current deductions against ordinary income and capital gains treatment (with little or no recapture) on disposition under present law.

Some proponents of retaining the present law capital gains treatment of depreciable trade or business assets contend that, to the extent a purpose of favorable capital gains rates is to minimize "lock-in", this purpose should apply to depreciable business property as well as to other property. The "lock-in" argument for capital gains treatment usually assumes a high degree of taxpayer discretion in determining when to sell the particular types of assets eligible for capital gain treatment. Applying this argument to trade or business assets raises the question whether sales of some such assets are more discretionary than others. Some proponents of present law also contend that capital gains treatment provides an investment incentive that remains desirable even though other incentives such as rapid depreciation may also be provided.

Land used in a trade or business

The Administration proposal would retain the present law capital gains/ordinary loss treatment for land used in a trade or business (and not held primarily for sale to customers). The basis of such business use land would not be indexed under the proposal. However, the proposal indicates that consideration would be given to treating business-use land in the same manner as other business-use property, with consequent indexing and ordinary income and ordinary loss treatment.

Arguably, if land were considered an investment asset regardless of its use, capital loss as well as capital gains treatment would be appropriate. On the other hand, if such land is considered a business asset, it is arguable that ordinary income treatment should follow. Decisions to dispose of land used in a trade or business may

⁴⁸ The present law recapture rules specifically override otherwise applicable nonrecognition rules in certain circumstances. For example, in corporate liquidations and pre-liquidation sales, recapture income is recognized, but gain in excess of the recapture amount is not and is effectively exempted from corporate level tax. In the case of sales under the installment method, depreciation recapture income is recognized at the time of the sale, but, subject to imputed interest and original issue discount rules, income in excess of recapture can be deferred in accordance with the installment sale provisions. If the recapture rules are eliminated and replaced with a requirement of full ordinary income treatment for certain assets, the question arises whether recognition of all gain with respect to such assets would also be required in a liquidation or preliquidation sale, and whether installment sale treatment of such gain would be denied. The Administration proposal recognizes that the recapture rules of present law serve to limit such nonrecognition provisions and states that, in general, such nonrecognition rules would be limited in similar fashion under the proposal (with consideration being given to providing parallel rules for realized gains with respect to personal and real property). If the approach of present law is retained, recapture provisions would remain in the law to define the extent and timing of recognition in such situations.

tend to relate to business cycles or other non-investment factors as much as would be the case for other trade or business assets, thus lessening the need to counter a "lock-in" effect. The ordinary loss treatment afforded land under the Administration proposal would be consistent with this view.

Treating land used in a trade or business in the same manner as other trade or business property could reduce the tax consequences of allocating price between land and building, although an allocation must be made by the buyer for depreciation purposes in any event.

Indexing

Proponents of indexing contend that indexing would accomplish the goals of capital gains taxation while producing a more accurate measurement of economic income with greater neutrality.

Opponents contend that indexing is complex, should not be significant if efforts to control inflation are successful, and would erode revenues if such efforts are not successful.

Issues related to partial indexing

The Administration proposal and the Kemp-Kasten bill would provide indexing of basis but would not generally index costs of financing property. The 1984 Treasury Report proposes generally to index debt through an adjustment to interest.

Where some but not all assets are indexed, several issues arise. To the extent that the basis of certain assets is indexed but debt-financing of those assets is not, the adjustment for inflation may be overstated. An overadjustment in favor of the taxpayer who finances assets can occur even if it is assumed that interest rates correctly anticipate inflation and rise in the marketplace to reflect the effect of inflation on borrower and lender. For example, suppose a taxpayer acquires an asset for \$100 (fully financed) and sells it one year later for \$125. Inflation over the year is 10 percent. The lender and the taxpayer are each in a 50 percent tax bracket. The lender, seeking a 15 percent pre-tax rate of interest and anticipating 10 percent inflation, charges 25 percent interest for the year. On a pre-tax basis, the taxpayer receives \$125 in return of basis and gain on the sale, but pays the lender \$125 in interest and principal, producing no net cash flow.

If there is no indexing and no capital gains preference, the after-tax result is the same as the pre-tax economic result—the taxpayer receives \$25 of income taxable at 50 percent and pays \$25 of offsetting, deductible interest, producing no after-tax net cash flow.⁴⁹ If both the basis of the asset and the interest on the financing are indexed (assuming an accurate indexing factor has been identified and applied) the taxpayer again has \$15 of gain and \$15 of offsetting deductible interest, producing no after-tax net cash flow. However, if the basis of the asset is indexed for inflation but the financing is not indexed, then the taxpayer has \$15 of gain (taxed at 50

⁴⁹ If there is a capital gains preference on sale of the asset, the taxpayer will have an after-tax positive net cash flow due to the lower than 50 percent capital gains tax rate on his \$25 gain, assuming the full \$25 interest deduction can be used against other income in the 50 percent bracket. If the \$25 capital gain were taxed at 20 percent in the example, the positive after-tax net cash flow would be \$7.50.

percent) but a \$25 deduction, producing an after-tax positive net cash flow of \$5, assuming the deduction can be used in full to offset other income in the 50 percent bracket.⁵⁰

If some but not all assets are indexed, additional consideration would have to be given to provisions designed to accomplish the desired results in certain special situations. For example, if stock but not debt is indexed, (or if debt is indexed in a different manner than stock—for example, by interest adjustments rather than basis adjustments) the question arises whether some types of assets, such as preferred stock or convertible debt, should be classified as stock or as debt for this purpose.

If only some types of assets are indexed, rules would be needed for assets that change categories. For example, it would be necessary to provide for the method of computing the indexed, depreciated basis (and the extent of eligibility for any capital gains treatment) of a personal residence converted to rental property (or vice versa).

If some assets (such as stock or a partnership interest) are not indexed or are only indexed at the option of the holder, it would be necessary to provide for the appropriate treatment of various types of flow-through entities that may hold indexed assets but whose stock or interests may or may not be indexed. Conversely, if an interest in an entity is eligible for indexing but the entity may hold substantial non-indexable assets, consideration could be given to provisions designed to prevent taxpayers from indirectly obtaining indexing for nonqualified assets.

The question also arises whether indexing of an otherwise capital asset is appropriate in situations such as the disposition of stock in a controlled foreign corporation or foreign investment company, where present law requires ordinary income treatment to account for prior income deferral.

Finally, so long as capital gains treatment remains available for some types of assets (as would the case under the Administration proposal and the Kemp-Kasten bill) then, depending upon the rate of inflation, taxpayers may continue to have an incentive to engage in transactions designed to convert ordinary income to capital gains income. Because of this possibility, the complex provisions of present law dealing with situations in which capital gains treatment is available (including the collapsible corporation and collapsible partnership rules) presumably would not be eliminated.

The Administration proposal observes that denial of capital gain treatment to depreciable assets would expand the scope of the current law collapsible partnership rules, which treat gain recognized on the sale or disposition of a partnership interest as ordinary income to the extent attributable to the selling partner's interest in certain assets of the partnership that would produce ordinary income if sold by the partnership. The proposal states that consideration would be given to extending similar rules to the disposition

⁵⁰ Indexing the basis of assets without indexing debt-financing of such assets also overcompensates the borrower if interest rates do not rise enough to compensate for inflation on an after-tax basis. Thus, if the stated interest payment in the example is only \$15 (rather than \$25), interest is not indexed, and there is no capital gains preference, the taxpayer will have a pre-tax positive net cash flow of \$10 and an after-tax positive net cash flow of \$5.

of interests in S corporations and stock in subsidiaries which are included in an affiliated group filing a consolidated return.

Other indexing considerations

Lock-in

It is possible that indexing might not relieve "lock-in" problems, because a taxpayer whose after-tax economic gain is protected against future inflation may decide to continue to hold an asset to obtain the benefits of tax deferral, or the benefits of tax exemption if the asset is held until death. Others contend that indexing alleviates "lock-in" by removing the burden of taxing nominal gains arising from inflation.

Complexity

Indexing would involve a significant amount of recordkeeping. However, records of the cost of property and of improvements are generally maintained under present law. Records of the dates such costs are incurred would also be retained under present law where holding periods are important for capital gains purposes.

Indexing would substantially increase the volume of calculations necessary to calculate taxable gain for many common transactions. For example, consider an individual who sells stock which was purchased 10 years before the sale and who has reinvested the quarterly dividends in additional stock during this entire period. Under present law, if all the stock is sold at once, the individual can add the original cost and the dollar amounts of each of the 40 reinvested dividend payments in order to obtain the stock's basis, which is subtracted from the sales proceeds in order to determine taxable gain. Under indexing, each of the 41 components of basis (the original purchase plus the 40 dividend payments) would be multiplied separately by different indexing factors in order to compute the inflation-adjusted value of that component and determine the basis of stock.

The interaction of indexing rules with other Code provisions would raise further issues. For example, the basis of a partnership interest or S corporation stock in the hands of a partner or shareholder is affected by numerous transactions, including distributions, that could complicate accurate indexing of such interests. Another example, is the appropriate interaction with the short sale provisions of the Code. Theoretically, it can be argued that any inflation adjustment for a short sale should require the short seller to report a capital gain to the extent of inflation. If such a requirement were not imposed, it may not be appropriate to allow a shareholder who sells short "against the box" (i.e., while he or she owns shares of stock for which the short sale is made) to receive an inflation adjustment for the stock owned during the period of the short sale.

III. BASIC CAPITAL COST RECOVERY PROVISIONS

A. Overview

In an income tax, it is necessary to provide for the deduction (or "recovery") of capital costs. These are costs incurred in one year for property which generates income in future years. The most important method of capital cost recovery is depreciation, in which the deduction for capital costs is spread over a multi-year period related to the income-producing period of the property. For example, a building is depreciated over a longer period than an airplane, and an airplane is depreciated over a longer period than a car. The investment tax credit, which provides a benefit similar to an extra depreciation deduction in the first year, is another factor in capital cost recovery.

The depreciation system can be designed to be generally consistent with a policy to treat income received in connection with the ownership of depreciable property the same as, or differently from, other kinds of income. In an income tax that has the objective of taxing this income the same as other kinds of income such as wages and salaries, a depreciation system would be used that allows deductions in each year for the amount of the decline in value of an asset during that year. In an income tax that has the objective of inducing taxpayers to invest more heavily in depreciable assets by effectively taxing the returns at a lesser rate than other kinds of income, a system of "incentive depreciation" could be used.

Present law incorporates an incentive depreciation system whose principal components are accelerated depreciation, the investment tax credit, and special amortization or expensing rules for certain types of capital costs. The Administration proposal would replace the current Accelerated Cost Recovery System ("ACRS") with a new depreciation system ("CCRS") and repeal the investment tax credit. According to the Administration, CCRS deductions would typically offer taxpayers a greater benefit than ACRS deductions. CCRS deductions would be indexed for inflation—that is, increased for the inflation that occurs between the time an asset is acquired and the time a deduction is taken. CCRS would alter the mechanics of depreciation, providing new recovery periods, new recovery methods, a new nomenclature for identifying and classifying assets, and other rules.

Thus, the Administration proposal poses several major issues. First, regardless of whether depreciation deductions are indexed or not, should the benefits of incentive depreciation be raised generally, and should existing differentials in benefits for different types of assets be changed? Second, regardless of whether the benefits of incentive depreciation are changed, should depreciation deductions be measured in current or inflation-adjusted dollars? Third, how

much or how little should the mechanics of depreciation be changed in order to achieve the purposes of CCRS or another cost recovery system?

Depreciation, the investment tax credit, and measurement of investment incentives are discussed in this Part III. Other forms of cost recovery allowed under present law—depletion, amortization, and expensing—are discussed in Parts IV and V.

B. Depreciation

Present Law and Background

The Economic Recovery Tax Act of 1981 ("ERTA") introduced the Accelerated Cost Recovery System ("ACRS") for tangible depreciable property placed in service after 1980. Under ACRS, the cost of depreciable property (without reduction for salvage value) is recovered using an accelerated method of depreciation over a predetermined recovery period that is generally shorter than the asset's useful life (sec. 168). Under prior law, an asset's original cost (less salvage value) was recovered over its estimated useful life (sec. 167). The prior law rules remain in effect for property placed in service by a taxpayer before 1981.

Application of pre-1981 Act rules

For personal property, taxpayers could use the straight-line method of depreciation or, for property with a useful life of three years or more, an accelerated method. The most accelerated method available was the 200-percent declining balance method, under which deductions were taken by applying a constant depreciation rate equal to twice the straight-line rate.⁵¹

Personal property

The principal method used to determine useful lives for personal property was the Asset Depreciation Range ("ADR") system, adopted in 1971. Assets included in the ADR system were grouped into more than 100 classes, and a guideline life for each class ("midpoint life") was determined by the former Office of Industrial Economics in the Treasury Department. Each ADR class consisted of a category of assets that have common characteristics (e.g., class .22 included automobiles and taxis) or that are utilized in the same or related activities (e.g., class 37.12 covered special tools used in the manufacture of motor vehicles). Taxpayers could claim a useful life up to 20 percent longer or shorter than the ADR midpoint life, except assets used predominantly outside the United States did not qualify for this variance. For assets not included in the ADR system, and for taxpayers who did not elect ADR, useful lives generally were determined on the basis of facts and circumstances.

The ADR midpoint life for an asset derived from data on how long each taxpayer who provided information held the asset. Spe-

⁵¹ For example, assume the cost of an asset is \$100, its estimated useful life is 5 years, and its estimated salvage value is negligible. Under the straight-line method, \$20 (or 20 percent) of the \$100 cost would be deducted annually during the five-year period (assuming the asset was placed in service on the first day of the year). Under the 200-percent declining balance method, the allowable deduction in the first year would be \$40 (twice the straight-line rate), the deduction in the second year would be \$24 (original cost, less the prior year's deduction, multiplied by 40 percent), and so forth, switching to the straight-line—or some other method—at a time to maximize the deduction.

cifically, it was targeted a holding period that was too short relative to the experience of 70 percent of the taxpayers. Thus, ADR midpoint lives were generally regarded as underestimates of useful lives. It has been observed that ADR midpoint lives were about 30 percent to 40 percent shorter than the service lives found in Bulletin F, a publication concerning useful lives issued in 1942 by the Internal Revenue Service.

Real property

Allowable methods for depreciating real property depended on the use of the property and whether the property was new or used. New residential buildings could be depreciated using the 200-percent declining balance method, while the depreciation of used residential buildings was limited to the 125-percent declining balance method. In contrast, new commercial buildings could be depreciated at a rate no greater than 150-percent of the straight-line rate, and used commercial buildings had to be depreciated using the straight-line method.

Except for certain structures such as farm buildings, real property was not included in the ADR system. Thus, useful lives for real property were generally determined on the basis of facts and circumstances. Prior to 1981, taxpayers were permitted to allocate the cost of a building among its component parts (e.g., the building shell, plumbing, heating systems, etc.), and then depreciate each component as a separate item of property. The use of component depreciation produced the equivalent of a relatively short composite life for the entire building if the short-lived components comprised a large portion of the building's cost. Taxpayers could also claim useful lives provided by Revenue Procedure 62-21 (1962-2 C.B. 418), which set forth useful lives for real property, ranging from 40 years for apartment buildings and 45 years for office buildings to 60 years for warehouses. The useful lives provided by Revenue Procedure 62-21 were based on composite depreciation, reflecting the use of the same useful life for a building's structural shell and all of its structural components.

Depreciation accounts

Taxpayers under the ADR system were required to use vintage accounts. The vintage of an account referred to the year in which property included in the account was first placed in service. In addition, assets with different midpoint lives were grouped in separate accounts.

For assets not subject to the ADR system, taxpayers could use an item account for each asset or group accounts. Unlike item or vintage accounts, group accounts could include assets placed in service in different years. Prior law also permitted the use of "classified" and "composite" accounts in which assets could be included without regard to useful lives.

Treatment of repairs

Under present law, the characterization of certain expenditures for the repair, maintenance, rehabilitation, or improvement of property is a factual determination. If these expenditures substantially prolong the life of an asset, or are made to increase its value

or adapt it to another use, the expenditures are capital in nature and are recoverable in the same manner as the cost of a capital asset (sec. 263(a)). All other expenditures for repair, maintenance, etc., are allowed as a deduction during the taxable year in which paid or incurred (i.e., they are expensed).

Under pre-1981 Act law, a repair allowance system was provided that was intended to reduce controversies about whether expenditures should be classified as currently deductible repairs or as capital expenditures. A taxpayer who elected to apply the ADR system also could elect to take a current deduction for amounts paid or incurred for certain repairs, maintenance, and similar expenditures, to the extent the expenditures did not exceed the class repair allowance. The class repair allowance was generally defined as the average unadjusted bases of all repair allowance property multiplied by the repair allowance percentage.

The repair allowance percentage was a predetermined rate established by the Treasury Department for each ADR class. Property improvements (including the amount of repairs, maintenance, etc., in excess of the asset repair allowance) and any expenditures that were clearly capital expenditures were capitalized in a special vintage account subject to the ADR rules. In general, taxpayers made the election only when the status of an expenditure as a "repair" was unclear.

ERTA repealed the repair allowance election with respect to property placed in service after December 31, 1980.

ACRS

Under the ACRS system adopted in 1981, the recovery deduction for the year eligible property is placed in service is determined by applying a statutory percentage to the property's original cost (adjusted, as described below, for investment tax credit allowed) (sec. 168(b)(1)).

Personal property

The statutory percentages for personal property are based on the 150-percent declining balance method for the early recovery years, switching to the straight-line method at a time to maximize the recovery allowance. (The recovery percentages are not precisely the same as would be allowed under the 150-percent declining balance method using a half-year convention.) Taxpayers can elect to use the straight-line method over the regular ACRS recovery period with respect to one or more classes of ACRS property placed in service during a taxable year (sec. 168(b)(3)(A)). Under a "half-year" convention, the statutory schedules and straight-line alternatives give a half-year depreciation allowance for the first recovery year, whether the property is placed in service early or late in the year. No deduction is allowed in the year that the taxpayer disposes of the asset.

The cost of eligible personal property is recovered over a three-year, five-year, 10-year, or 15-year period, depending on the type of property. Taxpayers can elect to recover capital costs over extended recovery periods, using the straight-line method of depreciation (sec. 168(b)(3)).

Property with an ADR midpoint life of four years or less (such as cars and light-duty trucks) and property used in connection with research and experimentation are in the three-year class, while most other personal property is in the five-year class. The 10-year class includes certain long-lived public utility property and railroad tank cars; longer-lived public utility property is in the 15-year class.

If the recovery year is:	The applicable percentage for the class of property is:				
	3-year	5-year	10-year	15-year public utility	18-year real property ¹
1.....	25	15	8	5	4
2.....	38	22	14	10	9
3.....	37	21	12	9	8
4.....		21	10	8	8
5.....		21	10	7	7
6.....			10	7	6
7.....			9	6	6
8.....			9	6	5
9.....			9	6	5
10.....			9	6	5
11.....				6	5
12.....				6	5
13.....				6	5
14.....				6	4
15.....				6	4
16.....					4
17.....					4
18.....					4
19.....					2

¹ Assuming a mid-month convention and that property is placed in service by a calendar year taxpayer on July 1.

A taxpayer is required to reduce the basis of assets by 50 percent of the amount of regular or energy investment tax credits allowed with respect to personal property (and the reduced basis is used to compute recovery deductions) (sec. 48(q)(1)). With respect to the regular investment credit, a taxpayer can elect a 2-percentage point reduction in the credit in lieu of the half-basis adjustment (sec. 48(q)(4)).

Real property

The statutory allowances for real property are based on the 175-percent declining balance method (200-percent for low-income housing described in section 1250(a)(1)(B)(i)-(iv)), switching to the straight-line method at a time to maximize the deduction (sec. 168(b)(2) and (4)). For the year of acquisition and disposition of real property, the recovery allowances are based on the number of months during those years that the property is in service. Under a "mid-month" convention, real property (other than low-income

housing) placed in service or disposed of by a taxpayer at any time during a month is treated as having been placed in service or disposed of in the middle of the month.

The cost of real property is recovered over an 18-year period (15 years for low-income housing), although longer periods may be elected (sec. 168(b)(2) and (4)). Generally, the same recovery period and method must be used for the building as a whole, including all structural components. A substantial improvement (generally, one that is made over a two-year period at a cost that is at least 25 percent of a building's original cost) is treated as a separate building.

If the 15-percent or 20-percent investment credit for rehabilitation expenditures is allowed, the basis of real property is reduced by the amount of credit earned (and the reduced basis is used to compute recovery deductions) (sec. 48(q)(1) and (3)). The basis of real property is reduced by 50 percent of the 25-percent credit allowed for the rehabilitation of a certified historic structure (sec. 48(q)(1)). In addition, if a credit for rehabilitation expenditures is allowed, the straight-line method of cost recovery must be used with respect to the rehabilitation expenditures.

Recapture

With certain limited exceptions, gain from the disposition of depreciable property is "recaptured" as ordinary income to the extent of previously allowed ACRS deductions (sec. 1245). For residential real property that is held for more than one year, gain is treated as ordinary income only to the extent the depreciation deductions allowed under the prescribed accelerated method exceeds what would have been allowed if the straight-line method had been used (sec. 1250(b)(1)). In addition, recapture for qualified low-income housing is phased out after such property has been held for a prescribed number of months, at the rate of one percentage point per month (sec. 1250(a)(1)(B)). For nonresidential real property, there is no recapture if the taxpayer elected to recover the property's cost using the straight-line method over the ACRS recovery period (sec. 1245(a)(5)(C)). If accelerated depreciation is claimed with respect to nonresidential real property, the full amount of the depreciation (to the extent of the gain) is recaptured, and not just the excess over the straight-line amount. Because the benefits of capital gains treatment on gains attributable to previously claimed depreciation often exceeds the additional benefit derived from accelerated depreciation, investors frequently choose to claim straight-line depreciation on nonresidential real property.

Depreciation accounts

In general, taxpayers compute depreciation deductions, as well as gain or loss on disposition, on an asset-by-asset basis. A taxpayer can elect, however, to establish mass asset vintage accounts for assets that are in the same recovery class and placed in service in the same year (sec. 168(d)(2)). Under proposed Treasury regulations, the definition of mass assets eligible for this treatment would be limited to assets (1) each of which is minor in value relative to the total value of such assets, (2) that are numerous in quantity, (3) that are usually accounted for only on a total dollar or quantity basis, (4) with respect to which separate identification is impracti-

cal, (5) that have the same ADR midpoint lives, and (6) that are placed in service in the same taxable year (prop. Treas. reg. sec. 1.168-2(h)(2)).

The full amount of the proceeds realized on disposition of property from a mass asset account is treated as ordinary income (without reduction for the basis of the asset since it is separately accounted for). As a corollary, no reduction is made in the depreciable basis remaining in the account. In contrast, where property is accounted for on an asset-by-asset basis, the taxable gain is limited to the excess of the sales proceeds over the property's unrecovered basis, and the amount treated as ordinary income is limited to previously allowed depreciation deductions (as described above in the discussion of recapture rules).

Application of different depreciation methods for certain purposes

In general, ACRS deductions are reduced for property that is (1) used predominantly outside the United States ("foreign-use property") (sec. 168(f)(2)), (2) leased to a tax-exempt entity, including a foreign person unless more than 50 percent of the gross income derived from the property is subject to U.S. tax ("tax-exempt use property") (sec. 168(j)), or (3) financed with industrial development bonds the interest on which is exempt from taxation (sec. 168(f)(12)).

Different depreciation methods are also used for purposes of computing earnings and profits of a domestic corporation and applying the minimum tax provisions.

Foreign-use property.—The rationale for reducing ACRS deductions for foreign-use property is that the investment incentive is intended to encourage capital investment in the United States and should not be available to property used predominantly outside the United States. The recovery period for foreign-use personal property is equal to the asset's midpoint life (or 12 years for property without a midpoint life). The owner of foreign-use personal property generally is allowed to use the 200-percent declining balance method, switching to the straight-line method at a time to maximize the deduction.

For foreign-use real property, the recovery period is 35 years, and the 150-percent declining balance method can be used, with a switch to the straight-line method.

The owner of foreign-use property can elect to use the straight-line method in lieu of the prescribed accelerated methods. In addition, for foreign-use personal property, the straight-line method can be used over one of the optional extended ACRS recovery periods allowed for domestic property, but the period elected cannot be shorter than the midpoint life (or 12 years, whichever is applicable). For foreign-use real property, an election can be made to use the straight-line method over 45 years (instead of 35 years).

Tax-exempt use property.—The policy underlying the restriction on tax-exempt use property is to provide tax-reducing incentives only to those who are subject to income tax, and to deny them to tax-exempt entities, including foreign entities. Prior to the tax-exempt use restrictions, tax-exempt entities were benefitting from ACRS deductions for which they do not qualify directly, by using

property under a lease and paying reduced rentals that reflect a pass-through of the investment incentives. Tax-exempt entities could thus enjoy both tax exemption and the benefits of tax deductions. Concerned about the surge of leases, sale-leasebacks and other transactions in which college buildings, city halls, court houses, and other property were being used to generate unintended tax benefits, Congress decided in 1984 to limit depreciation deductions for property used by tax-exempt entities to incentive-free cost recovery.

Depreciation deductions for tax-exempt use property are computed using the straight-line method and disregarding salvage value. The cost of tax-exempt use personal property is recovered over the longer of the asset's midpoint life or 125 percent of the lease term. The recovery period for tax-exempt use real property is the longer of 40 years or 125 percent of the lease term. A taxpayer can elect to recover the cost of tax-exempt use property over an optional extended ACRS recovery period that exceeds the recovery period prescribed under the tax-exempt use rules. The rules for tax-exempt use property override the rules relating to foreign-use property.

Property financed with industrial development bonds.—In 1982, the Congress determined that the combined benefits of incentive depreciation and tax-exempt financing were overly generous. Therefore, taxpayers were required to choose between (1) ACRS and conventional financing and (2) tax-exempt financing and a slower rate of cost recovery than that provided by ACRS. Except in the case of property that is placed in service in connection with projects for residential rental property, the cost of property that is financed with tax-exempt industrial development bonds is recovered using the straight-line method over the applicable ACRS recovery period (sec. 168(f)(12)).

Computation of earnings and profits.—A dividend is generally defined as a nonliquidating distribution by a corporation to its shareholders. If a distribution exceeds earnings and profits, the balance is treated as a tax-free return of capital (up to a shareholder's basis in the stock with respect to which the distribution is made, after which it is generally treated as capital gain). If incentive depreciation were to apply for purposes of computing earnings and profits, the acceleration of depreciation deductions would reduce a corporation's earnings and profits, and thereby facilitate the distribution of tax-free dividends. For this reason, domestic corporations are required to compute earnings and profits using the straight-line method over recovery periods that are longer than the standard ACRS recovery periods (sec. 312(k)(3)). The calculation of earnings and profits has significance for many other purposes of the tax law (e.g., the allowability of the indirect foreign tax credit), as discussed below in the analysis of the Administration proposal.

The extended recovery periods used to compute earnings and profits are: (1) five years for three-year property, (2) 12 years for five-year property, (3) 25 years for 10-year property, (4) 35 years for 15-year public utility property, and (5) 40 years for 18-year real property and low-income housing.

Minimum taxes.—The minimum tax provisions are designed to prevent taxpayers with substantial economic income from avoiding tax liability by using certain exclusions, deductions, and credits (re-

ferred to as "items of tax preference"). In general, the excess of ACRS deductions over depreciation deductions that would have been allowed had the taxpayer used the straight-line method over a prescribed recovery period is treated as an item of tax preference. For purposes of this rule, the prescribed recovery periods are: (1) five years for three-year property, (2) eight years for five-year property, (3) 15 years for 10-year property, (4) 22 years for 15-year public utility property, (5) 15 years for low-income housing, and (6) 18 years for real property other than low-income housing. These rules apply only with respect to personal property subject to a lease and 18-year real property and low-income housing (sec. 57(a)(12)). Further, personal property subject to a lease is not taken into account for corporations other than personal holding companies (as defined in sec. 542).

Luxury automobiles and mixed-use property.—ACRS deductions are subject to fixed limitations for automobiles and are also reduced for certain property (including automobiles) that is used for both personal purposes and business purposes (sec. 280F). For luxury automobiles, depreciation deductions are limited to \$3,200 for the first year, and \$4,800 for each succeeding year. For mixed-use property that is used 50 percent or more for personal purposes, capital costs are recovered using the straight-line method of depreciation over the same recovery periods that are used for purposes of computing the earnings and profits of a domestic corporation. ACRS is available for mixed-use property that is used more than 50 percent for business purposes, but only with respect to the portion of the property's basis that is attributable to business use.

ACRS and tax shelters

Although tax shelter investments take a variety of forms, a common element is the deferral of tax liability on income that is offset by accelerated deductions. ACRS is designed to provide an investment incentive by accelerating depreciation deductions (relative to the actual decline in value of the asset). ACRS mismeasures income by concentrating larger depreciation deductions in the early years of an investment. This result enables an investor to reduce tax liability attributable to unrelated income. Thus, ACRS provides a basis for tax shelter investments.

At-risk rules.—As part of an effort to limit tax shelters, Congress enacted an "at-risk" limitation in 1976 (sec. 465). The at-risk limitation is designed to prevent a taxpayer from deducting losses—including ACRS allowances—in excess of the taxpayer's actual economic investment.

The at-risk limitation applies to most business activities, except the holding of real property and certain corporate leasing and business activities. The at-risk rules are applicable to individuals and closely held corporations.

Under the at-risk rules, a taxpayer can deduct losses (including depreciation) from an activity only to the extent of the aggregate at-risk investment in the activity at the close of the taxable year. In general, the at-risk investment includes (1) cash and the adjusted basis of property contributed by the taxpayer to the activity, and (2) amounts borrowed for use in the activity for which the taxpayer has personal liability for repayment. This amount is general-

ly increased by the taxpayer's share of net income from the activity and decreased by its share of losses. In the case of partnerships or S corporations, the rules are applicable at the partner or shareholder level. A partner is considered at-risk with regard to a loan to the partnership only if the partner is personally liable for repayment.

At-risk investment does not include the proceeds of nonrecourse loans. The at-risk amount also excludes (1) amounts borrowed from other participants in the activity, (2) amounts borrowed from related parties, and (3) amounts with respect to which the taxpayer is protected against loss through guarantees, stop-loss agreements, or other similar arrangements.

Lessee-leasehold improvements

In general, if a lessee makes improvements to property, the lessee is entitled to recover the cost of the improvement over the shorter of the ACRS recovery period applicable to the property or the portion of the term of the lease remaining on the date the property is acquired (see sec. 178 and Prop. reg. sec. 1.168-5(d)(1)). If the remaining lease term is shorter than the recovery period, the cost is amortized over the remaining term of the lease. For purposes of these rules, if the remaining term of a lease is less than 60 percent of the improvement's ACRS recovery period, the term of a lease is treated as including any period for which the lease may be renewed pursuant to an option exercisable by the lessee, unless the lessee establishes that "it is more probable that the lease will not be renewed" (sec. 178(a)). In any case, a renewal period must be taken into account if there is a "reasonable certainty" the lease will be renewed (sec. 178(c)). These rules might permit a lessee to recover the cost of depreciable property over a shorter period of time than would be true if the lessee owned the property. If the lessor and the lessee are related parties, then the cost of leasehold improvements must be recovered over the ACRS recovery period (sec. 178(b)).

The lessor of property is not required to include in income the value of leasehold improvements realized on termination of a lease (sec. 109).⁵² The lessor is also denied basis for improvements that vest in the lessor on termination of a lease (sec. 1019).

Public utility property

In general, a regulatory commission allows a public utility to charge customers rates that are sufficient to recover the utility's cost of service. A public utility's cost of service includes its annual operating expense and the capital expense allocable to a year. The capital expense that can be passed through as higher prices to customers consists of an annual depreciation charge for equipment and also a rate of return on the capital invested in the equipment (which capital is referred to as the "rate base").

ACRS distinguishes between long-lived public utility equipment and other equipment. Further, as described below, public utilities

⁵² *But see* Treas. reg. sec. 1.109-1(a) (the exclusion from income does not apply to improvements whose residual value was intended to be in lieu of current rentals).

are required to use a "normalization" method of accounting for ACRS deductions (sec. 168(e)(3)).

Definition of public utility property.—In general, public utility property is property used predominantly in the trade or business of furnishing or selling:

- (1) electrical energy, water, or sewage disposal services;
- (2) gas or steam through a local distribution system;
- (3) telephone services;

(4) other communication services if furnished or sold by the Communications Satellite Corporation for purposes authorized by the Communications Satellite Act of 1962 (47 U.C.C. sec. 701); or

(5) transportation of gas or steam by pipeline, if the rates are established or approved by certain regulatory bodies (secs. 168(e)(3)(A) and 167(l)(3)(A)).

Under ACRS, public utility property with midpoint lives of 18.5 to 25 years (other than property used in connection with research and experimentation) is classified as 10-year property, and public utility property with midpoint lives of more than 25 years is classified as 15-year public utility property.

Normalization accounting.—A public utility can use ACRS only if a "normalization" method of accounting is used for purposes of establishing the utility's cost of service and reflecting operating results in its regulated books of account. Normalization requires that (1) a utility's tax expense for ratemaking purposes must be computed as if the depreciation deduction were computed in the same manner as the ratemaking allowance for depreciation (which is generally based on the straight-line method over relatively long useful lives), (2) the deferred taxes (i.e., the difference between the actual tax expense computed using ACRS and that computed for ratemaking purposes) must be reflected in a reserve (and thus be available for capital investment), and (3) the regulatory commission may not exclude from the rate base an amount that is greater than the amount of the reserve for the period used in determining the tax expense as part of the utility's cost of service (*see* Treas. reg. sec. 1.167(l)-1, which interprets a similar provision of prior law).

Normalization prevents the immediate lowering of rates charged to customers as a result of the cost savings from ACRS. Rather, current tax reductions are flowed through to customers over the period of tax deferral.

Expensing of up to \$5,000 of personal property

A taxpayer (other than a trust or estate) can elect to deduct the cost of up to \$5,000 of qualifying personal property in the year the property is placed in service, in lieu of recovering the cost under ACRS (sec. 179). In general, qualifying property must be acquired by purchase for use in a trade or business, and must be eligible for the investment tax credit (although no investment credit is allowed for the portion of the cost expensed under this rule). The \$5,000 limit is scheduled to increase to \$7,500 for taxable years beginning in 1988 and 1989, and to \$10,000 for years beginning after 1989.

The option to expense a limited amount of investment each year permits some small businesses to avoid depreciation computations for tax purposes, although the option is not restricted to small businesses. Furthermore, the option to expense up to \$5,000 of the cost

of qualifying property is available even if the property's purchase price exceeds \$5,000.

Administration Proposal

Under the Administration proposal, ACRS would be replaced by the Capital Cost Recovery System ("CCRS"). Like ACRS, CCRS would provide for the recovery of capital costs at a rate in excess of the actual losses experienced by a taxpayer, and thus would operate as an incentive depreciation system. The depreciation allowances under CCRS would differ from ACRS allowances in that (1) assets would be classified on the basis of similar actual depreciation rates (as determined by the Treasury Department), (2) the prescribed statutory percentages would be designed to produce comparable investment incentives for all depreciable assets, (3) the periods over which costs are recovered would be somewhat longer than ACRS recovery periods (but generally shorter than the useful lives of eligible property), and (4) the basis of depreciable property would be indexed for inflation.

In general

Each CCRS class would be assigned a schedule of recovery percentages and a recovery period. The allowable CCRS deduction would be determined by applying the appropriate recovery percentage to an asset's inflation-adjusted basis. The schedule of recovery percentages for a CCRS class would approximate the results of using a declining balance method for early years of the recovery period and the straight-line method for later years.⁵³ Because the recovery percentage would be applied to an asset's adjusted basis, level recovery percentages would result in early years, followed by rising recovery percentages after the switch to the straight-line method. For example, the recovery percentages for CCRS Class 1 are 55 percent in each of the first three years (the level recovery percentage), followed by 67 percent in the fourth year and 100 percent in the fifth year.

Classification of assets

With limited exceptions for certain assets such as cars and trucks, personal property was classified under the ADR system according to the activity in which it is primarily used. Agriculture, mining, petroleum refining, and manufacture of knitted goods are examples of these classifications by activity. A midpoint life was provided for all assets used in the same activity, other than certain enumerated assets (e.g., cars) for which midpoint lives were specified separately. In view of the many different types of equipment that might be used in an activity, a single midpoint life was provided to minimize conflict over individual asset lives. Although the option to elect the ADR system was repealed with the enactment of ACRS, asset classifications under ACRS are generally made in terms of ADR midpoint lives, the statutory term for which is now

⁵³ The year in which the switch occurs would be dependent on the depreciation rate and recovery period for the asset's CCRS class, not on the inflation rate. Thus, the switch to the straight-line method would be required even if the deduction would not be maximized as a result of the switch.

“present class life.” For example, 3-year ACRS property consists mainly of property that has a present class life of 4 years or less. Similarly, some tax reform proposals refer to present class lives, either directly or indirectly by reference to ADR or ACRS groupings, to assign assets to the various recovery classes provided by those proposals.

In contrast, CCRS asset classifications would not be based on ACRS or ADR classifications. Rather, assets would be identified by descriptions—such as “construction machinery” and “general industrial machinery”—apparently drawn from the U.S. National Income and Product Accounts (NIPA) prepared by the Commerce Department. The assets so identified would be grouped into 6 CCRS recovery classes on the basis of similar economic depreciation rates in accordance with empirical studies that were commissioned by the Treasury Department and completed by 1981 (referred to as the “Hulten-Wyckoff studies”).⁵⁴ According to this formulation, the economic depreciation rate of an asset is the declining balance rate that best approximates how the asset’s value will fall in the absence of inflation. To illustrate, suppose that studies find that the economic depreciation rate of pick-up trucks has been 32 percent. This would be interpreted as meaning that the value of a \$10,000 truck purchased in 1985 is forecasted to fall in the absence of inflation by \$3,200 (32 percent of \$10,000) to \$6,800 in 1986, by \$2,176 (32 percent of \$6,800) to \$4,624 in 1987, and so on year after year.⁵⁵

Although assets would be grouped into CCRS recovery classes according to estimated actual depreciation rates, recovery percentages higher than those estimated to occur would be allowed for computing depreciation deductions. The recovery percentages for the six CCRS classes are intended to provide investment incentives which are in excess of actual depreciation and approximately equal in degree for all depreciable assets. The level recovery percentages were utilized for purposes of implementing the desired levels of incentives. Similarly, the CCRS recovery periods, which range from four to 28 years, represent arbitrary cut-offs that facilitate the provision of comparable levels of incentives for all CCRS classes.

CCRS Class 1

Three-year ACRS property would constitute CCRS Class 1. The level recovery percentage for Class 1 property would be 55 percent, producing results comparable to those under a 220-percent declining balance method, and a recovery period of four years would be used.

⁵⁴ The Hulten-Wyckoff estimates of economic depreciation rates appear at C. Hulten and F. Wyckoff, “The Measurement of Economic Depreciation,” in C. Hulten, ed., *Depreciation, Inflation, and the Taxation of Income from Capital*, Urban Institute, 1981, p. 95.

⁵⁵ This formulation could lead to a depreciation system in which the cost of the truck (and other assets with similar economic depreciation rates) is written off over an indefinite period, each year’s depreciation allowance being 32 percent of adjusted basis. This is the basic structure of an open-ended account system. It is also the basic structure of the 1984 Treasury proposal, except that proposal would allow full recovery of the remaining basis in the year it falls below 15 percent of inflation-adjusted original cost, thus providing finite recovery periods in lieu of open-ended recovery.

CCRS Class 2

CCRS Class 2 would encompass trucks (other than light-duty trucks that are classified as three-year property under ACRS), buses, and office, computing, and accounting equipment. The level recovery percentage for Class 2 property would be 44 percent, producing results comparable to those under a 220-percent declining balance method, and a recovery period of five years would be used.

CCRS Class 3

CCRS Class 3 would include construction machinery, tractors, aircraft, mining and oil field machinery, and service industry machinery, equipment, and instruments. The level recovery percentage for Class 3 property would be 33 percent, producing results comparable to those under a 198-percent declining balance method, and a recovery period of six years would be used.

CCRS Class 4

Property that is not assigned otherwise would constitute CCRS Class 4. Examples enumerated in the proposal include metal working machinery, furniture and fixtures, general industrial machinery, other electrical equipment, communications equipment, fabricated metal products, and railroad track and equipment. The level recovery percentage for Class 4 property would be 22 percent, producing results comparable to those under a 154-percent declining balance method, and a recovery period of seven years would be used.

CCRS Class 5

CCRS Class 5 would cover railroad structures, ships, engines and turbines, distribution plants for communications services, and plant and equipment for the generation, transmission, and distribution of electricity, gas, or other energy sources. The level recovery percentage for Class 5 property would be 17 percent, producing results comparable to those under a 170-percent declining balance method, and a recovery period of ten years would be used.

CCRS Class 6

Real property would be covered by CCRS Class 6. The level recovery percentage for Class 6 property would be four percent, producing results comparable to those under a 112-percent declining balance method and a recovery period of 28 years would be used.

Analysis

Classification.—Much of the nomenclature used in the proposal to identify types of assets has been used for the statistical purposes of national income accounting, but has not been used for tax purposes. Thus, the classification of assets under CCRS would require more than a “translation” of ACRS (or ADR) classifications. As a result, at least initially, taxpayers would face uncertainty about the classification of certain items. This uncertainty could be manifested by controversies with the Internal Revenue Service or postponement of marginal investments pending clarification. For example, questions could arise whether “oil field machinery” (CCRS

Class 3) would include equipment used in off-shore drilling, such as drilling rigs—which might otherwise fall in CCRS Class 4—and support vessels—which might otherwise fall into CCRS Class 5 as a “ship or boat.” Similarly, it is unclear whether computerized switching equipment used in the telecommunications industry would constitute Class 2 property (which covers “computing equipment”) or Class 4 property (which covers “communications equipment”).

The proposed reclassification may be rooted in the fact that the Hulten-Wyckoff studies used the 32 NIPA classifications for analysis and communication of results.⁵⁶ Hulten and Wyckoff performed an empirical analysis of depreciation rates for several types of cars, trucks, tractors and structures, and some types of machine tools and construction machinery. These assets constitute a relatively small portion of all the assets included in 8 NIPA categories. Estimates for the empirically studied assets were basically extrapolated to all assets in those 8 categories. For example, estimates for the four types of machine tools studied were averaged to obtain economic depreciation rates for all assets in the two NIPA categories called “metalworking machinery” and “general industrial equipment.” Estimates for assets in at least 20 of the remaining 24 NIPA categories were imputed according to a formula which assigned a lower depreciation rate to assets with a longer “life” and a higher depreciation rate to assets with a shorter “life.” Specifically, Hulten and Wyckoff imputed the economic depreciation rate for an equipment category as 1.65 divided by the average life of equipment in the category; for a structures category the formula was 0.9 divided by the average life of structures in the category. “Life” in this case means the average service life assumed by the Bureau of Economic Analysis, Department of Commerce, for assets in a NIPA category. This service life, in turn, is generally 85 percent of the useful life published in the 1942 edition of Bulletin F, issued by the Internal Revenue Service. In this way, the imputed economic depreciation rates ultimately depend on Bulletin F useful lives.⁵⁷

Hulten and Wyckoff interpreted their empirically determined estimates as demonstrating that economic depreciation rates can be measured to a useful degree of precision, but emphasized that the estimates for the 32 NIPA categories were in no way intended as definitive estimates of depreciation. Thus, the Administration proposal raises the issues of whether the Hulten-Wyckoff studies should be the basis for restructuring the cost recovery system, whether this particular reclassification of assets is necessary to achieve the neutrality objectives of CCRS, and if so, how the advantages of reclassification would compare with the costs of adjusting to it.

One option for mitigating uncertainty about the boundaries of classification would be to use the established nomenclature of the ACRS or ADR systems to identify assets, while assigning the assets thus identified to whatever recovery classes are found appropriate

⁵⁶ C. Hulten and F. Wyckoff, “The Measurement of Economic Depreciation,” in C. Hulten, ed., *Depreciation, Inflation, and the Taxation of Income from Capital*, Urban Institute, 1981.

⁵⁷ The Bureau of Economic Analysis is revising its estimates of service lives later this year. It is unclear at this point whether the revisions would materially affect the imputed values of economic depreciation rates if the Hulten-Wyckoff methodology were repeated using the revised service lives.

to carry out the purposes of CCRS. Under this approach, two different kinds of assets (identified by their ADR names) with the same midpoint life could be assigned to different CCRS recovery classes, if desired, but in any case the identity of the property being assigned would be clarified. A second option would be to group equipment according to its present class life, as was done in formulating ACRS, using more groupings than the current four. This would make use of the regularity that the economic depreciation rates of assets generally go down as the present class lives go up. Indeed, the Hulten-Wyckoff imputations of economic depreciation rates were based on just this kind of regularity, except that useful lives assumed in Bureau of Economic Analysis studies were substituted for the present class lives of present law.

Whatever the basis for initially classifying assets, it would be necessary for Treasury to monitor and analyze actual experience with all tangible depreciable assets so that changes could be made when appropriate to insure that CCRS maintains its designed level of neutrality across assets (i.e., that assets with similar rates of price decline are in the same depreciation classes). Changes in classification could be left to the administrative process, as contemplated by the Administration's proposal, or the authority to reclassify assets could be reserved by Congress.

Appropriate depreciation for real property.—A basic issue in determining the appropriate depreciation for real property is whether different types of structures should receive different treatment. Under present law, for example, low-income housing is favored over other types of structures, reflecting an attempt by Congress to encourage investments in low-income housing and to adjust for the fact that low-income housing may have an actual useful life somewhat shorter than other structures.

Composite depreciation.—The staff is informed by the Treasury Department that composite depreciation would be required under CCRS. Thus, taxpayers would generally use the same recovery period and method for a building as a whole, including all structural components.

CCRS conventions

The depreciation allowance for the first year would be based on the number of months the asset was in service. For this purpose, under a mid-month convention, property placed in service at any time during a month would be treated as having been placed in service in the middle of the month, the same convention that applies to most real property under present law. As a result of applying a half-year convention for purposes of determining when the switch to the straight-line method takes place, the statutory schedules would cover one year more than the assigned recovery periods. For example, if the assigned recovery period is four years, recovery allowances would be taken in five taxable years. In the last year of cost recovery, the remaining adjusted basis of an asset would be fully written off.

Analysis

Historically, if property was placed in service after the first day of a taxable year, depreciation was not allowed for that full year.

Similarly, if property was disposed of before the last day of a taxable year, depreciation was not allowed for that full year. Originally, averaging convention rules were provided to simplify accounting procedures for determining the amount of depreciation allowable for assets that were acquired or disposed of at various times during a taxable year. For example, under the ADR system, taxpayers were required to use one of two averaging conventions: (1) under the half-year convention, a half-year of depreciation was allowed in the year property was placed in service, and (2) under the modified half-year convention, a full year of depreciation was allowed for assets placed in service during the first half of a taxable year, and no depreciation was allowed for the first year for property placed in service during the second half of a taxable year (in which case depreciation began in the second taxable year).

Under present law, the statutory schedules for personal property reflect a half-year convention that results in a half-year depreciation allowance for the first recovery year, regardless of when property is placed in service during the year. The mid-month convention that applies to real property was enacted to reduce depreciation in tax-oriented transactions involving significant investments in depreciable property toward the end of a taxable year, although the rule is not limited to such cases. Critics of the CCRS mid-month convention argue that requiring on-going businesses to compute depreciation for personal property based on the month each asset was placed in service would impose an unwarranted burden. One option to consider is limiting the application of the mid-month convention to potentially abusive situations.

Other property

Like ACRS, CCRS would not apply to intangible property (e.g., patents or copyrights) or to property that is amortized or depreciated in terms other than years (e.g., movies depreciated under the income forecast method). Such property would remain subject to applicable rules of present law, although the basis of such property would be indexed for inflation.

Indexing

Beginning with the second year that an asset is in service, after reducing the asset's basis for the prior year's depreciation deduction, the asset's unrecovered basis would be adjusted upwards for inflation. The applicable CCRS recovery percentage would then be applied to the asset's inflation-adjusted basis. For purposes of computing gain or loss on disposition of a depreciable asset, there would be a pro-rata inflation adjustment to basis in the year of disposition.

Rationale and analysis

The primary arguments made in favor of indexing depreciation are that income would be more accurately measured and tax incentives for investment would be more stable in periods of high inflation. The purchasing power represented by depreciation deductions taken in years after there has been inflation is less than the purchasing power represented by the money used to acquire the asset in an earlier year. Thus, inflation reduces the real value of depre-

ciation deductions that recover only the original cost of an asset. A taxpayer's real income is thereby overstated and the incentive to invest is diminished, unless some counteracting adjustment such as indexing is made.

On the other hand, some believe that a sufficient adjustment can be made without entering into the complexities of indexing. Under this approach, the depreciation system would allow unindexed deductions that are accelerated enough to yield approximately the same benefit for the taxpayer as would indexing itself for the expected range of future inflation rates. If inflation turns out to be consistently outside the expected range, then this type of system would provide greater or smaller benefits than were intended. Nevertheless, such variances may not be large enough to merit the extra apparatus of indexing and their significance would be reduced in a tax system that has reduced marginal tax rates. Another consideration in evaluating this approach, especially if a very high degree of incentive depreciation is desired, is whether the inflation-compensating acceleration might be so great as to encourage tax shelters or other transactions heavily motivated by the transfer of depreciation deductions. On the other hand, the benefits of indexing depreciation might also encourage tax-motivated transactions.

Others question whether indexing depreciation allowances for assets purchased with borrowed funds but not indexing interest expense would in fact improve the measurement of income relative to no indexation at all. While high inflation rates reduce the real value of unindexed depreciation deductions, they also benefit taxpayers who financed investments with debt and repay in dollars of smaller real value. Present law does not increase the taxable income of investor-borrowers to adjust for this benefit, nor does it reduce their taxable income to adjust for the diminished value of depreciation deductions. Also, the income of a creditor is not adjusted to take account of the repayment of a loan with dollars that are worth less than the dollars originally borrowed. The 1984 Treasury proposal would attempt to adjust for both effects. One issue raised by the Administration proposal is whether the accuracy of income measurement is advanced by indexing for the detrimental but not the beneficial effect of higher inflation on debt-financed depreciable assets.

Appropriate government price index

The Administration proposal indicates that inflation adjustments would be determined using an appropriate government price index, without making a specific recommendation.

Analysis.—Because there is no universally acknowledged economic index of inflation, it is difficult to say what measure of changes in the value of a dollar should be used. Some would argue in favor of an index based on the cost of consumption goods and services (such as the Consumer Price Index), on the ground that indexing should attempt to provide a measure of income which represents a taxpayer's ability to command consumption goods and services. Others would argue that the appropriate index should be based on a more comprehensive price index such as the gross national product deflator (which includes capital goods and govern-

ment services, as well as consumer goods prices). The Kemp-Kasten bill would use the gross national product deflator for indexing depreciation deductions and capital gains.

To facilitate the extra steps needed to administer and comply with a depreciation system that indexes for inflation, ideally, the price index would be well publicized and immune to revision after publication.

Financial accounting standards

In general, the amount of depreciation reflected in primary financial statements is measured in nominal dollars. Under Statement of Financial Accounting No. 33 ("FAS 33"),⁵⁸ however, large publicly held enterprises are required to present information—in published annual reports—about the effects of changing prices on depreciation expense. In general, FAS 33 requires a more comprehensive measurement of the effects of inflation on a business enterprise than does the Administration proposal for inflation adjustments. FAS 33 imposes dual reporting requirements on both historical cost/constant dollar and current cost bases. Further, for purposes of presenting information about current costs, (1) a reporting enterprise is allowed flexibility in choosing sources of information about current costs (such as a specific price index or more direct evidence such as replacement cost), and (2) an asset's value and depreciation are measured by reference to the lower of the current cost or the "recoverable amount" (i.e., the current amount of cash to be expected from the asset's use or sale). For purposes of the historical cost/constant dollar analysis, monetary liabilities (i.e., obligations to pay a fixed or determinable sum of money, without reference to future prices of specific goods or services), as well as monetary assets, are required to be restated in constant dollars. Given these differences between FAS 33 and the Administration proposal, even those business enterprises that are required to measure the effects of inflation for financial reporting purposes would face additional accounting burdens under the Administration proposal.

Assets held by pass-through entities

The Administration proposal does not address the consequences of inflation adjustments to assets held by pass-through entities such as partnerships and S corporations. Under general rules of application, the deductibility of depreciation allowances is limited by a taxpayer's basis in the ownership interest in a partnership or S corporation (secs. 704(d) and 1366(d)). A taxpayer's basis in an ownership interest in a pass-through entity is also relevant for purposes of determining gain or loss on disposition of the interest. To the extent that the basis of an ownership interest is reduced by inflation adjustments, there would be increased gain on disposition. Thus, an increase in depreciation allowances as a result of inflation adjustments would not necessarily result in an increased deduction or reduced gain on disposition, unless the taxpayer's basis in the ownership interest is also adjusted. The Administration proposal does not contemplate the indexation of the bases of ownership in-

⁵⁸ Issued by the Financial Accounting Standards Board in September 1979.

terests in pass-through entities that constitute capital assets until 1991.

A similar issue is presented by the treatment of assets held by a subsidiary corporation that joins a parent corporation in the filing of a consolidated Federal income tax return. Under applicable Treasury regulations, a parent corporation's basis in the stock in a subsidiary is subject to reduction for operating losses—including ACRS deductions—generated by the subsidiary (Treas. reg. sec. 1.1502-32). A subsidiary's losses in excess of the parent's stock basis represent a potential income item that is "recaptured" on the parent's disposition of its stock in the subsidiary (Treas. reg. sec. 1.1502-19(b)). The concern is that inflation adjustments to the basis of a subsidiary corporation's depreciable assets could result in additions to an excess loss account, thereby increasing the parent corporation's potential income on disposition of stock in the subsidiary.

Assets not subject to CCRS

The basis of depreciable assets not subject to CCRS (e.g., intangibles such as patents) would be indexed for inflation. Similarly, amortizable costs, such as the cost of a leasehold interest, would be indexed for inflation. Other assets used in a trade or business, such as goodwill or a contract right of indefinite duration, would not be indexed for inflation.

In the case of foreign-use property, the adjustment to basis would be determined by reference to the inflation rate of the taxpayer's "functional currency." The term "functional currency" would be defined as the primary currency of the economic environment in which the taxpayer operates. Present law does not embody the functional currency concept, although the concept is utilized for financial reporting purposes.

Analysis.—Under the Administration proposal for the treatment of foreign exchange gains and losses, a business entity's income would be determined by computing the profit or loss as measured in the entity's functional currency, and then translating the net amount into U.S. dollars. If the aim of the inflation adjustment is to take real costs into account, it is unclear whether a U.S. taxpayer operating abroad should be permitted to increase the basis of foreign-use property because of inflation in the currency of the host country. A basic issue is whether the goal of indexing for inflation should be to take dollar costs into account, or to maintain the value of depreciation deductions in terms of a foreign currency. A business entity's functional currency could appreciate against the dollar even though there is inflation in the host country, with the result that the dollar value of the depreciation allowance would exceed the intended level of depreciation. Further, an issue would be presented regarding the appropriate index for a foreign currency. Because there is no commonly quoted inflation index for foreign currencies, the Treasury Department may find it necessary to monitor and publish such indices for numerous foreign currencies. These issues could be considered in the context of the Administration's proposal relating to the treatment of foreign exchange gains and losses.

Tax shelters and interaction with at-risk rules

To the extent that CCRS would result in depreciation deductions in excess of actual depreciation, a basis for a tax shelter investment would be present. Consistent with this view, the Administration proposal would retain the at-risk rule of present law and extend the limitation to the holding of real estate.

Analysis.—Where a taxpayer pays cash for an asset, the CCRS system clearly contemplates allowing recovery deductions that are greater in nominal dollar terms than the taxpayer's initial dollar investment. Thus, the amount at risk would have to be adjusted in some manner to allow CCRS deductions attributable to inflation adjustments. Otherwise, the indexing could essentially be nullified. On the other hand, where a taxpayer obtains nonrecourse financing for the entire cost of an asset, initially, there would be no amount at risk to which inflation adjustments could be made.

In any case, it is unclear how inflation adjustments would be given effect. For example, assume a taxpayer invests \$10 cash and obtains nonrecourse financing for the balance of a \$100 investment in CCRS Class 4 property. Assume further that the investment generates \$5 of income in the first year. If the asset is placed in service on the first day of the taxable year, the recovery allowance would be \$22 (disregarding the proposed mid-month convention) \$7 of which would be disallowed under the at-risk rule. For the second year, it is unclear whether the inflation adjustment should be made with respect to \$78 (original cost less the recovery allowance determined without regard to the at-risk rules), or \$85 (the actual amount of the taxpayer's unrecovered basis).

As a further example, assume that the taxpayer in the example above obtains nonrecourse financing for the entire \$100 cost, a balloon payment of the principal amount is due at the end of five years, and the taxpayer's amount at risk is not increased otherwise. When the principal is repaid and the taxpayer becomes at risk, it is unclear whether previously disallowed depreciation allowances would be indexed for the effects of inflation in prior years. Consideration could be given to whether protecting the value of disallowed depreciation deductions against inflation would reduce the effectiveness of the at-risk rules.

Interaction with leveraged lease guidelines

The Administration proposal does not address the application of Internal Revenue Service ruling guidelines for determining whether a transaction is treated as a lease or as a financing arrangement (Rev. Proc. 75-21, 1975-1 C.B. 715 and Rev. Proc. 75-28, 1975-1 C.B. 752, referred to as the "guidelines"). The proposal to make inflation adjustments to the basis of depreciable property raises a question about whether the guidelines should be applied by taking inflation into account.

Capital cost recovery deductions are allowed only to the person who is treated as owning the property for Federal income tax purposes. Certain lease transactions present the issue whether the transaction is more akin to a sale or financing arrangement than a true lease. The rules for determining the ownership of property for tax purposes focus on the economic substance of a transaction, not

its form. Thus, in a transaction structured as a lease, the nominal lessor must show that he possesses meaningful burdens and benefits of ownership. The Internal Revenue Service issued the guidelines to give taxpayers guidance in structuring leveraged leases (generally, leases in which the property is financed by a nonrecourse loan from a third party) of equipment.⁵⁹

Among the specific requirements for obtaining a ruling under the guidelines are: (1) the lessor must maintain a 20-percent minimum at-risk investment in the property throughout the lease term, and (2) the lessor must expect to receive a profit and have a positive cash flow from the transaction independent of tax benefits. Under present law, the determination of whether these requirements are met is made in nominal dollar terms (i.e., inflation is disregarded). Some would argue that the requirements of the guidelines should be measured by taking inflation into account, particularly if a lessor's depreciation deductions are indexed for inflation.

Inflation adjustments where basis is redetermined

There are a variety of circumstances under present law where the basis of depreciable property is increased or decreased in a taxable year subsequent to the year an asset is placed in service. For example, the basis of depreciable property may be reduced pursuant to section 1017 as the result of an election to defer the recognition of income from the discharge of indebtedness. The basis of depreciable property could also be adjusted by application of the statutory rules that apply where depreciable property is acquired in exchange for a debt instrument and the interest rate on the debt instrument is inadequate, as described below. Apart from proposed Treasury regulations, present law provides little guidance regarding the recovery of an increase or decrease in an asset's basis. Under the proposed regulations, an increase or decrease in depreciable basis would be accounted for over the ACRS recovery period remaining on the date of the adjustment to basis (Treas. reg. sec. 1.168-2)(d)(3)).

The Administration proposal does not specify the treatment of inflation adjustments in cases where basis is redetermined. Some have suggested that the amount of an increase in basis should itself be adjusted for inflation that occurred in years after the asset was placed in service but before the redetermination. Others point out that that approach would be inappropriate, to the extent that a contingent payment was set by taking the effects of inflation into account.

Deferred property sales providing for contingent payments.—If a taxpayer acquires depreciable property in exchange for a debt instrument, the principal amount of the debt determines the taxpayer's depreciable basis in the property. In such cases, if the stated interest rate on the debt instrument is inadequate, section 1274 could apply to recharacterize a portion of the principal amount as interest. The applicable statute does not provide rules for the treat-

⁵⁹ By their terms, the guidelines do not represent a definitive statement of applicable legal principles and were not intended for use in audits. On the other hand, if the requirements of the guidelines are met, and the facts and circumstances do not indicate a contrary result, the Internal Revenue Service generally issues an advance letter ruling that the transaction is a lease and the lessor will be treated as the owner for tax purposes.

ment of debt instruments that provide for contingent payments of interest or principal. Although the Treasury Department is authorized to issue regulations dealing with contingent payments, no regulations have been issued yet. Conceivably, for example, a taxpayer who acquires depreciable property in exchange for a contingent-interest obligation could be required to make annual adjustments to the principal amount of the debt, with the result that the depreciable basis of the acquired property would also change.⁶⁰

Application of different cost recovery system for certain purposes

Like ACRS, CCRS would be inapplicable where incentive depreciation is not intended. Thus, it would be necessary to supplement CCRS by providing a second cost recovery system, for purposes of (1) recovering the cost of foreign-use property, (2) computing the earnings and profits of a domestic or foreign corporation, and (3) applying alternative minimum tax provisions.⁶¹ The staff is informed by the Treasury Department that similar treatment would be accorded to (1) tax-exempt use property, and (2) investment property (for purposes of applying the limitations on the deductibility of investment interest). No provision is made for property financed by tax-exempt industrial development bonds, presumably because another provision of the Administration proposal would repeal the tax-exempt status of such bonds.

The Administration proposal indicates that depreciation deductions for ineligible property would be computed under a method that approximates the results of economic depreciation. Although no specific method is recommended, the Administration proposal indicates that the depreciation system set forth in the 1984 Treasury report ("RCRS") would serve as the model for the proposed economic depreciation method. Under RCRS, the inflation-adjusted cost of tangible property would be recovered over periods ranging from five years for short-lived property to 63 years for real property. As under CCRS, assets would be assigned to RCRS recovery classes on the basis of the Hulten-Wyckoff studies. Each RCRS class would be assigned an invariant depreciation rate for application to the indexed basis of an asset, except full recovery of remaining basis would be allowed in the final year of the recovery period.

Analysis

Tax-exempt use property.—A switch from present-law rules for depreciating tax-exempt use property to RCRS would increase the value of recovery deductions for virtually all types of depreciable property. The increase would be significant in many cases. This conclusion is based on comparison of the first-year equivalent of deductions allowed under current rules and RCRS. The first-year equivalent deduction is the present discounted value of the stream of deductions allowed for a \$1 investment in an asset; in other words, it is the amount which, if allowed as a single deduction in the year that a taxpayer acquires an asset, is economically equiva-

⁶⁰ See Treas. reg. sec. 1.483-1(e)(2) (which provided a comparable result under prior law rules).

⁶¹ Another provision in the Administration proposal would revise the alternative minimum tax applicable to individuals and substitute an alternative minimum tax for the "add-on" minimum tax that applies to corporations under present law.

lent to the many deductions actually allowed over many years. As an example, the first-year equivalent deduction for recovering the cost of a bus under the current tax-exempt leasing rules is 72 cents per \$1 of cost; under RCRS, it would rise to 89 cents. As a second example, the first-year equivalent deduction for structures would rise from 31 cents to 44 cents.⁶²

Foreign-use property.—A switch from present-law rules for depreciating foreign-use property to RCRS would in many cases increase cost recovery benefits for property used predominantly outside the United States. examples of the potential increase in first-year equivalent deductions include: for computers, from 85 cents per \$1 of investment under present law to 89 cents under RCRS; for commercial aircraft, from 72 cents to 85 cents; and for structures, from 39 cents to 44 cents.

Computation of earnings and profits.—The value of RCRS deductions would be greater than the depreciation allowances computed under the present law rules for calculating earnings and profits of domestic corporations. For example, the first-year equivalent deduction of amounts computed for earnings and profits purposes with respect to long-lived public utility property would increase from 44 cents (if in the 10-year ACRS class) or 35 cents (if in the 15-year ACRS class) per \$1 of cost to 58 cents under RCRS. Thus, the Administration proposal could facilitate the distribution of tax-free dividends, since the extent to which a distribution is treated as a taxable dividend is limited by the amount of earnings and profits. The acceleration of depreciation allowances for purposes of computing earnings and profits would also affect the operation of other statutory provisions. For example, in the case of an elective one-month liquidation governed by section 333, a qualified electing shareholder recognizes gain only to the extent of the greater of the corporation's earnings and profits or the amount of cash and stock or securities distributed. Further, the application of the proposed rule to foreign corporations could have a significant impact on (1) the amount of income currently taxed to certain U.S. shareholders of controlled foreign corporations (secs. 951-964), since the constructive dividends are limited to the amount of current earnings and profits, (2) the allowability of indirect foreign tax credits associated with dividends received from foreign subsidiary corporations because the reduction of earnings and profits would increase the allowable credit (secs. 902-960), and (3) the amount of gain recharacterized as a dividend on disposition of stock in a controlled foreign corporation, since dividend treatment is limited by the amount of earnings and profits (sec. 1248), to name a few areas. Consideration could be given to whether it is appropriate to effect reductions in earnings and profits for purposes of every statutory provision that takes earnings and profits into account.

⁶² These and other computations in the following paragraphs assume a 4-percent real after-tax discount rate, a 4-percent inflation rate, and an 8-percent after-tax nominal discount rate. These assumptions are discussed under "Measurement of Investment Incentives," in part III.D. below. The increased benefit cited in the text would be greater if the inflation and nominal discount rates were higher than have been assumed.

Vintage accounts

Taxpayers would generally account for CCRS property on an asset-by-asset basis. The Administration proposal indicates that mass asset vintage accounts would be retained for property qualifying for such treatment under ACRS.

Analysis

It is unclear whether the "vintage" of an account would be determined by reference to the year in which assets are placed in service, or, in view of the mid-month convention, the month *and* year. A special accounting procedure would be required to take account of the mid-month convention, which would appear to detract from the purpose of simplification. In addition, if the Administration proposal contemplates applying the rule for prorated inflation-adjustments to property that is disposed of before the cost has been fully written off, it may be necessary to require taxpayers to augment CCRS vintage accounts by asset-by-asset accounts. Alternatively, all proceeds from sale of property from a vintage account could be treated as ordinary income, and the property's unrecovered basis could remain in the account (subject to indexation).

Consideration could be given to expanding the definition of property that is eligible for inclusion in a mass asset vintage account. The current limitations on the ability to establish vintage accounts, as proposed in Treasury regulations, arose from a concern about the mechanics of recapturing investment tax credits on dispositions of property from an account. To facilitate the application of the investment credit rules without the requirement that individual assets be identified, the proposed regulations provide mortality dispersion tables that cannot easily be applied to diverse assets. In view of the Administration proposal to repeal the investment tax credit, the primary reason for restricting a taxpayer's ability to establish vintage accounts would be set aside.

Open-ended accounts

Under an asset-by-asset approach, taxpayers would still be required to keep track of the basis of individual assets. The Administration proposal indicates that consideration will be given to simplifying taxpayer accounting by permitting an election to maintain "open accounts" for certain classes of CCRS property.

Analysis

One option for consideration is the "open-ended account" system that was approved by the Senate Finance Committee in 1980 (and included in the Finance Committee amendment to H.R. 5829, 96th Congress). More recently, the House Ways and Means Committee approved an open-ended account system for public utilities in 1981 (included in H.R. 4242, 97th Congress). An open-ended account system is also included as part of the depreciation proposal in the Bradley-Gephardt bill.

Under an open-ended account system, a taxpayer would establish permanent accounts for tangible personal property. All property in the same recovery class would be accounted for in one account, regardless of the year placed in service. This would collapse a multi-

tude of otherwise vintage or item accounts to a much smaller number, with commensurate simplification. On placing an asset in service, the taxpayer would add its cost to the appropriate account balance. If indexing is desired, account balances could be increased annually by the rate of inflation. On sale of an item from an account, no gain or loss would be recognized, but the balance of the account would be reduced by the amount realized (resulting in a corresponding reduction in future depreciation deductions). If the amount realized on a disposition reduced the balance to a negative amount, ordinary income would be recognized.

Lessee leasehold improvements

The cost of leasehold improvements made by a lessee generally would be recovered over the CCRS recovery period applicable to the property, without regard to the term of the lease. On termination of the lease, the lessee would compute gain or loss by reference to the adjusted basis of the improvement at that time.

Although the Administration proposal contains a statement that a lessee would be permitted to use a different depreciation rate if the leasehold improvement is reasonably expected to have no residual value on expiration of the lease, the staff is informed by the Treasury Department that no such special rule would be provided.

Analysis

A case in which a leasehold improvement is not expected to have a residual value on expiration of the lease would seem to be the case in which a lessee should recover its costs under the general rules, since the lessee would bear the risk of depreciation in the property's value. In any case, as described more fully below, the application of the general rules to a lessee's leasehold improvement would reduce the potential for tax avoidance transactions.

As indicated above, capital cost recovery deductions are allowed to the person who is treated as owning the property for Federal income tax purposes. Further, a taxpayer is entitled to depreciation deductions only with respect to actual capital expenditures. Thus, if the owner of property makes a capital improvement and then leases it, the owner-lessor is entitled to ACRS deductions. The following discussion focuses on the tax consequences where a lessee makes a capital improvement.

Treatment of lessee.—Under pre-1981 Act law, if the lessee of property made an improvement, the lessee was entitled to depreciation deductions if the lease term exceeded the asset's useful life (Treas. reg. sec. 1.167(a)-4). Essentially, the lessee was treated as the tax owner of the property because the lessor did not bear the risk of depreciation in the property's value. On the other hand, if the improvement's useful life exceeded the remaining lease term, the lessee recovered its capital costs by amortization deductions (in lieu of depreciation deductions) (Treas. reg. sec. 1.162-11(b)). In the latter case, the lessee's capital expenditure was treated as an ordinary business expense and allocated over the period to which the expense was related (i.e., the lease term).

Under ACRS, lessees are permitted to recover capital expenditures over the shorter of the lease term or the ACRS recovery period (Prop. Treas. reg. sec. 1.168-5(d)(1)). This treatment is viewed

as consistent with the design of ACRS to permit taxpayers to recover capital costs over periods that are substantially shorter than the useful lives of assets. The lessee is treated as the tax owner of an improvement where the lease term exceeds the ACRS recovery period, but is limited to amortization deductions (in lieu of ACRS deductions) where the ACRS recovery period exceeds the lease term. In either case, having made no investment, the lessor is precluded from taking depreciation deductions with respect to capital costs incurred by the lessee.

The Administration proposal, as clarified by the Treasury Department, would treat a lessee who makes a leasehold improvement as the tax owner in every case.

Treatment of lessor.—Where the lease term extends beyond the economic life of a lessee's improvement, the residual value of the improvement vests in the lessor. Originally, the Internal Revenue Service took the position that the residual value should be included in the lessor's income as prepaid rent on completion of the improvement, and the lessor should depreciate the amount over the remaining lease term. Although this treatment may be sound from an economic perspective, the U.S. Supreme Court held that the residual value of a lessee's improvement should not be treated as rental accruing over the lease term.⁶³ In that case, the court held that the lessor had not realized any income, although there was an alternative ground for decision because the government failed to establish the amount of the residual value.

In a later case, where a lessee's improvement vested in the lessor on termination of the lease, the U.S. Supreme Court held that the residual value of the improvement was includible in the lessor's gross income.⁶⁴ Under this case, the lessor would obtain a tax basis for the improvement on termination of the lease, which basis could be depreciated thereafter. Sections 109 and 1019 reverse the results obtained under the case law: the enhancement in the value of the lessor's property is not taxed, and the lessor's basis for the improvement on termination of the lease is zero. This treatment is tantamount to expensing (i.e., deducting the full cost of an investment in the year when the investment is made) by the lessor.

Potential for tax avoidance.—Because the statutory rules for the treatment of lessors do not correspond to the economic effect of a leasing transaction in which the lessor receives the residual value of a lessee's improvement, these rules provide a basis for tax avoidance transactions. For this reason, the rule that permits a lessee to recover costs over the lease term was made inapplicable to cases in which the lessee and lessor are related parties. The concern was that lessors would attempt to achieve the effect of expensing with respect to capital improvements, by having lessees make long-lived improvements in lieu of making rental payments. In such a case, the lessee could be compensated by the combination of lower cash rentals and amortization deductions, and the lessor would avoid the recognition of "prepaid" rentals in the form of improvements.

The treatment of lessors under section 109 is defended on several grounds: (1) the treatment of improvements as prepaid rentals ac-

⁶³ See *M.E. Blatt Co. v. United States*, 305 U.S. 267 (1938).

⁶⁴ *Helvering v. Bruun*, 309 U.S. 461 (1940).

cruing over the lease term would present administrative difficulties in valuing such improvements, (2) arguably, it would be unfair to tax a lessor on the residual value of an improvement that the lessor did not require and has no use for, and (3) on termination of a lease, questions would arise regarding the proper valuation of the improvement (e.g., whether the property's value should be determined by reference to its value in the hands of the lessor or under a more objective standard). Given the treatment of lessors, at the least, lessees should be treated in a manner that would reduce the potential for tax avoidance. The indicated treatment is to apply the general rules to a lessee's leasehold improvements. In this manner, the tax cost to lessees would be comparable to that of other property owners who make capital expenditures, and the incentive to engage in a tax avoidance transaction would be reduced (although the treatment of lessors would still amount to expensing of the residual value).

Another problem area under present law involves the determination of whether the term of a lease includes periods covered by renewal options exercisable by the lessee. The concern here is that lessees could attempt to accelerate the recovery of capital costs by leasing the improved property for a short term initially, amortizing the costs over the short original term, and then renewing the lease pursuant to an option. The present law rules for making the relevant determination are subject to abuse because they apply subjective standards. The application of the general rules to a lessee's leasehold improvements would avoid the need for subjective tests of the probability of renewal.

Repair allowance

The present law distinction between capital expenditures and deductible repairs would be retained; however, each CCRS class would be assigned a safe-harbor repair allowance factor (under a procedure similar to the treatment of repairs under the prior-law ADR system). A taxpayer would deduct expenses incurred after an asset is placed in service, to the extent such expenses do not exceed the product of the asset's unrecovered inflation-adjusted basis and the repair allowance factor. The Administration proposal does not specify how large the repair allowance factors would be.

Analysis

Unlike the ADR system, the CCRS repair allowance factor would be mandatory. Thus, taxpayers would automatically expense costs that might be capitalized otherwise.

The CCRS repair allowance factor is intended to reduce disputes between the Internal Revenue Service and taxpayers about whether expenditures are currently deductible repairs or capital expenditures. If the CCRS repair allowance factors are negligible, the disputes would continue. On the other hand, if the CCRS repair allowance factors are too generous, taxpayers would be able to take current deductions for certain expenses that are clearly capital expenditures.

Another issue presented relates to the manner in which the CCRS repair allowance factors would be computed. Under prior law, repair allowance factors were determined by the repair experi-

ence of an industry or sub-industry group. Because the CCRS classifications are based on asset descriptions, it is unclear how a repair allowance factor would be computed with respect to the broad classes of assets under CCRS.

Presumably, as under prior law, taxpayers would be required to maintain books and records that identify repair expenditures relating to specific classes of CCRS property, allocate to specific classes the expenditures relating to properties in two or more classes, and identify expenditures for excluded additions. Thus, the application of a repair allowance factor would introduce additional complexity.

Public utility property

CCRS would not prescribe a special class for property used by regulated public utilities. Thus, regulated utilities would depreciate long-lived assets on the same basis as unregulated utilities. Normalization rules comparable to those under ACRS would be provided.

Analysis

Some would argue that it is inappropriate to provide incentive depreciation to regulated utilities that do not compete with unregulated companies and are guaranteed a rate of return on their investments.

Proponents of reducing the difference between depreciation allowances for public utilities and other taxpayers point out that regulated companies encounter the same problems as unregulated companies in raising capital for modernization and expansion. Thus, it is argued that CCRS should be available to reduce the cost of capital to regulated utilities. It is also argued that normalization should be retained to insure that the deferred taxes derived from accelerated depreciation are available to utilities as investment capital, rather than being flowed through to customers.

Mixed-use property

CCRS would apply to property that is used for personal purposes as well as business purposes (e.g., automobiles). In general, depreciation deductions for eligible mixed-use property are allowed for the portion of the property's basis that is attributable to business use; it does not appear that the Administration proposal would alter this general treatment. The Administration proposal contemplates that the business-use portion of the basis of such mixed-use property would be indexed for inflation, but the personal-use portion of the basis would not be eligible for indexing until 1991. Furthermore, on disposition of mixed-use property, gain attributable to the business-use portion would be taxed as ordinary income, while gain on the personal-use portion would be treated as capital gain.

Analysis

For taxpayers whose business use varies over time, indexing of depreciable basis would require more complicated recordkeeping than is required under present law. Where the percentage of personal use varies from year to year, the recordkeeping of basis would be complicated by the fact that the basis of the personal use portion would not be indexed until 1991. Likewise, if the property

is sold, it is unclear what percentage would be entitled to capital gain, and whether a taxpayer could benefit both from indexing and then capital gains treatment by converting a business asset to a capital asset prior to sale.

Expensing

The present law provision that permits taxpayers to expense up to \$5,000 of the cost of personal property would be retained. The scheduled increases in the ceiling to \$10,000 would be repealed.

Analysis

The Administration proposal includes the following arguments against retaining the provision to expense up to \$5,000 of the cost of personal property. It notes that this provision, apart from measuring income, creates no marginal investment incentive for taxpayers whose capital expenditures exceed the limit, but does create compliance problems. The compliance problems arise when a taxpayer, having expensed an asset, converts the asset to personal use or sells it without complying with present-law recapture rules.

Nevertheless, the Administration proposal adopts the view that a limited expensing election would have simplification advantages in that small businesses would be able to eliminate or reduce record-keeping. The Administration proposal would not limit the option to small businesses generally, or to taxpayers who would be spared any depreciation computation by virtue of this option. Opportunities for tax avoidance, similar to those under present law, would appear to remain.

The Bradley-Gephardt bill would repeal this election to expense depreciable personal property.

Effective date and transitional rules

CCRS would be effective for property placed in service on or after January 1, 1986. Under rules similar to the rules enacted as part of ACRS but not yet specified, taxpayers would be prevented from bringing property placed in service before the effective date under CCRS by certain post effective date transactions (i.e., "churning" transactions). In general, churning transactions include those in which either the owner or the user of property before the effective date (or a related party) is the owner or user immediately after the transaction. In general, taxpayers who place assets in service before the effective date would continue to compute depreciation deductions for them under ACRS.

Analysis

The Administration proposal indicates that CCRS generally would be more favorable to taxpayers than ACRS at projected inflation rates. Any acceleration of capital cost recovery for purchases of used property would create the risk that existing assets will be sold for the sole purpose of realizing tax benefits. Simply making CCRS inapplicable to property in existence on the effective date would be difficult to administer because taxpayers who purchase used property after such date might be unable to determine when the property was originally placed in service. Thus, for exam-

ple, the ACRS anti-churning rules generally were limited to cases of sale-leasebacks, sales between related parties, and transactions involving nonrecognition of gain.

C. Recapture of Excess Accelerated Depreciation Deductions

Rationale

The Administration proposal includes a substantial reduction in corporate and individual tax rates effective as of July 1, 1986. The proposed recapture rule is intended to prevent taxpayers who deferred tax liability by taking accelerated depreciation at present-law rates from obtaining a windfall by paying the deferred taxes at lower post-enactment tax rates. Taxing 40 percent of excess depreciation at the post-enactment maximum corporate rate of 33 percent is intended to have the effect of taxing excess depreciation deductions allowed during the test period (described below) at a rate of 13 percent (i.e., the differential between the 46-percent maximum corporate tax rate of present law and the proposed 33-percent rate).

Analysis

There are other instances in which taxpayers who deferred tax liability at present law rates would benefit from the proposed rate reduction (e.g., where a taxpayer uses the completed contract method of accounting for income or loss from long-term contracts and the resulting tax liability is deferred until after enactment). Nevertheless, the Administration's proposal imposes a recapture tax only on taxpayers who deferred tax liability by use of accelerated depreciation deductions.

Further, a taxpayer who defers tax liability by taking accelerated depreciation deductions would normally pay the tax liability only when, and as, the investment either produces taxable income or is disposed of at a gain. Thus, it is argued that, if the taxpayer's legitimate expectations at the time the investment was made are not to be disrupted, the income inclusions required by the Administration's proposal should be deferred until the time when the economic depreciation allowance from the investment would exceed the accelerated depreciation allowance (i.e., when the deferred tax liability would be paid).

More generally, commentators have noted that there are other options available that would address the windfall effect of lowering tax rates. For example, a phasing-in of lower tax rates would reduce the amount of the windfall that occurs in the first place.

Computation of excess depreciation

A portion of depreciation deductions taken between January 1, 1980, and July 1, 1986, would be included in income over a three-year period.

The aggregate amount includible in income ("excess depreciation") would be determined by, first, computing the excess of (1) cumulative depreciation deductions for the period, over (2) the

amount that would have been allowed if the taxpayer had computed the deductions using the straight-line method over the recovery period required to be used for purposes of computing the earnings and profits of domestic corporations. Forty percent of the excess depreciation would be included in income according to the following schedule: 12 percent in 1986; 12 percent in 1987; and 16 percent in 1988.

Under a *de minimis* rule, the recapture provision would be inapplicable to a taxpayer whose total depreciation deductions for the period January 1, 1980, through December 31, 1985, are less than \$400,000. For taxpayers whose depreciation deductions for the relevant period total \$400,000 or more, the first \$300,000 of excess depreciation would be exempt.

Excess depreciation would be reduced by net operating losses carried forward from years prior to 1986; these losses would continue to be available for purposes of computing taxable income. The treatment of net operating losses would generally produce the result that the provision would not apply to taxpayers with large losses who did not benefit from deferral at the present-law rates, and would use net operating loss carryovers only at the lower post-enactment rates.

In the case of partnerships, S corporations, or other pass-through entities, the proposed recapture rule would apply at the partner, shareholder, or beneficiary level, as the case may be. Thus, the \$400,000 *de minimis* rule and the \$300,000 exemption would be applied by looking to deductions claimed by the beneficial owners of pass-through entities, not at the entity level. Amounts included in income that are attributable to foreign-use property would be treated as foreign-source income.

Analysis

Effect of "blended rate".—Depreciation deductions for the 1986 calendar year would offset income that would otherwise be taxed at a "blended" tax rate (reflecting the present law rates for the first half of the year, and the lower post-enactment rates for the second half). Thus, for example, a calendar-year taxpayer who claims an ACRS deduction for 1986, would not benefit from the deferral of tax liability for that year to the same extent as it would from a deduction taken at present law rates. Also, a taxpayer who includes 12 percent of excess depreciation in income in 1986 would be taxed at a blended rate that is higher than the 33 percent rate contemplated by the recapture proposal. Apparently, the Administration's proposal would apply the recapture rule without regard to the statutory tax rate in effect when the tax liability was deferred.

Measure of excess depreciation.—The Administration proposal indicates that depreciation as computed for purposes of measuring earnings and profits was chosen as a proxy for actual depreciation "primarily for convenience, since most of the taxpayers subject to the proposal would be corporations that are currently required to [make this computation]." Because property as diverse as aircraft and computers are treated as having the same useful life of 12 years for purposes of computing earnings and profits, the proposed measure may not be the best available choice. Another standard of measure, which Congress enacted in 1984, is depreciation as com-

puted under the provisions that reduce depreciation deductions for property that is leased to tax-exempt entities. Under the latter standard, depreciation deductions would be computed using a straight-line method over a recovery period equal to the ADR midpoint life for personal property (12 years for personal property that did not have a midpoint life), and 40 years for real property.

Effective date

The proposed recapture rule would apply to all property placed in service on or after January 1, 1980, and before January 1, 1986, for which depreciation or amortization deductions were allowable under current law for any part of the period January 1, 1980, through June 30, 1986.

Analysis

The Administration proposal does not make clear whether the proposed recapture rule would apply to a taxpayer who acquired property on or after January 1, 1980, but disposes of the property in a taxable transaction before January 1, 1986. In the case of personal property, the current recapture rules would apply, and previously allowed depreciation deductions would be "recaptured" as ordinary income to the extent of gain on the sale. Thus, the taxpayer's deferred tax liability would be paid at present law rates. Because the Administration proposal is intended to apply to taxpayers with deferred tax liabilities as of July 1, 1986, it would not be appropriate to apply the proposed rule where personal property was transferred in a taxable exchange prior to that date.⁶⁵ Consistent with this view, the Administration proposal contains special rules for certain dispositions before July 1, 1986 (described below), which rules appear to be premised on the conclusion that a disposition before July 1, 1986, would relieve the taxpayer of liability under the proposed rule.

On the other hand, the Administration proposal contemplates that special rules will be developed to prevent avoidance of the proposed recapture rule. As an example, the Administration proposal indicates that special rules might apply to dispositions of real property before July 1, 1986, where the gain attributable to "excess depreciation" is not fully subject to recapture under present law, although no specific proposal is made. The current recapture rule is inapplicable where the straight-line method was used to recover the cost of real property. Further, in the case of residential real property, recapture is limited to the excess of the deductions taken under the prescribed accelerated method over what would have been allowed had the straight-line method been used. Under the Administration proposal, however, a recapture tax would apply to 40 percent of all excess depreciation deductions taken with respect to real property, but only if such property is held on July 1, 1986, or transferred in a nonrecognition exchange prior to that date. It is unclear whether a taxpayer who recovered the cost of real property using the straight-line method, and disposed of the property before the effective date, should be subject to the recapture rule. In such a

⁶⁵ Of course, a recapture tax would only be imposed at a "blended rate," not at present law rates, if property is disposed of on or after January 1, 1986, and before July 1, 1986.

case, any windfall obtained by the taxpayer would not result from the proposed rate reduction, but would flow from present law rules.

Dispositions before July 1, 1986

Transfers of property before July 1, 1986, in transactions where gain was not recognized would be disregarded in computing the transferor's liability under the proposed recapture rule. Similar rules would be provided for transfers to related parties, with appropriate adjustments for income recognized on the transfer. No disposition of property after July 30, 1986 would relieve the transferor of liability under the recapture rule, since such liability would be calculated as of that date.

Analysis

The special rules for the treatment of nonrecognition exchanges and sales to related parties presuppose that a disposition of property before July 1, 1986, would relieve a taxpayer of liability otherwise. Under the Administration proposal, excess depreciation deductions taken by the transferor in a nonrecognition exchange, or a related-party sale, would not be included in the transferee's income. Rather, the excess depreciation would be recaptured on the transferor's income tax return. Thus, in this instance, the recapture rule would be applied to the taxpayer whose tax liability was deferred.⁶⁶ The Administration proposal does not indicate how this rule would apply where the transferor in a nonrecognition exchange goes out of existence before July 1, 1986 (e.g., where assets were transferred in a reorganization described in section 368(a)(1)(C)).

The Administration proposal does not address an analogous situation involving the taxable disposition of stock in a corporation that joined the transferor in the filing of a consolidated income tax return. In such a case, the present law recapture rules generally have no application and the transferred corporation's asset basis would be unchanged, unless an election to treat the stock acquisition as a direct purchase of assets were made. If the transferred corporation were to join the acquiring corporation in the filing of a consolidated income tax return, apparently, the Administration proposal would require the entire amount of excess depreciation to be included in the transferee's consolidated return, even though the transferee did not benefit from accelerated depreciation deductions taken prior to the acquisition. While a transferred corporation's stock would probably be priced by taking the present law recapture rules into account, prior to the publication of the Administration's recapture proposal, parties to acquisitions had no reason to expect an acceleration of tax liability attributable to excess depreciation deductions.

Others argue that the separate identity of each member of a consolidated group of corporations should be respected, and that the

⁶⁶ Note that taxpayers are able to circumvent the present law recapture rule (which generally characterizes gain on the disposition of depreciable property as ordinary income to the extent of previously allowed depreciation deductions), by transferring depreciable property in nonrecognition exchanges. For example, a taxpayer can transfer depreciable property to an 80-percent controlled corporation with net operating losses that completely offset the recapture tax liability (sec. 1245(b)). The Administration's recapture proposal would prevent this type of tax avoidance.

recapture tax should only be imposed on the corporation that claimed the excess depreciation and recorded the deferred taxes (attributable to the excess of accelerated depreciation over actual depreciation) as a liability.

D. Regular Investment Tax Credit

Present Law and Background

A credit against income tax liability is allowed for up to 10 percent of a taxpayer's investment in certain tangible depreciable property (generally, not including buildings or their structural components) (secs. 38 and 46). The amount of the regular investment credit is based on the ACRS recovery class to which the property is assigned. The 10-percent credit is allowed for eligible property in the five-year, 10-year, or 15-year public utility property class. Three-year ACRS property is eligible for a six-percent regular credit (even if the taxpayer elects to use a longer recovery period). The maximum amount of a taxpayer's investment in used property that is eligible for the regular investment credit is \$125,000 per year; the limitation on used property is scheduled to increase to \$150,000 for taxable years beginning after 1987.

The amount of income tax liability that can be reduced by investment tax credits in any year is limited to \$25,000 plus 85 percent of the liability in excess of \$25,000 (sec. 38(c)). Unused credits for a taxable year can be carried back to each of the three preceding taxable years and then carried forward to each of the 15 following taxable years (sec. 39).

The regular investment tax credit was originally adopted in 1962. Congress suspended the credit from October 10, 1966 to March 9, 1967. The credit was restored in 1967. In 1969, however, Congress terminated the investment credit again, largely because of inflationary pressures. Congress felt that the investment credit made anti-inflationary policies, such as tight money, budget surpluses, and higher taxes, less effective. Congress reinstated the investment credit in 1971.

Public utility property is eligible for the regular investment credit only if the tax benefits of the credit are normalized in setting rates charged by the utility to customers and in reflecting operating results in regulated books of account (sec. 46(f)). The investment credit will be denied for public utility property if the regulatory commission's treatment of the credit results in benefits being flowed through to customers more rapidly than under either (1) the ratable flow-through method or (2) the rate base reduction method.

Under the ratable flow-through method, utilities pass through to customers a *pro rata* portion of the credit during each year of the useful life of the asset. The regulatory commission, however, may not require that the utility reduce its rate base by the amount of the credit. Therefore, even though the credit itself is flowed through to customers over the life of the asset, the utility's shareholders are allowed to earn a return on the 10 percent of the cost of the equipment which has, in effect, been supplied by the Federal Government through the regular investment credit.

Under the rate base reduction method, the utility's rate base is reduced by the amount of the credit, so that the shareholders are prevented from earning a return on that part of the cost of the equipment which is, in effect, paid for by the credit. Under this method, the regulatory commission may not require that the utility flow through to customers any part of the credit itself, and it must allow the utility to charge customers for the depreciation expense on the entire cost of the equipment, including the part paid for by the investment credit.

Administration Proposal

The regular investment tax credit would be repealed effective for property placed in service on or after January 1, 1986.

Normalization rules would be retained for the unamortized portion of investment tax credits allowed to public utilities.

Analysis

The investment tax credit is one mechanism for providing investment incentives. A discussion relating to the measurement of investment incentives is included in part III.E., below. This discussion focuses on certain issues presented by the proposal to repeal the investment tax credit.

Carryforwards of unused credits

Under the Administration proposal, taxpayers would be allowed to carry forward some amount of unused credits to reduce tax in years when the lower marginal tax rates of the Administration proposals are in effect. It is uncertain whether the credits carried forward would be adjusted so that the carryforward shields no more income from tax than it would under present law. For example, a \$1 million credit shields about \$2.2 million of income from tax when the maximum tax rate is 46 percent; the same amount, if carried forward to a year when the top rate is 33 percent, would shield about \$3 million of income.

The Bradley-Gephardt and the Kemp-Kasten bills, which would also repeal the investment tax credit, would make a one-time reduction in the amount of credits carried forward, so that carryforwards would shield the same amount of income from tax after a lowering of the rates as they would have if used under current rates. This option, if applied to the Administration proposal, would involve reducing a carryforward by an amount equal to $13/46$ of the amount that would be available otherwise. If this were done, investment tax credit carryforwards would be treated just as net operating loss carryforwards would as a result of rate reductions. On the other hand, reducing the amount of investment tax credit can be viewed as inappropriate if the credit is intended to reduce the cost of capital dollar for dollar, generally without regard to the taxpayer's statutory tax rate.

When the investment tax credit was repealed by the Tax Reform Act of 1969, Congress decided not to allow an unlimited carryover of unused credits, in order to achieve greater economic restraint and revenue. A limitation was enacted which restricted the amount of unused credit that a taxpayer could claim as carryovers in any

one year after 1968 to 20 percent of the aggregate amount of unused credits otherwise available as a carryover to the year in question.

Retention of normalization rules

The Administration proposal does not indicate how the normalization rules would be enforced. Under present law, a violation of the normalization requirement would result in the (1) retroactive disallowance of credits claimed in all open years (i.e., any taxable year with respect to which an assessment of a deficiency has not been barred), and (2) loss of eligibility to claim credits in future years during the period the regulatory commission fails to comply with the normalization requirements. Given the general three-year period of limitations, if the investment tax credit were repealed as of January 1, 1986, the last calendar year in which a credit could be claimed would close after 1988. Thus, after that year, regulatory commissions might be free to flow through the unamortized portion of credits claimed prior to repeal, since there would be no other operative penalty.

E. Measurement of Investment Incentives

One of the central issues raised by the tax reform proposals is the extent, if any, to which the depreciation system should impart special incentives for earning income from depreciable assets. Two yardsticks—the first-year equivalent deduction and the incentive depreciation index—have been developed to quantify the different recovery benefits and investment incentives associated with present law and reform proposals. The two measures are described and applied in this section.

First-Year Equivalent Deduction

Concept

The components of a recovery system—number of recovery classes, assignment of property to recovery classes, length of recovery periods, recovery methods, mid-year and mid-month conventions, amount of investment credit, and so forth—can be specified to give a great number of different combinations. Often the question is, which one of several combinations would produce the most favorable write-off of a particular asset?

The first-year equivalent deduction is useful in this regard. It is the present discounted value of the stream of deductions allowed for a \$1 investment in an asset. Thus, it is interpreted as the amount which, if allowed as a single deduction in the year that a taxpayer acquires an asset, is economically equivalent to the many deductions the taxpayer is actually allowed over many years.

Assumptions

In general, two assumptions are needed to compute a first-year equivalent deduction. The first is the value of the discount rate which represents the time value of money for the taxpayer. The second is the assumption that a taxpayer holds an asset over its entire income-earning period. In a recovery system that has an investment tax credit, it is also necessary to assume the tax bracket of the investor in order to convert the credit into a deduction of the same value as the credit. The top corporate rate (46 percent) is used for this purpose when computing first-year equivalent deductions under present law, and a 10-percent credit is thereby turned into a 21.7-percent deduction. First-year equivalent deductions under present law would be higher than those shown in this part of the pamphlet for a taxpayer whose marginal tax rate is less than 46 percent.

With respect to the discount rate, the staff has used an 8-percent after-tax rate in preparing this part of the pamphlet, although 8 percent could be criticized as being either too low or too high. Under one approach, the discount rate is formulated as the taxpayer's after-tax cost of borrowing money. For a taxpayer who can

borrow at 11 percent (the current yield on high-grade corporate bonds) and deduct 46 percent of the interest expense, the after-tax cost of financing investment with debt is about 6 percent (54 percent times 11 percent) under present law. The discount rate would be above 6 percent for taxpayers who must finance investment at higher interest rates or who face a lower marginal tax rate under present law. Under a second approach to determining a discount rate, it is argued that the cost of equity capital, not debt, is the correct starting point. While it cannot be directly observed, the cost of equity capital can be inferred from the real after-tax rate of return earned by corporations (3 percent to 6 percent) plus the expected inflation rate. In recent publications, the Treasury Department has used a 4-percent real after-tax rate of return, and inflation is projected in the Administration's 1986 budget to be about 4 percent. This approach implies the 8-percent discount rate used by the staff, but it would be higher under more pessimistic inflation assumptions. For example, the discount rate would rise to 12 percent if the inflation forecast were 8 percent rather than 4 percent.

Interpretation

The first-year equivalent deduction generally indicates which combination of recovery period and method would give the most favorable write-off of a particular asset across the various proposals. For example, the first line of Table 2 suggests that cost recovery for a car is most generous under present law (\$1.02 per \$1 of cost), followed by the Kemp-Kasten bill (\$.99), the Administration proposal (\$.95), and ACRS without an investment credit, the 1984 Treasury proposal and the Bradley-Gephardt bill (\$.92).

Two precautions should be noted in the interpretation of the first-year equivalent deduction. First, it does not necessarily indicate which proposal gives the greatest overall incentive for investing in a particular asset when proposals differ in other provisions that interact significantly with cost recovery. To illustrate with an example under present law, many real estate investors choose the straight-line method instead of the accelerated method, even though the latter method produces a higher first-year equivalent deduction (\$.60 versus \$.57), in order to avoid recapture of depreciation as ordinary income on disposition. Secondly, the first-year equivalent deduction does not necessarily indicate which of two different kinds of assets would receive the greater investment incentive. For example, the fact that first-year equivalent deductions under the Administration proposal would be \$.95 for pickup trucks and \$.94 for buses does not signify a greater incentive for investing in pickup trucks, because no account is taken of the shorter useful life of the trucks. The incentive depreciation index, described below, would generally be used for comparisons of this kind.

Application

First-year equivalent deductions computed under the stated assumptions are shown in Table 2 for present law (ACRS), present law without an investment credit (ACRS, no ITC), the Administration (CCRS) and 1984 Treasury (RCRS) proposals, and the Bradley-Gephardt (SCRS) and Kemp-Kasten (NCRS) bills. For comparative purposes, first-year equivalent deductions under the section 168(j)

rules of present law which deny accelerated depreciation for property leased to tax-exempt entities are shown in the right-most column. Examples of various kinds of equipment are arrayed according to their present class lives, beginning with cars, which have the shortest present class life (3 years), and ending with electric utility hydraulic production plants, which have the longest (50 years). Two kinds of structures are also included.

Table 2.—First-year Equivalent Deductions under Various Cost Recovery Systems ¹

[Dollars per \$1 invested]

Asset	ACRS	ACRS, no ITC	CCRS	RCRS	SCRS	NCRS	Tax- exempt
Car.....	1.02	.92	.95	.92	.92	.99	.89
Pickup truck.....	1.02	.92	.95	.92	.92	.99	.86
Information systems	1.03	.85	.94	.89	.87	.99	³ .83
Noncommercial aircraft.....	1.03	.85	.92	.85	.87	.99	.80
Construction	1.03	.85	.92	.85	.87	.99	.80
Bus.....	1.03	.85	.94	.89	.79	.99	.72
Chemical manufacture	1.03	.85	.89	.78	.79	.99	.71
Mining	1.03	.85	.92	.85	.79	.99	.70
Commerical aircraft.....	1.03	.85	.92	.85	.79	.99	.65
Paper manufacture	1.03	.85	.89	.78	.79	.99	.63
Petroleum refining.....	1.03	.85	.89	.78	.66	.99	.58
Vessels.....	1.03	.85	.85	.70	.66	.99	.54
Cement manufacture	1.03	.85	.89	.78	.66	.99	.51
Electric utility nuclear production plant92	.74	.85	.58	.66	.97	.51
Electric utility transmission.....	.82	.64	.85	.58	.55	.96	.39
Electric utility hydraulic production plant.....	.82	.64	.85	.58	.46	.96	.25
Commercial structure.....	² .60	² .60	.61	.44	.46	.95	.31
Low-income housing.....	.67	.67	.61	.44	.46	.96	.31

¹ ACRS (present law), ITC (investment tax credit), CCRS (Administration proposal), RCRS (1984 Treasury proposal), SCRS (Bradley-Gephardt bill), NCRS (Kemp-Kasten bill), tax-exempt (present law recovery applicable to property leased to tax-exempt entities).

² Assumes accelerated recovery. Estimate falls to \$0.57 if straight-line method is elected.

³ Assumes straight-line recovery applicable to longer leases.

⁴ Estimates depend on assumptions stated in text.

First-year equivalent deductions exceed \$1 for most investments in equipment under present law. This is property in the 3-year or 5-year ACRS class that is eligible for an investment tax credit. When amended in 1982, the combined benefits of ACRS and the investment credit for this property were reduced to approximate first-year equivalent deductions of \$1, using an after-tax discount rate of 10 percent, reflecting the higher interest rates prevailing at that time.

A first-year equivalent deduction equal to \$1 indicates that although the cost of an asset is recovered through the mechanics of depreciation, the economic result is as if the cost had been expensed. With respect to investment incentives, a \$1 first-year equivalent deduction or expensing for an asset implies tax exemption for income generated by a marginal investment in the asset. To illustrate, assume that a person in year 1 considers purchasing a \$100 asset that will earn \$108 of gross income in year 2 and nothing in any other year. The person, whose discount rate is 8 percent, would invest in the asset if there were no income tax, because the present value of income (\$100) is just large enough to justify the expenditure. The person would likewise invest in the asset under an income tax which allowed expensing or its present-value equivalent, since the \$100 deduction would exactly offset the present value of the income, producing no net taxable income or tax liability in present value terms. Thus, the first-year equivalent deductions which exceed \$1 under present law imply that ACRS and the investment credit now impart an incentive for persons to make more investments in those assets than they would if there were no income tax.

Relative to present law, first-year equivalent deductions for equipment would generally be lower under the Administration proposal, reflecting the proposed repeal of the investment tax credit and substitution of CCRS for ACRS. The exception is very long-lived equipment in the 15-year public utility class under ACRS, for which CCRS would provide a more favorable write-off (\$.85) than does ACRS and the investment credit (\$.82). The comparison for structures is mixed. CCRS recovery would be more favorable if straight-line recovery is chosen under ACRS and only slightly more favorable if accelerated recovery is chosen. CCRS recovery for low-income housing, however, would not be as favorable as ACRS recovery. With the exception of low-income housing, CCRS recovery appears more favorable than ACRS recovery and no investment credit for every kind of asset shown, as suggested by comparing the second and third columns of Table 2. These differentials would widen in times of higher inflation than assumed by these computations, because of the indexation of depreciation under CCRS.

First-year equivalent deductions under the 1984 Treasury proposal and Bradley-Gephardt bills would be lower than under present law. They reflect the proposed repeal of the investment tax credit and substitution of less accelerated depreciation systems for ACRS. As noted in an earlier section, substitution of RCRS for the current tax-exempt leasing rules would increase the first-year equivalent deduction of cost recovery allowances for property leased to tax-exempt entities.

First-year equivalent deductions under the Kemp-Kasten bill would be nearly \$1 for all types of depreciable property. Relative to present law, this would be a reduction for equipment in the 3-year and 5-year ACRS classes, an increase for long-lived public utility property, and a considerable increase for structures. These estimates reflect the proposed repeal of the investment credit and replacement of ACRS with a new depreciation system (NCRS). NCRS is designed to approximate the benefits of expensing for all new investment, assuming a 3.5-percent annual real after-tax rate of return. (The 4-percent real rate assumed for comparing the various proposals accounts for the slight deviations from \$1 in the estimates in Table 2.) This would be accomplished by allowing for any item of depreciable property NCRS deductions whose sum exceeds the cost of the property in the absence of inflation. The deductions would also be indexed for inflation to preserve the result of expensing in present value. Thus, the proposal has a depreciation system that would impart investment incentives comparable to an income tax which exempts income from depreciable assets.

The Roth-Moore bill would provide similar investment incentives for certain equipment. It would generally allow noncorporate taxpayers to expense the cost of equipment now classified as 3-year or 5-year property under ACRS. Expensing would be phased in and the investment tax credit would be phased out over 5 years under the proposal.

Incentive Depreciation Index

Concept

Interest is sometimes expressed in the questions, whether the cost recovery system of a particular proposal contains any investment incentive for a particular asset, how great is the incentive, and whether the incentive is greater for one type of asset than for another. The questions involve a comparison between the value of depreciation deductions allowed and the value of deductions that would be allowed under an incentive-free cost recovery system. The incentive depreciation index has been formulated to make this comparison. The index is 100 times the ratio of two amounts, each measured in dollars. In the numerator, the first-year equivalent of deductions that would be allowed for an asset under incentive-free depreciation is subtracted from the first-year equivalent of deductions allowed under present law or a proposal; in the denominator, it is subtracted from the asset's cost. Thus, if a proposal provides expensing or its present-value equivalent for an asset, the index value for the asset would be 100; if it provides recovery equivalent to incentive-free depreciation, the index value for the asset would be zero. Intermediate situations are represented by index values between 0 and 100, depending on how far the cost recovery system goes in permitting recovery for an asset that is more like expensing than incentive-free depreciation in present value terms for that asset.

In effect, the incentive depreciation index converts every cost recovery proposal into the same, stylized plan, according to which expensing would be allowed for a percentage of an asset's cost and

incentive-free recovery would apply to the remainder. The percentage that would be expensed in this format is the index value.

Assumptions

The assumptions needed to compute the incentive depreciation index are the same as needed to compute the first-year equivalent deduction, except the index also requires estimates of incentive-free depreciation for each asset.

The staff has used the statutory provision for incentive-free depreciation as set forth in the tax-exempt entity leasing rules of section 168(j). Congress enacted these rules in the Tax Reform Act of 1984 to respond to the very rapid growth of leasing, sale-leasebacks and similar transactions under which tax-exempt entities were using property while taxable lessors claimed accelerated depreciation deductions for it. These transactions gave tax-exempt entities indirect access to tax deductions for which they do not qualify directly, generated unintended revenue losses, and demonstrated that tax-exempt entities as lessees could in many cases have the use of property on more favorable terms than tax exemption itself if they had owned the property. Therefore, Congress provided the section 168(j) rules to deny incentive depreciation for tax-exempt use property, just as the investment tax credit since first enacted has generally been denied for such property. These rules generally provide for straight-line recovery over the present class life of an asset (40 years for structures). For a wide range of after-tax discount rates, these rules yield first-year equivalent deductions (shown in Table 2) similar to those of open-ended recovery with a constant recovery percentage computed as if the 150-percent declining balance method were used and the recovery period were the present class life of the asset.

An underestimate of incentive-free depreciation for an asset would cause the index value to show too great an incentive for investing in that asset; an overestimate would cause the index value to show too small an incentive.

Interpretation

An index value of zero for an asset suggests that a cost recovery system contains no special tax incentive for earning income from that asset: in present value terms, recovery allowances are equivalent to those that would be allowed by incentive-free depreciation. An index value of 70 suggests investment incentives comparable to allowing expensing for 70 percent of asset cost and incentive-free depreciation for the other 30 percent. An index value of 100 signifies investment incentives comparable to expensing for the entire asset.

The Administration proposal embraces the view of many economists that investment incentives, to the extent allowed, should be neutral across different kinds of assets: the incentive should be uniform in degree for every asset, so that investors' preferences for more productive assets over less productive assets are not diminished or inverted by differential incentives. Insofar as such incentives originate in the cost recovery system, their neutrality can be assessed by comparing index values for various properties. Assuming full information about what constitutes incentive-free deprecia-

tion of assets, a perfectly neutral cost recovery system would generate identical index values for all assets.

The index values shown below do not capture all of the investment incentives that may be afforded by a tax system. Thus, an index value of 80 for one asset and 40 for another does not automatically lead to the conclusion that a tax reform proposal, taken in its entirety, favors the investment in the first asset; it does indicate that the cost recovery component of the proposal favors investment in the first asset.

Application

Incentive depreciation index values computed under the stated assumptions are displayed in Table 3 for present law, ACRS without an investment tax credit, the Administration proposal and the 1984 Treasury report. The bottom line shows the average index value for all equipment (including equipment not listed in the table) under the various approaches. Table 3 is otherwise set up in the same way as Table 2.

Table 3.—Incentive Depreciation Index Values under Various Cost Recovery Systems ¹

Asset	ACRS	ACRS, no ITC	CCRS	RCRS
Car	121	24	56	28
Pickup truck.....	116	42	66	45
Information systems	117	14	64	³ 34
Noncommercial aircraft.....	115	27	59	23
Construction.....	115	27	59	23
Bus	111	48	78	60
Chemical manufacture.....	110	50	62	25
Mining.....	110	52	73	49
Commercial aircraft.....	108	58	77	56
Paper manufacture.....	108	61	70	41
Petroleum refining.....	107	66	74	48
Vessels.....	106	68	68	34
Cement manufacture.....	106	70	77	55
Electric utility nuclear production plant.....	83	46	70	15
Electric utility transmission	71	41	76	31
Electric utility hydraulic production plant.....	76	52	80	44
Commercial structure.....	² 42	² 42	44	20
Low-income housing	52	52	44	20
Average, all equipment	108	41	66	33

¹ ACRS (present law), ITC (investment tax credit), CCRS (Administration proposal), RCRS (1984 Treasury proposal).

² Assumes accelerated recovery. Estimate falls to 38 if straight-line method is elected.

³ Assumes straight-line recovery applicable to longer leases.

⁴ Estimates depend on assumptions stated in text.

As shown in the first column, the present cost recovery system imparts investment incentives for all kinds of depreciable property. They are highest for equipment in the 3-year and 5-year ACRS classes, with index values over 100 reflecting write-offs more generous than expensing in present value. Incentives for long-lived public utility property appear to go about 70 percent to 80 percent of the way beyond incentive-free treatment towards expensing. The lowest index value under present law is for commercial structures, which nevertheless indicates cost recovery benefits comparable to expensing for 40 percent of cost and incentive-free depreciation for the other 60 percent of cost.

Repeal of the investment tax credit and retention of ACRS would bring the average incentive imparted by ACRS for investment in equipment down to that for structures, and in that sense would tend to produce a more neutral pattern of incentives. However, there would be differential incentives favoring longer-lived equipment over shorter-lived equipment in the 5-year ACRS class, since the same depreciation schedule would apply to both types.

The Administration proposal would provide investment incentives for all kinds of depreciable property. For equipment, CCRS on average would generate benefits similar to treating 66 percent of an asset's cost as a current expense and 34 percent as a capital cost recoverable according to incentive-free depreciation. Investment incentives would appear to be more evenly distributed across different types of assets under CCRS than if only the investment credit were repealed, indicating a more neutral set of incentives under CCRS than under ACRS without an investment credit. The index values for structures would be somewhat lower than for equipment, although the differential would be much smaller than under present law.

Revenue Considerations

A switch from the current depreciation system to any of the proposed systems would alter the timing of depreciation deductions allowed for a given investment. Also, the aggregate amount of deductions allowed for the investment would increase due to indexing as allowed in some proposals. The Kemp-Kasten bill also would increase total deductions in the absence of inflation.

With so many factors potentially modifying the timing of deductions and, especially in later years, adding to their total, it is possible for the short-run revenue effect of switching to a new system to be dominated by transitory factors and to be quite different than the revenue effect in succeeding years. Since all of the proposals would extend recovery periods for most assets, the transitory revenue effects may wear off only gradually over an extended period.

Administration proposal

To explore the matter with respect to the Administration proposal, the staff used a simple procedure to project over many years the depreciation deductions that would be generated by ACRS and CCRS on the same amount and composition of investment. A starting mix of investment (reflecting estimates of the current mix over different types of equipment and structures) was increased at a

constant annual growth rate and deductions were tallied year by year under each depreciation system. The experiment was repeated for different growth rates, each growth rate made up of two components: an inflation component (alternatively assumed to be 4 percent or 6 percent per year) and a real or inflation-adjusted component (alternatively assumed to be 2.5, 4 or 5.5 percent per year). To put the assumptions in perspective, a real growth rate of 4 percent would be consistent with the long-run historical trend of nonresidential fixed investment; while a 2.5-percent real growth rate, as experienced between the mid-1960's and mid-1970's, would be a more pessimistic projection and a 5.5-percent rate would be more optimistic. With respect to inflation and using the GNP deflator as the price index, the Administration's 1986 budget assumes that inflation through 1990 will average 3.9 percent; over the past 20 years, inflation has averaged 5.8 percent.

The results of this procedure do not constitute revenue estimates. They do not attempt to convert deductions generated into tax savings realized. Far more elaborate procedures are needed for that task. Nevertheless, the results of this procedure do indicate, under the stated assumptions, whether CCRS would generate more or less allowable deductions than ACRS (without an investment credit) when applied to the same amount of investment.

The results are shown in Table 4. Each entry is the percentage by which CCRS deductions would fall short of ACRS deductions (a negative percentage) or exceed ACRS deductions (a positive percentage) for a given year.

Table 4.—Percentage Change in Depreciation Deductions For Switch from ACRS to CCRS

Time elapsed since CCRS first effective	Assumed inflation rate	
	4 percent	6 percent
<i>1. Assumed real growth is 2.5 percent</i>		
a. First 5 years, cumulative	-8	-6
b. Tenth year	2	6
c. Twentieth year	4	9
d. Thirtieth year	9	15
<i>2. Assumed real growth is 4 percent</i>		
a. First 5 years, cumulative	-8	-6
b. Tenth year	1	5
c. Twentieth year	3	8
d. Thirtieth year	7	13
<i>3. Assumed real growth is 5.5 percent</i>		
a. First 5 years, cumulative	-8	-6
b. Tenth year	1	5
c. Twentieth year	2	7
d. Thirtieth year	5	10

The results exhibit the same general pattern, regardless of the specific assumptions about inflation or real growth. They indicate

that in the first 5 years it is effective, CCRS would generate depreciation deductions which are about 6 to 8 percent smaller than ACRS deductions, with the largest differences occurring in the fourth and fifth years. Beginning in the seventh year (if inflation is 6 percent) or eighth year (if inflation is 4 percent) it is effective, CCRS deductions would exceed ACRS deductions year after year. This excess would generally grow in percentage terms through time until the twenty-ninth year, when it would stabilize at the figure shown in rows d of Table 4.

For example, if investment annually grows at 4 percent due to inflation and another 4 percent due to real growth, CCRS would ultimately generate annual depreciation deductions that are about 7 percent greater than ACRS deductions.

High inflation and low real growth magnify the projected differences between CCRS and ACRS. Low inflation and high real growth diminish them. The sensitivity to inflation stems from the fact that ACRS is not indexed, but CCRS would be.

Other proposals

The procedure described above was also applied to the SCRS depreciation system in the Bradley-Gephardt bill and the NCRS depreciation system in the Kemp-Kasten bill.

The computations displayed in Table 5 suggest that a switch from ACRS (without an investment credit) to SCRS would cut depreciation deductions by 11 percent over the first 5 years, even though SCRS deductions would be greater at the very outset. The percentage change would fluctuate somewhat through succeeding years, but the general pattern appears to be a stable, 9-percent to 11-percent cut in depreciation deductions in both the short and long run, regardless of specific assumptions about inflation or growth within the values tested.

The computations displayed in Table 6 indicate that in the first 5 years it is effective, NCRS would generate depreciation deductions which are about 5 to 8 percent smaller than ACRS deductions, with the largest differences occurring in the first 2 years. Beginning in the fifth year (if inflation is 6 percent) or sixth year (if inflation is 4 percent) it is effective, NCRS deductions would exceed ACRS deductions year after year. This excess would generally grow in percentage terms through time until the twenty-fifth year that NCRS is effective, when it would stabilize at the figure shown in rows d of Table 6. This pattern recurs regardless of specific assumptions about inflation or growth within the values tested.

For example, if investment annually grows at 4 percent due to inflation and another 4 percent due to real growth, NCRS would ultimately generate annual depreciation deductions that are about 27 percent greater than ACRS deductions on the same investment. As with the Administration proposal, high inflation and low real growth magnify the projected differences between NCRS and ACRS, while low inflation and high real growth diminish them.

Table 5.—Percentage Change in Depreciation Deductions For Switch from ACRS to SCRS

Time elapsed since SCRS first effective	Assumed inflation rate	
	4 percent	6 percent
<i>1. Assumed real growth is 2.5 percent</i>		
a. First 5 years, cumulative	-11	-11
b. Tenth year	-10	-11
c. Twentieth year	-10	-10
d. Thirtieth year	-9	-9
<i>2. Assumed real growth is 4 percent</i>		
a. First 5 years, cumulative	-11	-11
b. Tenth year	-11	-11
c. Twentieth year	-10	-10
d. Thirtieth year	-9	-10
<i>3. Assumed real growth is 5.5 percent</i>		
a. First 5 years, cumulative	-11	-10
b. Tenth year	-11	-11
c. Twentieth year	-10	-10
d. Thirtieth year	-10	-10

Table 6.—Percentage Change in Depreciation Deductions For Switch from ACRS to NCRS

Time elapsed since NCRS first effective	Assumed inflation rate	
	4 percent	6 percent
<i>1. Assumed real growth is 2.5 percent</i>		
a. First 5 years, cumulative	-8	-5
b. Tenth year	15	20
c. Twentieth year	25	33
d. Thirtieth year	31	38
<i>2. Assumed real growth is 4 percent</i>		
a. First 5 years, cumulative	-8	-6
b. Tenth year	14	18
c. Twentieth year	22	29
d. Thirtieth year	27	33
<i>3. Assumed real growth is 5.5 percent</i>		
a. First 5 years, cumulative	-8	-6
b. Tenth year	13	17
c. Twentieth year	20	26
d. Thirtieth year	23	29

IV. TAXATION OF ENERGY AND NATURAL RESOURCES

A. Overview

Much of the nation's energy policy is located in the Internal Revenue Code rather than in Federal outlay and regulatory programs. Tax expenditures for energy, in the form of credits and other tax preferences, are estimated to be \$5.2 billion in fiscal year 1986.⁶⁷ This is comparable to the total amount of budget authority for energy programs (\$5.1 billion) requested by the Administration in the fiscal year 1986 budget.

The Code contains provisions that influence both energy supply and energy conservation. The most significant of the energy supply provisions from the standpoint of tax revenue involve the deduction of expenses associated with the exploration, development, and depletion of fossil fuels (primarily oil, natural gas, and coal). These provisions were added soon after the adoption of the income tax.

Following the 1974 Arab oil embargo, and the economic disruption associated with the subsequent quadrupling of the price of imported oil, Congress enacted several tax credits in the Energy Tax Act of 1978⁶⁸ that were explicitly designed to reduce U.S. dependence on energy imports. These new energy tax credits were designed to encourage private expenditures both for energy conservation and for the production of nonconventional energy. Congress also provided for the gradual deregulation of natural gas prices in the Natural Gas Policy Act of 1978, and the Administration decontrolled petroleum prices between 1979 and 1981. As a result, domestic petroleum and natural gas prices are now at or near world market levels.

Primarily as a result of energy price increases and conservation measures, U.S. petroleum consumption dropped by 16.5 percent over the 1979-1984 period, and U.S. crude oil production increased by 2.7 percent.⁶⁹ The decline in consumption and the rise in production has reduced net imports of crude oil and refined products by 42 percent from 1979 to 1984. Over the 1979-1984 period, net petroleum imports have declined from 43.1 to 29.7 percent of domestic supply. In 1984, Organization of Petroleum Exporting Countries ("OPEC") supplied 12.8 percent, and Arab members of OPEC supplied only 5.1 percent, of U.S. petroleum demand.⁷⁰

⁶⁷ Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 1986-1990* (JCS-8-85), April 12, 1985.

⁶⁸ The Crude Oil Windfall Profit Tax Act of 1980 increased to 15 percent and extended through 1985 the energy investment credits for solar, wind, and geothermal equipment. The 1980 Act also added the alternative fuels production credit and the energy credits for ocean thermal, small-scale hydroelectric, and cogeneration equipment, and intercity buses. In addition, the Act provided for the expensing of injectants used in tertiary oil recovery and allowed tax-exempt industrial development bonds to be used to finance certain alternative energy facilities.

⁶⁹ U.S. Department of Energy, *Monthly Energy Review: February 1985* (May 1985), pp. 5, 7.

⁷⁰ U.S. Department of Energy, *Monthly Energy Review: February 1985* (May 1985), p. 15.

U.S. vulnerability to petroleum supply disruptions to some extent has been reduced by the establishment of a Federal strategic petroleum reserve ("SPR"). The SPR contains 465 million barrels of oil (as of April 1985), capable of replacing 100 days of net oil imports at 1984 import rates of 4.66 million barrels per day. Although the decline and diversification of U.S. petroleum imports and the expansion of the SPR provide some protection against import curtailments, a national security threat remains to the extent that Western Europe and Japan continue to be dependent on Persian Gulf oil.

Over the 1976-1983 period, U.S. oil and gas reserve additions (including natural gas liquids) gradually caught up with production. In 1976, U.S. reserve additions were only 2.9 billion barrels compared to production of 6.7 billion barrels. By 1983, reserve additions had reached 6.4 billion barrels, slightly exceeding production.⁷¹ The 131-percent increase from 1979 to 1984 in the annual rate of reserve additions was primarily the result of intensified exploration and development activity. The number of oil and gas exploratory and development wells drilled increased by 65 percent, from 49,800 in 1979 to 82,000 in 1984.⁷²

The Administration in 1981 proposed complete repeal of the residential and business energy credits. Congress allowed many of these energy tax credits to expire as scheduled on December 31, 1982, but continued the remaining credits through December 31, 1985. The Administration's tax reform proposal would allow all of the remaining energy tax credits to expire at the end of 1985 and would also reduce certain of the tax preferences for oil, gas, and mineral depletion. Some have criticized the Administration's tax reform proposal on the grounds that it undercuts national energy policy, while others contend that all energy tax preferences should be eliminated.

In evaluating the provisions of the Code affecting energy production and use, and proposed changes to these provisions, several important issues arise. First, should the Federal government attempt to influence the level and composition of private energy supply and demand, in view of national security considerations, or let free-market prices determine these decisions. Second, if national energy policy seeks to encourage certain energy production and conservation activities, is it more efficient to use direct outlay programs or tax provisions to influence the use of energy. Third, if present provisions are used to further energy policy objectives, can they be made more efficient. Fourth, to what extent do energy-related tax provisions affect the distribution of income among individual taxpayers and among regions of the country.

⁷¹ U.S. Department of Energy, *Annual Energy Review 1984* (April 1985), p. 77.

⁷² U.S. Department of Energy, *Monthly Energy Review: February 1985* (May 1985), p. 64.

B. Tax Provisions Relating To Oil And Gas Production

1. Intangible Drilling and Development Costs

Present Law and Background

General rules

Costs incurred by an operator to develop an oil or gas property for production are of two types: (1) intangible drilling and development costs, and (2) depreciable costs.

Under present law, intangible drilling and development costs ("IDCs") may be either currently expensed or capitalized and recovered through depletion or depreciation deductions (as appropriate), at the election of the operator. In general, IDCs include expenditures by the property operator incident to and necessary for the drilling of wells and the preparation of wells for the production of oil or gas (or geothermal energy) which are neither for the purchase of tangible property nor part of the acquisition price of an interest in the property.⁷³ IDCs include amounts paid for labor, fuel, repairs, hauling, supplies, etc., to clear and drain the well site, make an access road, and do such survey and geological work as is necessary to prepare for actual drilling. Other IDCs are paid or accrued by the property operator for the labor, etc., necessary to construct derricks, tanks, pipelines, and other physical structures necessary to drill the wells and prepare them for production. IDCs may be paid or accrued to drill, shoot, and clean the wells. IDCs also include amounts paid or accrued by the property operator for drilling or development work done by contractors under any form of contract.

Depreciable costs are amounts paid or accrued during the development of a property to acquire tangible property ordinarily considered to have a salvage value. For example, the costs of drilling tools, pipe, cases, tubing, engines, boilers, and machines fall into this category. This class of expenditures also includes amounts paid or accrued for wages, fuel, repairs, etc., in connection with equipment or facilities not incidental or necessary for the drilling of wells, such as structures to store or treat oil or natural gas. These expenditures must be capitalized and depreciated in the same manner as ordinary items of equipment, and they are treated the same for both independent and integrated producers.

Only persons holding an operating interest in a property are entitled to deduct IDCs. This includes an operating or working interest in any tract or parcel of oil- or gas-producing land either as a fee owner, or under a lease or any other form of contract granting working or operating rights. In general, the operating interest in

⁷³ The acquisition price for the actual oil- or gas-producing property, together with certain other costs, is recovered through depletion deductions (see discussion of depletion below).

an oil or gas property must bear the cost of developing and operating the property. The term operating interest does not include royalty interests or similar interests such as production payment rights or net profits interests.

Generally, if IDCs are not expensed, but are capitalized, they can be recovered through depletion or depreciation, as appropriate. However, if IDCs are capitalized and are paid or incurred with respect to a nonproductive well ("dry hole"), they may be deducted, at the election of the operator, as an ordinary loss in the taxable year in which the dry hole is completed. Thus, a taxpayer has the option of capitalizing IDCs for productive wells while expensing those relating to dry holes.

Twenty percent reduction for integrated producers

In the case of a corporation which is not an independent producer⁷⁴ (i.e., which is an "integrated" producer), the allowable deduction with respect to IDCs is reduced by 20 percent. The disallowed amount must be added to the basis of the property and amortized over a 36-month period, starting with the month in which the costs are paid or accrued. (These capitalized IDCs are not, however, taken into account for purposes of determining cost depletion.) Amounts paid or accrued with respect to non-productive wells (dry hole costs) remain fully deductible when the non-productive well is completed.

Recapture

If an operator elects to expense IDCs paid or accrued after 1975 and then disposes of the oil, gas, or geothermal property, a portion of the expensed IDCs must be treated as ordinary income (instead of capital gain). This portion is equal to the lower of (1) the amount of IDCs deducted since January 1, 1976 (which, but for being deducted, would have been reflected in the adjusted basis of the property), reduced by the amount (if any) by which the depletion deduction with respect to such property would have been increased if such amounts had been capitalized, or (2) the gain on the sale, exchange, or involuntary conversion of the property.

Minimum taxes

While IDCs are currently deductible (at the election of the operator), the economic value of this current deduction election is reduced by the effect of the alternative minimum tax with respect to noncorporate operators.

In the case of an individual, trust, or estate (noncorporate taxpayer), the taxpayer's alternative minimum tax is equal to 20 percent of the excess of that taxpayer's alternative minimum taxable income over a statutory exemption amount.⁷⁵ Alternative minimum taxable income is adjusted gross income, less certain deductions, plus the amount of the taxpayer's tax preference items.

⁷⁴ This term is defined in the same manner as it is for purposes of percentage depletion (discussed below).

⁷⁵ The exemption amount is equal to \$30,000 for single persons and \$40,000 for married couples.

In general, IDC deductions on successful wells are a tax preference item for purposes of the alternative minimum tax to the extent they exceed the amount which would have been deductible in that year had the IDCs been capitalized and recovered over a 10-year, straight-line amortization period, but only to the extent of the excess of such deductions over the taxpayer's income for the taxable year from the oil or gas property. (Geothermal properties are treated in a similar manner.) Thus, IDCs are treated as a preference item only to the extent they are used to offset non-oil or gas income. The 10-year amortization period applies on a well-by-well basis, starting with the month in which production for the well begins. At the election of the operator, the cost depletion method may be substituted for the 10-year amortization schedule in determining the amount of tax preference.

IDCs paid or accrued by an individual are not treated as tax preference items if the individual elects to capitalize the IDCs and deduct them ratably over a 10-year period. In addition, in the case of any IDC expenditure in the United States by an individual which is not allocable to a limited partnership interest or certain subchapter S corporation shareholdings of such individual (e.g., individuals with operating interests, general partners, and sole proprietors), the IDCs are not treated as items of tax preference if the individual elects to deduct the IDCs over a 5-year period. If the 5-year schedule (which is the same as the ACRS 5-year recovery schedule) is chosen, the amount of the IDC is also treated as a qualified investment for purposes of the investment tax credit.

Under present law, IDCs are not treated as a preference item for purposes of the "add-on" minimum tax on corporations.

Administration Proposal

The Administration proposal would retain the present law tax treatment of IDCs. However, 8 percent of the IDCs paid or incurred on productive wells in any taxable year would constitute a tax preference item for purposes of the proposed noncorporate and corporate minimum taxes under the Administration proposal.⁷⁶ The 8-percent figure was derived by estimating the difference between (1) the value of expensing IDCs in the year paid or incurred, and (2) the present value of the deductions to which the taxpayer would have been entitled under the Capital Cost Recovery System ("CCRS") included in the Administration proposal. The 8-percent figure assumes that IDCs would be indexed for inflation and recovered over a 6-year CCRS period, the same as tangible drilling costs.

⁷⁶ Under the Administration proposal, the minimum tax for noncorporate taxpayers would continue to be structured as an alternative tax, with a rate of 20 percent. Alternative minimum taxable income would be computed by adding to adjusted gross income the excess of preference items over \$10,000 (\$5,000 for married persons filing separately), and subtracting (a) allowable itemized deductions (generally, all itemized deductions with the exception of excess nonbusiness interest), (b) personal exemptions, and (c) a threshold exemption amount. The threshold exemption amount would be \$15,000 for joint returns (\$7,500 for married persons filing separately), \$12,000 for heads of households, and \$10,000 for single persons. The minimum tax for corporations would be restructured as an alternative minimum tax with a 20 percent rate, and would operate similarly to the noncorporate minimum tax. Thus, under this proposal, the minimum tax on IDCs, for a taxpayer subject to that tax, would be at the rate of 1.6 percent on its expensed IDCs (i.e., 20 percent tax rate multiplied by 8 percent IDC inclusion).

Under the Administration proposal, the amount of the tax preference for IDCs would not be reduced by the taxpayer's net income from oil and gas (or geothermal) properties. Thus, expensed IDCs would be treated as a preference regardless of whether they were used to offset oil and gas income or other taxable income.

The expensing of amounts with respect to nonproductive wells (dry holes) would not be treated as a preference item under the Administration proposal.

These proposals would be effective for costs paid or incurred on or after January 1, 1986.

Other Proposals

1984 Treasury Report

Under the 1984 Treasury report, the option to expense IDCs would be repealed. Instead, these costs would be capitalized as depreciable or depletable costs, depending on the nature of the cost incurred. Depreciable costs would be recovered over a 12-year period under the Real Cost Recovery System ("RCRS") included in the report. Depletable costs would be recovered using the cost depletion method. (Depreciation incurred during the pre-production stage would also be recovered through cost depletion). Both the depreciation and cost depletion basis would be indexed for inflation.⁷⁷

S. 409 and H.R. 800 (Bradley-Gephardt)

Under S. 409 and H.R. 800, the option to expense IDCs would be repealed. Instead of expensing, these costs would be added to the basis for depreciation or cost depletion (as appropriate). Amounts included in the basis for cost depletion would be recovered on an accelerated method over a 10-year period, under rules similar to those applied for depreciable property generally. Immediate deductions would continue to be allowed upon the abandonment of an unproductive well.

H.R. 2222 and S. 1006 (Kemp-Kasten)

H.R. 2222 and S. 1006 would retain present law.

Analysis

The taxation of oil and gas investments can be compared with other capital investments, such as investments in plant and equipment. Under the Administration proposal, pre-drilling costs (i.e., depletable costs), except in connection with stripper wells, would be deducted using indexed cost depletion. This is generally equivalent to cost recovery under the principles of the RCRS depreciation system contained in the 1984 Treasury report. However, under the Administration proposal, equipment and structures would be depreciated using the proposed CCRS system which is more generous than RCRS. Consequently, depletable property would be treated less favorably than most equipment and structures. Tangible drill-

⁷⁷ The repeal of IDC expensing would not affect the expensing of costs associated with non-productive wells. However, it is understood that, under the 1984 Treasury report, taxpayers would be allowed to expense dry hole costs only when an entire property was unproductive, rather than on a well-by-well basis as under present law.

ing costs would be recovered using CCRS and would as a result receive the same treatment as depreciable equipment. However, most intangible drilling costs would be expensed, as under present law, which is a more generous recovery method than CCRS. Whether or not a particular well would be at a disadvantage relative to depreciable property in the Administration proposal thus depends on the magnitude of the well's pre-drilling costs relative to intangible drilling costs.

One issue is whether investments in oil and gas should be given preferential treatment, relative to other capital investments. The Administration contends that preferential treatment of IDCs is necessary to stem the recent "substantial decline in oil drilling activity" that could reduce domestic oil production and increase vulnerability to oil import interruptions.

Evidence that drilling activity has fallen over recent years is not clear. According to Department of Energy statistics, the number of exploratory and development oil wells drilled in 1984 (41,130) was larger than the number drilled in any year since 1949.⁷⁸ The number of seismic crews and rotary rigs in use increased from 1983 to 1984; however the 1984 levels are below the records attained during the 1980-82 period. These data indicate that despite the retrenchment in manpower, the oil industry has managed to drill a record number of wells by increasing labor productivity.

The Administration proposal takes the position that providing tax incentives for drilling activity is necessary to increase U.S. energy security. In 1984, net imports of petroleum products into the United States were 4.7 million barrels of oil per day, accounting for 29.7 percent of domestic petroleum supply. In the event of a complete curtailment of imports, the Strategic Petroleum Reserve could, at current levels, replace all net imports for at most 100 days. If the SPR were depleted, domestic production would have to increase by about 40 percent to replace imports. As of 1983, proven reserves of crude oil amounted to just 8.7 years of production.⁷⁹ If production rates were increased to replace net imports, proven reserves would be exhausted in less than 7 years. To respond to a complete oil import curtailment, it is argued that proven reserves must be increased now because it can take several years from initial discovery of a petroleum reservoir to reach maximum production. It is argued that energy security would be increased by retaining tax preferences in current law for intangible drilling costs and percentage depletion. It is also argued that these tax incentives should be retained in order to maintain adequate levels of labor and equipment in the oil and gas industry in the event of an energy crisis.

Some have questioned this view on the grounds that drilling incentives may lead to a substitution of domestic oil for imports—arguably "draining America first". They argue that oil production is likely to rise along with reserve additions yielding little net increase in field reserves. Some argue that it may be more efficient

⁷⁸ Department of Energy, *Annual Energy Review 1984*, (April 1985), p. 73. The Department's statistics exclude service wells, stratigraphic tests, and core tests. The oil well footage drilled in 1984 (161.7 million) was greater than in any other year except 1981.

⁷⁹ Department of Energy, *Annual Energy Review 1984* (April 1985), pp. 79, 89.

to stockpile petroleum by filling the SPR with oil purchased in the world market at the current depressed prices. It is also argued that the decline and diversification of U.S. imports, and the collapse of the OPEC price structure, have reduced the likelihood of a sharp curtailment of oil imports.

Others argue that the object of energy policy should be complete energy independence. In this view, tax incentives for oil and gas exploration serve energy policy by increasing domestic production and replacing imports. This might also improve the merchandise trade balance since net petroleum imports accounted for almost 20 percent of all merchandise imports in 1984.⁸⁰ However, energy self-sufficiency might be achieved more efficiently by a tax on imported oil.⁸¹ Such a tax would encourage conservation and fuel switching, as well as production, by raising the price of domestic oil.

From an accounting standpoint, part of the reason that IDCs have historically been allowed to be expensed⁸² (aside from the implicit tax subsidy) is the difficulty of establishing an alternate recovery period, because the "useful life" of a well may not be known in advance and its production may occur at an uneven rate. (This is similar to the problem faced in determining a proper oil and gas depletion method.) If Congress decides to modify the present law treatment of IDCs, it may wish to establish a statutory recovery period which, if desired, contains some incentive element. Alternatively, IDCs may be merged with general depreciation provisions in order to provide similar tax incentives. Likewise, as under present law, differentiation between integrated producers and other taxpayers could be maintained. To the extent that Congress is concerned principally with domestic exploration, different rules could be provided for domestic and foreign production.

It has been argued that the expensing of costs associated with "dry holes" is consistent with general tax accounting principles, which allow deductions for ordinary business losses incurred during the year. However, this depends upon whether one defines a "loss" as an event occurring on a well-by-well basis, or alternatively a property-by-property basis. Advocates of allowing dry hole costs to be expensed argue that whenever a well proves not to have any recoverable oil, the money spent on drilling that well has been irrecoverably lost and accordingly should be regarded as deductible. Others argue that this is inconsistent with common business practice in the oil and gas field. They assert that oil and gas operators, when beginning operations on properties which they believe to contain valuable reserves, will commonly drill several wells in the knowledge that some, but not all, of them will likely prove productive. Thus, these advocates argue, the dry holes on a productive property are most accurately viewed as expenses related to an

⁸⁰ Department of Energy, *Monthly Energy Review: February 1985*, (May 1985), p. 11.

⁸¹ The Administration's 1984 fiscal year budget contained a provision which would have imposed a \$5 per barrel tax (the so-called "contingency" tax) on domestic and imported oil under certain circumstances.

⁸² The option to expense IDCs has been permitted by regulations since the Revenue Act of 1918. In 1945, in response to a case casting doubt on this treatment, Congress passed a concurrent resolution which specifically approved the Treasury regulations granting the option to expense IDCs. The Internal Revenue Code of 1954 (sec. 263(c)) directs the Treasury Department to promulgate regulations allowing for the option to expense IDCs.

overall productive project, and accordingly cannot properly be expensed under general tax accounting rules.

2. Depletion

Present Law and Background

General rules

Depletion, like depreciation, is a species of ordinary and necessary business expense. In both cases, the taxpayer is allowed a deduction in recognition of the fact that an asset—in the case of depletion, the oil or gas reserve itself—is being expended in order to produce income. Certain costs incurred prior to drilling an oil- or gas-producing property are recovered through the depletion deduction. These include costs of acquiring the lease or other interest in the property, and geological and geophysical costs (in advance of actual drilling). Depletion is available to any person having an economic interest in a producing property (including royalty interests).

Two methods of depletion are currently allowable under the Internal Revenue Code: the cost depletion method, and the percentage depletion method. Under the cost depletion method, the taxpayer deducts that portion of the adjusted basis of the property which is equal to the ratio of units sold from that property during the taxable year to the number of units remaining as of the taxable year (in general, the number of units remaining in the property⁸³ at the end of the taxable year to be recovered, plus the number of units sold during the taxable year). The amount recovered under cost depletion thus may not exceed the taxpayer's basis in the property. In order to determine the number of remaining units, it is necessary to estimate or determine the recoverable units reasonably known, or on good evidence believed, to have existed according to the method current in the industry and in light of the most accurate and reliable information obtainable.

Under percentage depletion, 15 percent of the taxpayer's gross income from an oil- or gas-producing property is allowed as a deduction in each taxable year. The amount deducted may not exceed 50 percent of the net income from that property in any year (the "net income limitation"). Additionally, the deduction for all oil and gas properties may not exceed 65 percent of the taxpayer's overall taxable income. Because percentage depletion is computed without regard to the taxpayer's basis in a property, it may result in eventual recovery of an amount greater than that actually expended by the taxpayer to acquire or develop the property.

A taxpayer is required to determine its depletion deduction for each oil and gas property under both the percentage depletion method (if the taxpayer is entitled to use this method) and cost depletion method. If the cost depletion deduction is larger, the taxpayer must utilize that method for the taxable year in question.

⁸³ A property is generally defined for depletion purposes as each separate interest owned by the taxpayer in each separate tract or parcel of land (sec. 614). In the case of oil and gas wells and geothermal deposits, all of a taxpayer's operating interests in each separate tract or parcel of land are generally treated as one property, subject to an election to separate certain interests in the same tract or parcel. Special rules apply in the case of certain unitization or pooling arrangements.

Similar rules apply to geothermal deposits located in the United States, except that the 65 percent of taxable income limitation and the limitation to independent producers (discussed below) do not apply.

Limitation to independent producers

The Tax Reduction Act of 1975 repealed percentage depletion with respect to much oil and gas production. Under that Act, independent producers and royalty owners⁸⁴ (as contrasted to integrated oil companies) are allowed to take percentage depletion with respect to up to 1,000 barrels of average daily production of domestic crude oil or an equivalent amount of domestic natural gas.⁸⁵ For producers of both oil and natural gas, this limitation applies on a combined basis.

For purposes of percentage depletion, an independent producer is any producer who is not a "retailer" or "refiner." A retailer is any person who directly, or through a related person, sells oil or natural gas or any product derived therefrom, (1) through any retail outlet operated by the taxpayer or related person, or (2) to any person obligated to market or distribute such oil or natural gas (or product derived therefrom) under the name of the taxpayer or the related person. In determining whether or not a person is a retailer, bulk sales to commercial or industrial users, and bulk sales of aviation fuel to the Department of Defense, are excluded. Further, a person is not a retailer within the meaning of this provision if the combined gross receipts of that person and all related persons from the retail sale of oil, natural gas, or any product derived therefrom, do not exceed \$5 million for the taxable year.

A refiner is any person who directly or through a related person engages in the refining of crude oil, but only if such taxpayer or related person has a refiner run in excess of 50,000 barrels per day on any day during the taxable year.

In addition to the independent producers exception, certain sales of natural gas under a fixed contract in effect on February 1, 1975, and certain natural gas from geopressurized brine,⁸⁶ are eligible for percentage depletion, at rates of 22 percent and 10 percent respectively. These exceptions apply without regard to the 1,000 barrel per day limitation and regardless of whether the producer is an independent producer or an integrated oil company.

To prevent proliferation of the independent producer exception, all production owned by businesses under common control and members of the same family must be aggregated. Each group is then treated as one producer for application of the 1,000-barrel amount. Further, if an interest in a proven oil or gas property is transferred after 1974 (subject to certain exceptions), the production from such interest does not qualify for percentage depletion.

⁸⁴ Percentage depletion is available to lease bonuses and advance royalty payments. *Commissioner v. Engle*, 464 U.S. 206 (1984). See also I.R. Ann. 84-59, IRB 1984-23 (June 4, 1984).

⁸⁵ Under the 1975 Act, the depletable oil quantity was originally 2,000 barrels of average daily production. This was gradually to be phased down to 1,000 barrels for 1980 and thereafter. The 1975 Act also phased down the percentage depletion rate from 22 percent in 1975 to 15 percent in 1984 and thereafter.

⁸⁶ This exception is limited to wells the drilling of which began between September 30, 1978, and January 1, 1984.

The exceptions to this rule include transfers at death, certain transfers to controlled corporations, and transfers between controlled corporations or other business entities.

*Minimum taxes*⁸⁷

The excess of percentage depletion over the taxpayer's adjusted basis for each oil or gas property, for any taxable year, is treated as a preference item for purposes of the noncorporate (i.e., individual) alternative minimum tax and the corporate "add-on" minimum tax under present law.

Administration Proposal

General rules

The Administration proposal would generally phase out percentage depletion for oil and gas (and geothermal) properties over a 5-year period, beginning on January 1, 1986. This would be accomplished by reducing the percentage depletion rate by 3 percentage points for each of calendar years 1986 through 1990. Taxpayers for whom percentage depletion was repealed would be required to use cost depletion, the basis for which would be indexed for inflation.

Under the Administration proposal, percentage depletion would continue to be available for so-called "stripper" wells (i.e., wells producing less than 10 barrels per day) owned by independent producers. The proposal specifies that this exception would not apply to royalty owners.

The phase-out of percentage depletion would be effective for production beginning on or after January 1, 1986.

Minimum taxes

For depletable property placed in service on or after January 1, 1986, the Administration proposal would include as a preference item, for purposes of the proposed noncorporate and corporate alternative minimum taxes, the excess of percentage depletion over the amount which would have been deductible had the taxpayer capitalized its costs and recovered them through cost depletion. For property placed in service before 1986, the amount of the preference would be the excess of the depletion deduction over the adjusted basis of the property (as under the present law noncorporate minimum tax).

Other Proposals

1984 Treasury Report

Under the 1984 Treasury report, percentage depletion would be repealed for all oil and gas properties, effective for production on or after January 1, 1986. The basis for cost depletion would be indexed for inflation.

⁸⁷ For a more detailed discussion of minimum taxes, see separate staff pamphlet *Tax Shelters and Minimum Tax* (JCS-34-85), August 7, 1985.

S. 409 and H.R. 800 (Bradley-Gephardt)

Under S. 409 and H.R. 800, percentage depletion would be repealed for all oil and gas properties from which production begins after December 31, 1986. Depletable expenses would be recovered over a 10-year period, using rules similar to those applied for depreciable property generally. These rules would replace the present law cost depletion system (which is based on the annual ratio of units sold to remaining production units), as well as the percentage depletion method.

H.R. 2222 and S. 1006 (Kemp-Kasten)

H.R. 2222 and S. 1006 would retain present law.

Analysis

Under the Administration proposal, pre-drilling (i.e., depletable) costs, except in connection with stripper wells, would be deducted using indexed cost depletion. This is generally equivalent to cost recovery under the principles of the RCRS system contained in the 1984 Treasury report. However, under the Administration proposal, equipment and structures would be depreciated using CCRS, which is more generous than RCRS. Consequently, depletable costs would be treated less favorably than most equipment and structures, although indexed cost depletion would be more generous during periods of inflation than the cost depletion in current law.

The Administration proposal retains percentage depletion for stripper wells. The proposal states that repeal of this tax preference could lead to early abandonment of these wells, reduced oil production, and a consequent increase in U.S. vulnerability. Others argue that energy security would be better served by leaving this oil in the ground so that it would be available for production, at a profit to the owner, in the event prices rise due to a supply disruption. However, in circumstances where State law requires that an abandoned well be capped, the cost of reopening might be prohibitive.

The phasing out, over 5 years, of the percentage depletion allowance for independent producers (other than for stripper wells) raises another energy policy issue. A gradual tax increase of this kind may create an incentive for independent producers to accelerate production over the next 5 years in order to obtain the benefits of percentage depletion. This could decrease imports over the next 5 years, but increase import dependence in the future. Rapid production also may decrease the total amount of recoverable oil in a reserve. As a result, accelerated depletion of existing oil reserves may not further the objectives of energy policy. If Congress decides to reduce the current allowance for percentage depletion, a shorter phase-out period might mitigate these potentially adverse effects.

Cost recovery for the oil and gas (or mining) industries is especially complex because the amount and accessibility of those substances, and the rate of production, vary widely between different properties. Cost depletion attempts to resolve these problems by estimating the total amount of each individual reserve and allowing annual cost recovery in proportion to that percentage of the reserve which is extracted in any year. If the estimate of the total

reserve is accurate, this system may be superior (in a pure economic sense) to ordinary depreciation methods, which assign assets to prearranged categories that may not match the actual rate of decline of an asset's value.

Under percentage depletion, producers are allowed a deduction for a set percentage of gross income from a given property in each year (15 percent, in the case of independent oil and gas producers and royalty owners). Under present law, this allowance may reduce the net (i.e., taxable) income from a property by up to 50 percent in each year. Although nominally a form of cost recovery, percentage depletion has come to be seen as an implicit tax subsidy to the oil and gas industry, in order to encourage production, because the total deductions with respect to a property may substantially exceed the actual costs invested in the property.⁸⁸ Since the Tax Reduction Act of 1975, this incentive has been limited to specified amounts of production by independent producers and royalty owners.

Advocates of retaining percentage depletion argue that it serves to encourage domestic oil and gas production. These arguments are similar to those made in connection with the treatment of intangible drilling costs.⁸⁹ Opponents argue that percentage depletion is an ineffective subsidy. In contrast to intangible drilling costs, percentage depletion is based on production from existing wells, and may thus be less significant in encouraging the development of new properties. It has also been noted that the 50-percent of net income limitation reduces the subsidy for marginally profitable wells, which are more likely to be affected by a subsidy.⁹⁰

The Administration proposal would limit percentage depletion to "stripper" wells only (i.e., wells producing less than 10 barrels per day). This is essentially a continuation of the process begun in 1975, of limiting percentage depletion to a progressively smaller number of properties which are deemed to require the most subsidy. If Congress decides to modify existing law, it may wish to limit percentage depletion to a differently defined group, or else to eliminate it altogether (as in the 1984 Treasury report). Alternatively, Congress may wish to replace percentage depletion with a new recovery system, more favorable than cost depletion, for all producing properties. Such a system could be designed to integrate depletion into a general cost recovery system in order to provide the same treatment of oil and gas investments as investments in other capital equipment, or it could be structured so as to provide a higher degree of incentive for oil and gas production. Depending upon the methods adopted, it may be appropriate to integrate the

⁸⁸ Percentage depletion was originally enacted in 1926 as a replacement for recovery based on "discovery values" of oil and gas properties, the determination of which had resulted in substantial litigation. The original statutory rate of 27.5 percent was reduced to 22 percent by the Tax Reform Act of 1969 and subsequently repealed for integrated producers and phased down for others to 15 percent (for 1984 and thereafter) by the Tax Reduction Act of 1975. The 50 percent "net income limitation" dates from the industry-wide recession of the 1920s, during which depletion deductions (which were based on pre-recession values) frequently exceeded the income from oil and gas properties. The preference nature of percentage depletion is formally recognized in the individual and corporate minimum tax.

⁸⁹ An analysis of issues relating to IDCs is included in the previous section.

⁹⁰ See Administration Proposal, p. 229.

treatment of some or all IDCs (and perhaps tertiary injectants) into such a new system.

3. Tertiary Injectants

Present Law and Background

Under present law, expenditures for tertiary injectants used in tertiary recovery methods for oil and gas production may be deducted in the year of injection (i.e., such amounts may be expensed, rather than capitalized). Tertiary recovery methods are various chemical, fluid, or gaseous recovery techniques (including miscible fluid displacement, steam drive injection, and augmented water flooding) specified in the Crude Oil Windfall Profit Tax Act of 1980 or under subsequent Treasury regulations. Expensing does not apply to crude oil or natural gas injectants which are recoverable from the reservoir. The rule regarding tertiary injectants also does not apply to costs which are subject to an election to be treated as intangible drilling costs.

Amounts which may be expensed under the tertiary injectants rule are subject to recapture upon a sale or other disposition of the property under sections 1245 and 1250 of the Code.

Administration Proposal

The Administration proposal would retain the present law treatment of qualified tertiary injectant expenses.

Other Proposals

1984 Treasury Report

Under the 1984 Treasury report, the deduction for qualified tertiary injectant expenses would be repealed, effective January 1, 1986. In place of current deductions, these costs would be added to the depletable basis of the property and recovered through cost depletion. Waterflooding and similar pressure maintenance techniques, which enhance production for a period of less than one year, could continue to be expensed.

S. 409 and H.R. 800 (Bradley-Gephardt)

S. 409 and H.R. 800 would allow 50 percent of qualified tertiary injectant expenses to be deducted in the year of injection, and 50 percent in the succeeding taxable year.

H.R. 2222 and S. 1006 (Kemp-Kasten)

H.R. 2222 and S. 1006 would retain present law.

Analysis

The tax treatment of tertiary injectant expenses raises similar issues to that of intangible drilling costs (discussed above). Tertiary injectants also suggest issues of (1) which enhanced recovery techniques (if any) should be singled out for advantageous tax treatment, and (2) what constitutes "normal" tax treatment for enhanced recovery procedures, which may increase production for unpredictable periods, or not at all. This latter issue resulted in sig-

nificant confusion prior to 1980, when Congress legislatively approved expensing. If Congress decides to modify the present law treatment of tertiary injectant expenses, it may attempt to resolve these issues by adopting a new statutory recovery period (as in the Bradley-Gephardt bill), by adding the expenses to the basis for cost depletion (as in the 1984 Treasury report), or by integrating the treatment of tertiary injectant expenses into a new, broader recovery system.

4. Crude Oil Windfall Profit Tax

Present Law and Background

Present law imposes an excise tax on the windfall profit element of the price of domestically produced crude oil when it is removed from the premises on which it was produced. Generally, the windfall profit element is the excess of the sale price over the sum of the adjusted base price plus the applicable State severance tax adjustment. The windfall profit element may not exceed 90 percent of net income attributable to a barrel of crude oil. The tax was enacted in the Crude Oil Windfall Profit Tax Act of 1980.

The tax rates applicable to taxable crude oil are as follows:

Tier	Tax rate
Tier one oil (oil not in tier 2 or tier 3).	70 percent: 50 percent for independent producers.
Tier two oil (stripper oil, Petroleum Reserve oil).	60 percent: 30 percent for independent producers.
Tier three oil:	
Newly discovered oil.	22.5 percent for 1985-1987, 20 percent for 1988, and 15 percent for 1989 and thereafter.
Heavy oil and incremental tertiary oil.	30 percent.

Crude oil from a qualified governmental interest or a qualified charitable interest, certain front-end oil, certain Indian oil, certain Alaskan oil, certain independent producer stripper well oil, and, in the case of qualified royalty owners, up to three barrels per day of royalty production, are exempt from the tax.

The windfall profit tax is scheduled to phase out over a 33-month period, beginning after December 31, 1987, if the cumulative revenue raised by the tax reaches \$227.3 billion, but in any event beginning no later than January 1991.

Administration Proposal

The Administration proposal would not affect the crude oil windfall profit tax.

Other Proposal

The 1984 Treasury report proposed beginning the scheduled phase-out of the windfall profit tax on January 1, 1988.

Analysis

The windfall profit tax was enacted in 1980 in response to the perceived "windfall" accruing to oil producers as a result of the de-control of domestic oil prices. As oil prices have stagnated and even declined in the 1980s, the tax has come to be seen less as a tax on excess profits, and more as an ordinary excise tax. Because the tax is based on sale price, declining prices have also caused receipts from the tax to be substantially lower than expected.

The 1984 Treasury report would accelerate the scheduled expiration of the windfall profit tax in connection with the proposed repeal of existing tax preferences benefiting the oil and gas industry (i.e., intangible drilling costs and percentage depletion). The repeal of these preferences was thought to require repeal of the windfall profit tax as well.

C. Tax Provisions Relating to Mineral Deposits and Timber

1. Expensing of Hard Mineral Exploration And Development Costs

Present Law and Background

Under present law, taxpayers may elect to expense (i.e., currently deduct) exploration costs associated with mines and other hard mineral deposits (sec. 617). Additionally, once the existence of commercially marketable ores is established, the taxpayer may expense development costs associated with the preparation of the mine for production (sec. 616).

Mining exploration costs are expenditures for the purpose of ascertaining the existence, location, extent or quality of any deposit of ore or other depletable mineral, which are paid or incurred by the taxpayer prior to the development state of the mine or deposit. Expensed mining exploration costs (but not development costs) reduce the depletion deductions for the mine concerned (alternatively, these costs may be "recaptured" in income once the mine reaches the producing stage). Exploration costs are also subject to recapture if the property is disposed of by a taxpayer after expensing these amounts (secs. 1245 and 1250). Foreign exploration costs cannot be expensed after the taxpayer has total foreign and domestic exploration costs of \$400,000.

Development costs include expenses incurred for the development of a mine or other natural deposit, after the existence of ores in commercially marketable quantities has been determined. These costs generally include costs for construction of shafts and tunnels and, in some cases, drilling and testing to obtain additional information for mining operations.

In the case of a corporation, 20 percent of mining exploration and development costs may not be expensed, but must instead be capitalized using the schedule for 5-year ACRS property. For mines located in the United States, expenses recovered under ACRS also qualify for an investment tax credit. The expensing of mining exploration and development costs is further treated as a preference item for purposes of the noncorporate alternative minimum tax, to the extent that such expensing exceeds the deduction which would have been allowable if the costs had been amortized over a 10-year period.

Administration Proposal

The Administration proposal would retain the present law treatment of mining exploration and development costs. The expensing of such costs (in excess of the deduction allowable under a 10-year amortization schedule) would be treated as a preference item under

the proposed corporate and noncorporate alternative minimum taxes.

Other Proposals

1984 Treasury Report

The 1984 Treasury report would repeal the option to expense hard mineral exploration and development costs. Instead of expensing, these costs would be capitalized and recovered through cost depletion, with the depletable basis being indexed for inflation. Capitalizable costs would be determined using the general cost accounting rules contained in the Treasury report.

S. 409 and H.R. 800 (Bradley-Gephardt)

S. 409 and H.R. 800 would repeal the option to expense hard mineral exploration and development costs. In place of expensing, costs relating to depletable mineral property would be recovered under the general cost recovery system contained in the proposal. Recovery periods would be determined based on the anticipated productive life of the property.⁹¹ The proposal would not affect the current deduction of losses sustained by reason of abandonment of a nonproductive mine or other deposit.

H.R. 2222 and S. 1006 (Kemp-Kasten)

H.R. 2222 and S. 1006 would retain present law.

Analysis

The expensing of mining exploration and development costs raises issues which parallel those concerning intangible drilling and development costs (IDCs) for oil and gas wells (discussed in Part IV. B. 1., above). As in the case of IDCs, general accounting principles suggest that these amounts be recovered over a multi-year period, as income is generated by the property. However, immediate deductions are arguably necessary to encourage production of the minerals in question, and may be no more arbitrary than any replacement recovery system. (The persuasiveness of the incentive argument depends upon the market for the particular material concerned and on the adequacy of the present strategic stockpiles for dealing with national security issues.) If Congress decides to modify the present law treatment of mining expenses, it may desire to establish new, statutory recovery periods, or else to require these costs to be recovered as part of a general depreciation or depletion system.

2. Depletion of Hard Mineral Deposits

Present Law and Background

Taxpayers are permitted to recover the acquisition and certain related costs of mines or other mineral deposits⁹² under one of

⁹¹ These recovery periods are equivalent to the proposed class lives for depreciable property generally, except that they are determined based on anticipated productive lives rather than present class lives.

⁹² The recovery of hard mineral exploration and development costs is discussed in the previous section.

two methods: the cost depletion method, or the percentage depletion method.

Under the cost depletion method, the taxpayer deducts that portion of the adjusted basis of the property which is equal to the ratio of units sold from that property during the taxable year to the number of units remaining as of that year. The amount recovered under cost depletion thus may not exceed the taxpayer's basis in the property.

Under percentage depletion, a deduction is allowed in each taxable year for a fixed statutory percentage of the taxpayer's gross income from the property. The percentages applicable to various minerals are summarized in the following table (Table 7).⁹³

Table 7.—Percentage Depletion Rates For Selected Hard Minerals Under Code Section 613

Mineral	Percentage depletion rate
Antimony.....	*22
Asbestos.....	*22
Asphalt (rock).....	14
Bauxite.....	*22
Beryllium.....	*22
Borax.....	14
Cadmium.....	*22
Chromite.....	*22
Coal.....	10
Cobalt.....	*22
Copper.....	*15
Feldspar.....	14
Garnet.....	14
Gold.....	*15
Granite.....	14
Graphite.....	*22
Gravel.....	5
Iron ore.....	*15
Lead.....	*22
Lignite.....	10
Limestone.....	14
Lithium.....	*22
Magnesite.....	14
Manganese.....	*22
Marble.....	14
Mercury.....	*22
Mica.....	*22
Mollusk shells.....	14
Molybdenum.....	*22
Nickel.....	*22

⁹³ The complete list of percentage depletion rates is included in section 613(b) of the Code. Generally, percentage depletion is allowed for all minerals. However, it is not allowed in the case of soil, dirt, turf, water, or mosses, or in the case of minerals from sea water, the air, or similar inexhaustible sources.

Table 7.—Percentage Depletion Rates For Selected Hard Minerals
Under Code Section 613—Continued

Mineral	Percentage depletion rate
Oil shale.....	15
Peat.....	5
Phosphate rock.....	14
Platinum.....	*22
Potash.....	14
Pumice.....	5
Quartz (radio grade).....	*22
Quartzite.....	14
Sand.....	5
Shale.....	5
Silver.....	*15
Slate.....	14
Soapstone.....	14
Sodium Chloride.....	10
Stone.....	5
Stone (ornamental).....	14
Sulphur.....	22
Thorium.....	*22
Tin.....	*22
Titanium.....	*22
Tungsten.....	*22
Uranium.....	22
Vanadium.....	*22
Zinc.....	*22
Zircon.....	*22

*A 14-percent rate applies to these minerals if mined outside the United States.

The amount deducted for any mineral may not exceed 50 percent of the net income from a particular property in any year (the "net income limitation"). Because percentage depletion is computed without regard to the taxpayer's basis in the property, it may result in eventual recovery of an amount greater than that actually expended by the taxpayer to acquire the property.

In general, a taxpayer is required to determine its depletion deduction under both the percentage and cost depletion methods. If the cost depletion deduction is larger, the taxpayer must utilize that method for the taxable year in question.

In the case of a corporation, the amount of the percentage depletion for coal (including lignite) and iron ore, to the extent that such deduction exceeds the adjusted basis of the property, is reduced by 15 percent. Percentage depletion of all materials, to the extent it exceeds adjusted basis, is also treated as a preference item for pur-

poses of the noncorporate (i.e., individual) and corporate minimum taxes.⁹⁴

Administration Proposal

The Administration proposal would phase out percentage depletion for all minerals⁹⁵ over a 5-year period, beginning January 1, 1986. This would be accomplished by reducing the applicable percentage depletion rate for any mineral by one-fifth in each of calendar years 1986 through 1990. Mineral deposits would continue to qualify for cost depletion, with the depletable basis to be indexed for inflation.

This phase-out of percentage depletion would be effective for production beginning on or after January 1, 1986.

Under the Administration proposal, for depletable property placed in service on or after January 1, 1986, the excess of percentage over cost depletion in any taxable year would be treated as a preference item for purposes of the proposed noncorporate and corporate alternative minimum taxes. For property placed in service before 1986, the amount of the preference would be the excess of percentage depletion over the adjusted basis of the property (as under the present law noncorporate minimum tax).

Other Proposals

1984 Treasury Report

The 1984 Treasury report would repeal percentage depletion for all minerals, effective for production on or after January 1, 1986. Cost depletion would continue to be available, with the depletable basis to be indexed for inflation.

S. 409 and H.R. 800 (Bradley-Gephardt)

S. 409 and H.R. 800 would repeal percentage depletion for properties from which production began after December 31, 1986. Depletable costs associated with mineral deposits would be recovered under the general cost recovery system contained in the proposal, with recovery periods based on the anticipated productive life of the property. The recovery periods are equivalent to those used for other productive assets, except that they are based on anticipated productive life rather than present law class lives. This new recovery system would replace present law cost depletion (which requires a determination of the ratio of expended to remaining production units in each taxable year) as well as percentage depletion.⁹⁶

H.R. 2222 and S. 1006 (Kemp-Kasten)

H.R. 2222 and S. 1006 would retain present law.

⁹⁴ An adjustment is made in the case of coal and iron ore to prevent the combination of the 15 percent reduction and the minimum tax from reducing the tax benefit from the taxpayer's marginal dollar of preference more than under pre-1983 law.

⁹⁵ Percentage depletion would continue to be allowed for oil and gas "stripper" wells (see discussion of oil and gas depletion in part IV.B.2. above).

⁹⁶ These bills would also repeal a provision of existing law (sec. 621) relating to the exclusion of certain payments by the United States to explore, develop, and mine for defense purposes. It appears that this provision is obsolete.

Analysis

Depletion of hard mineral costs raises essentially the same issues as oil and gas depletion, discussed above.⁹⁷ While nominally a form of cost recovery, percentage depletion has come to be seen as an implicit tax subsidy for the extraction of mineral substances, the extent of which varies depending upon the depletion rate. This view is reflected in the inclusion of "excess" percentage depletion as a minimum tax preference item, and in the 15-percent cutback of corporate coal and iron ore percentage depletion.

The Administration proposal calls for the repeal of percentage depletion for all hard mineral substances, over a 5-year period. If Congress agrees to modify present law, it may wish to consider preserving percentage depletion for particular substances for which a continued production subsidy is considered appropriate. Alternatively, percentage depletion could be targeted only to specified producers of some or all minerals, similarly to the present law treatment of oil and gas. (This would reduce the scope of production incentives, but arguably heighten their efficiency.) Congress may also wish to consider integrating the tax treatment of depletion and hard mineral exploration and development costs.

3. Royalty Income From Coal and Domestic Iron Ore

Present Law

Under present law, subject to certain special limits, royalties received on the disposition of coal and domestic iron ore qualify for capital gains treatment. For capital gain treatment to apply, the coal or iron ore must have been held for more than six months before mining. Capital gain treatment does not apply to income realized by an owner as a co-adventurer, partner, or principal in the mining of the coal or iron ore, or to certain related party transactions. If capital gain treatment applies, the royalty owner is not entitled to percentage depletion with respect to the coal or iron ore disposed of.

Administration Proposal

The Administration proposal would repeal the capital gain treatment for coal or iron ore royalties, by phasing out the special treatment over a three-year period beginning in 1986.⁹⁸

Analysis

The special capital gain treatment for coal and domestic iron ore royalties functions as an alternate benefit to percentage depletion, and may be more valuable in certain cases. Because the relative value of this treatment depends upon the availability of percentage depletion, and the treatment of capital gains generally, it may be appropriate to consider these items together.

⁹⁷ See also Part IV.C.2. regarding coal depletion, above.

⁹⁸ Other Congressional proposals deal with capital gains generally. These proposals are discussed in Part II of this pamphlet ("Capital Gains and Losses").

4. Capital Gains Rules Applicable To Timber

Present Law and Background

Royalty income received by the holder of a timber royalty interest qualifies for long-term capital gain treatment, where the timber has been held for 6 months before being cut (sec. 631(b)). Additionally, the owner of timber (or a contract right to cut timber) may elect to treat the cutting of timber as a sale or exchange qualifying for long-term capital gain treatment, although the timber is sold or used in the taxpayer's trade or business (sec. 631(a)). This provision also generally requires that the timber (or contract right) be held for 6 months prior to cutting. Under present law, timber qualifies for cost (but not percentage) depletion.

Administration Proposal

The Administration proposal would phase out the special capital gain rules regarding timber over a three-year period, beginning January 1, 1986.⁹⁹

Analysis

The special rules regarding timber have been described as a recognition of the long period necessary to grow timber, and the historic characterization of timber as a part of real property, which if sold itself would generally be entitled to capital gains treatment. One issue is whether these factors distinguish timber income from income from the sale of ordinary farming inventories, which are treated as ordinary income.

⁹⁹ Other Congressional proposals deal with capital gains generally. These proposals are discussed in Part II of this pamphlet ("Capital Gains and Losses").

D. Energy-Related Tax Credits and Other Incentives

1. Residential Energy Tax Credits

Present Law and Background

Individuals are allowed a 15-percent tax credit on the first \$2,000 of qualifying expenditures, up to a maximum credit of \$300, for installations made through 1985 in the taxpayer's principal residence of eligible insulation and other energy conservation items. Each conservation item must be capable of reducing heat loss or gain, increasing the efficiency of the heating system, or reducing fuel consumption.

Individuals also are allowed a 40-percent credit on expenditures up to \$10,000, for a maximum credit of \$4,000, for renewable energy source property (i.e., solar, wind and geothermal energy property). The credit for individuals for renewable energy sources applies to expenditures made through 1985. These credits for residential energy property were enacted in the Energy Tax Act of 1978, and were modified in the Crude Oil Windfall Profit Tax Act of 1980. The credit for renewable energy source property was increased, beginning in 1980, from 30 percent of the first \$2,000 of expenditures and 20 percent of the next \$8,000 of expenditures (maximum credit of \$2,200) to the present 40-percent credit.

Installations of qualified renewable energy property must be made in or on a taxpayer's principal residence. The conservation credit is available only for expenditure with respect to equipment installed in or on a principal residence in existence or substantially completed on April 19, 1977. There is a credit carryover provision that allows unused credits for both energy conservation property and renewable energy source equipment to be carried over to subsequent taxable years but not to any taxable year beginning after 1987.

As defined in the regulations, renewable energy source property includes equipment (and parts solely related to the functioning of such equipment) necessary to transmit or use energy from a geothermal deposit. A geothermal deposit is defined as a geothermal reservoir consisting of natural heat, which is from an underground source and is stored in rocks or in an aqueous liquid or vapor, having a temperature exceeding 50 degrees Celsius, which is 122 degrees Fahrenheit. The regulations also provide that equipment which serves both a geothermal function and a nongeothermal function does not qualify as geothermal energy property. However, the existence of a backup system designed for use only in the event of failure of the geothermal energy system would not be disqualifying.

Administration Proposal

The Administration proposal would allow the residential energy tax credits to expire at the end of 1985, as scheduled under present law.

Other Proposals

H.R. 2001 (Heftel) and S. 1220 (Hatfield)

Solar energy property.—H.R. 2001 and S. 1220 would extend and phase out the tax credit for residential solar renewable energy source expenditures. The credit would be phased out over a 5-year period according to the following schedule:

Taxable year	Residential energy tax credit
1986.....	35%
1987.....	30%
1988.....	25%
1989.....	20%
1990.....	15%
1991 and after	0%

H.R. 2001 and S. 1220 would generally retain the \$10,000 upper limit for qualified expenditures, but specifically limit allowable expenditures to \$6,000 for solar hot water systems.

For photovoltaic cells, the energy tax credit would be kept at 40 percent in taxable years before 1991.

Wind energy property.—The wind energy credit would be extended for 3 years, from 1986 through 1988, at 35, 30 and 25 percent, respectively. This credit would expire after 1988. The credit would be allowed for wind energy expenditures up to \$20,000.

Geothermal energy property.—The credit for geothermal property would be extended through 1986 at the present 40-percent rate, and would decline by 10 percentage points in each of 1987 and 1988. It would expire at the end of 1988. The bill also would amend the definition of qualifying property in cases where geothermal property is used with nonrenewable energy: all equipment would qualify when geothermal energy provides 80 percent of annual energy use (measured on a Btu basis); if geothermal energy is the source of more than 50 percent but less than 80 percent, only geothermal energy equipment would qualify.

Energy conservation credit.—The conservation credit would be increased to 25 percent of expenditures of \$700 or less, limited to taxpayers with adjusted gross income ("AGI") of \$30,000 or less. For married individuals filing separate returns, AGI for these purposes would be the sum of the AGI of husband and wife. Storm doors no longer would be eligible for the credit. These credits would expire after December 31, 1988.

Carryforward of unused credits.—Residential credits that remain unused after the expiration date for the property involved may be carried forward for 2 additional years.

S. 409 and H.R. 800 (Bradley-Gephardt), H.R. 2222 and S. 1006 (Kemp-Kasten) and S. 411 and H.R. 373 (Roth-Moore)

These bills would allow the residential energy tax credits to expire at the end of 1985.

H.R. 1272 (Fowler) and S. 1201 (Hawkins)

H.R. 1272 and S. 1201 would phase out the credit for residential solar property following the same schedule as in S. 1220, and also would limit to \$6,000 qualified expenditures for solar hot water use in a dwelling. In addition, a 40-percent credit would be provided for photovoltaic cells used solely to provide electricity. Performance standards would be enacted for qualified solar hot water systems and active space heating systems.

H.R. 843 (Seiberling) and H.R. 1315 (Latta)

H.R. 843 and H.R. 1315 would amend the eligibility rules for qualifying for the energy tax credit in a mixed-use operation relying primarily on geothermal energy. If geothermal sources provide 80 percent of the energy used, all equipment of the system would be eligible for the energy credit. If geothermal sources provide less than 80 percent of the energy used, the energy credit would apply only to equipment using geothermal energy for 50 percent or more of its energy supplies. Energy percentages would be determined on a Btu basis.

Analysis

The Administration argues that the energy credits for conservation and production are no longer needed because the investments yielding the greatest conservation gains have been made during the 8 years the credits have been in effect. At free-market prices it is argued that adequate incentives for investment in conservation equipment and nonconventional fuels already exist.

The energy credits have also been criticized as inefficient. For some energy credit claimants, the credit may be a windfall because the qualifying property would have been installed even if tax credits were not available.¹⁰⁰ Another potential inefficiency is that the same rate of credit may be available for equipment with different energy saving capabilities, while systems with the same energy effectiveness may qualify for different credit rates. Some conservation expenditures receive no credit if the equipment serves a structural as well as a conservation purpose (i.e., certain passive solar equipment). Similar inefficiencies arise because alcohol fuels receive a larger credit than nonconventional fuels on an equivalent energy basis (alcohol fuel facilities may qualify for the energy investment credit, as well). In general, it is argued that a unified in-

¹⁰⁰ H. Craig Peterson, "Survey Analysis of the Impact of Conservation and Solar Tax Credits," Final Report, submitted to the National Science Foundation, (July 15, 1982), p. 33. Less than 10 percent of residential credit claimants reported that they probably or definitely would not have made conservation expenditures if the tax benefits had not been available.

centive for production of alternative energy sources and for conservation, such as an oil import tax, would meet any energy security objectives while avoiding these problems.

The energy credits also have been criticized on equity grounds. Individuals that have little or no tax liability are unable to take advantage of most of these credits. Also, the bulk of residential energy credits have been claimed by middle and upper income taxpayers.¹⁰¹

On the other hand, proponents of the credits argue that incentives for energy conservation and for production of energy from sources other than oil and gas are needed in view of the national security considerations (discussed above in connection with the tax treatment of production expenditures for oil and gas.) It is further argued that it would be especially harmful to continue incentives for oil and gas production, (e.g., expensing of intangible drilling costs) while discontinuing incentives for conservation and use of alternative energy sources. It is argued that conservation and use of alternative energy sources may directly and indirectly reduce oil imports at much less cost than incentives for production of oil and gas. Further, the problems of inefficiency and redistributive effects listed above also apply to oil and gas incentives. In any case, it is possible to adjust for disproportionate use of the credits by any particular income class by designing the tax rates to take this pattern into account. It is argued that the case for continuing tax incentives for conservation and for production of energy from non-oil and gas sources is as persuasive as the case for tax incentives for oil and gas production.

2. Business Energy Tax Credits

Present Law and Background

A 15-percent energy tax credit is allowed through 1985 for solar, wind, geothermal and ocean thermal property. The tax credit was originally enacted in the Energy Tax Act of 1978 for solar, wind and geothermal property. In the Crude Oil Windfall Profit Tax Act of 1980, the credit was increased from 10 to 15 percent starting in 1980, ocean thermal property was added, and the credit was extended from December 31, 1982 through December 31, 1985. Qualified intercity buses and biomass property are eligible for a 10-percent energy credit through 1985. Small scale hydroelectric projects are eligible for an 11-percent credit, also through 1985. Solar, wind and geothermal properties are defined in the same manner as for the residential solar credits.

Prior to 1983, a general 10-percent investment credit was allowed for certain energy property in addition to the regular investment credit. Property eligible for the general 10-percent energy credit included alternative energy property, specially defined energy property, recycling equipment, shale oil equipment, equipment for producing natural gas from geopressured brine, and cogeneration equipment. The energy credit for most of these types of property

¹⁰¹ Congressional Research Service, *An Economic Evaluation of Federal Tax Credits for Residential Energy Conservation*, Report No. 82-204E (December 2, 1982).

terminated after 1982, except that the credit is allowed through 1990 for long-term projects for which certain affirmative commitments were made.

Under the affirmative commitment rules, the 10-percent energy tax credit remains available after 1982 for credits that expired in 1982, if specified requirements are satisfied with respect to qualified property that is part of a project with a normal construction period of two years or more. The credit is allowed through December 31, 1990, for property that is constructed or acquired after 1982 if (1) all engineering studies on the project were completed, and applications for all environmental and construction permits required to commence construction were filed, before 1983, (2) before 1986, binding contracts are entered into to construct or acquire equipment that is specially designed for the project and which represents at least 50 percent of the aggregate cost of all such equipment, and (3) the project is completed before January 1, 1991.

Administration Proposal

Under the Administration proposal, the business energy tax credits would be allowed to expire at the end of 1985. The present law affirmative commitment rules would continue to apply.

Other Proposals

H.R. 2001 (Heftel) and S. 1220 (Hatfield)

Under H.R. 2001 and S. 1220, the energy tax credits for solar, wind, geothermal and ocean thermal property would be extended after 1985, under the following schedule:

Property	Credit rate	Termination date
Solar property:		
Low temperature	15%	Dec. 31, 1990.
Other solar.....	25%	Dec. 31, 1990.
Geothermal property	15%	Dec. 31, 1988.
Wind property.....	10%	Dec. 31, 1987.
	5%	Dec. 31, 1988.
Ocean thermal property.....	15%	Dec. 31, 1990.
Biomass property	15%	Dec. 31, 1987.
	10%	Dec. 31, 1988.

For the most part, these credits would be extended at the present law rate of tax credit. Solar property, other than low temperature, would receive a 25-percent credit instead of 15 percent, and it would consist of property to generate electricity, provide solar process heat, or provide hot water at a temperature more than 300 degrees Fahrenheit.

The credit for wind energy property would be phased down during the 3-year extension period.

In a mixed use geothermal energy situation, all energy property qualifies for the alternative energy property tax credit, if geother-

mal sources provide 50 percent of the energy used and the remainder is supplied from an alternate substance. When the other source does not use an alternate substance, the property would qualify for the credit to the proportionate use of geothermal energy. If geothermal energy supplies less than 50 percent of the energy, no property qualifies for the credit.

The definition of biomass property would be expanded to include (1) any synthetic gaseous fuel produced from wood and (2) methane-containing gas for fuel or electricity produced by anaerobic digestion from nonfossil waste materials at farms or other agricultural facilities which include processing of agricultural products.

Affirmative commitment rules would be modified with respect to certain long-term energy projects relating to solar energy and geothermal energy properties. If these properties meet the modified affirmative commitment rules, they would qualify for the credit over a longer period. In certain prescribed circumstances, a longer period would be made available also for certain hydroelectric projects.

The energy tax credits for intercity buses and small scale hydroelectric generating property would be allowed to expire on December 31, 1985.

H.R. 1272 (Fowler) and S. 1201 (Hawkins)

H.R. 1272 and S. 1201 would extend the energy tax credit for solar property as does S. 1220.

S. 409 and H.R. 800 (Bradley-Gephardt), H.R. 2222 and S. 1006 (Kemp-Kasten)

Under the Bradley-Gephardt and Kemp-Kasten bills, the business energy tax credits would be repealed as part of repeal of the general investment tax credit.

H.R. 843 (Seiberling) and H.R. 1315 (Latta)

H.R. 843 and H.R. 1315 would amend the eligibility rules for qualifying for the energy tax credit in a mixed-use operation relying primarily on geothermal energy. If geothermal sources provide 80 percent of the energy used, all equipment of the system would be eligible for the energy credit. If geothermal sources provide less than 80 percent of the energy used, the energy credit would apply only to equipment using geothermal energy for 50 percent or more of its energy supplies. Energy percentages would be determined on a Btu basis.

Analysis

The issues with respect to business renewable energy tax credits fundamentally are the same as those with respect to residential credits, namely, whether the credits have been available for a sufficiently long period of time to encourage production and sales at efficient, self-sustaining levels, and if such production levels have not been reached, whether those levels will be attained solely because a tax credit is available.

3. Alternative Fuels Production Tax Credit

Present Law and Background

A tax credit is provided for the domestic production and sale of qualified fuels to unrelated persons. The credit applies to such fuels produced and sold from (1) facilities placed in service after December 31, 1979, and before January 1, 1990, or (2) wells drilled after December 31, 1979, and before January 1, 1990, on properties which first begin production after December 31, 1979. Qualifying fuels may be sold at any time after December 31, 1979, and before January 1, 2001. The tax credit for alternative fuels production was enacted in the Crude Oil Windfall Profit Tax Act of 1980.

The credit equals \$3 for each 5.8 million Btu's of energy. (One barrel of crude oil contains approximately 5.8 million Btu's.) All Btu measurements must be made without regard to any Btu's attributable to materials or energy sources other than the qualified fuel. Except for gas produced from a tight formation, the \$3 amount is indexed for post-1979 increases in the GNP deflator.

The credit phases out as the annual average wellhead price of uncontrolled domestic oil rises from \$23.50 to \$29.50 a barrel (\$32.10 and \$40.30, respectively, in terms of 1984 prices). The phase-out range is adjusted for post-1979 changes in the GNP deflator.

The credit is available for production and sale of the following fuels:

- (1) Oil produced from shale and tar sands;
- (2) Gas produced from geopressured brine, Devonian shale, coal seams, or a tight formation;
- (3) Gas produced from biomass;
- (4) Liquid, gaseous, or solid synthetic fuel (including alcohol) produced from coal (including ignite), including such fuels when used as feedstocks;
- (5) Qualifying processed wood fuels; and
- (6) Steam from solid agricultural byproducts (not including timber byproducts).

Administration Proposal

The credit for producing fuels from nonconventional sources would be terminated after December 31, 1985. However, the credit would continue for eligible fuel produced from a well drilled, or facility completed, before January 1, 1986, and sold before January 1, 1990.

Other Proposals

S. 409 and H.R. 800 (Bradley-Gephardt), H.R. 2222 and S. 1006 (Kemp-Kasten)

The Bradley-Gephardt and Kemp-Kasten bills would repeal the credit allowable for producing fuel from a nonconventional source.

S. 411 and H.R. 373 (Roth-Moore)

Under S. 411 and H.R. 373, no tax credit for producing fuel from nonconventional sources would be allowed after December 31, 1984, to a person other than a subchapter C corporation.

Analysis

The alternative energy production credit was enacted in 1980 when oil prices had doubled within a period of one year. Since net imports were about 37 percent of U.S. petroleum and products in 1980, there was extensive interest in the United States to encourage development and production of alternative energy sources. Production of other fuels was to be encouraged by a production credit that was related to the price of oil, the rate of inflation, and the Btu content of the fuel relative to that of petroleum.

Since 1981, the price of petroleum has been falling on world markets reflecting increased production from new sources, conservation efforts, and industrial fuel switching.

Declining oil prices have squeezed the ability of alternative fuels to compete with oil because the costs of producing alternative fuels has not fallen. Consequently, efforts to produce such fuels profitably have been stymied.

On the one hand, it is argued that it is undesirable to continue the production credits in view of the present noncompetitive economic situation and the prospect that alternative fuels production will need to be subsidized, possibly for long periods of time. The needed subsidies may be so large that the credits clearly would be subsidizing very inefficient sources of energy production. Further, it is argued that a uniform incentive for conservation and for production of alternative energy sources would encourage, on an even-handed basis, all alternatives for reducing oil imports.

On the other hand, the credits, no matter now expensive currently, may be viewed as an investment in research and development for long-term future energy needs. If successful, these could yield large future benefits.

4. Alcohol Fuels Tax Credit and Related Provisions

Present Law and Background

Alcohol fuels credit

A 60-cents-per-gallon tax credit is allowed for alcohol used in certain mixtures of alcohol and gasoline (i.e., gasohol), diesel fuel, or any special motor fuel if the mixture is sold by the producer for use as a fuel or is used as a fuel by the producer (sec. 40).¹⁰² The credit also is permitted for alcohol (other than alcohol used in a mixture with other taxable fuels) if the alcohol is used by the taxpayer as a fuel in a trade or business or is sold at retail by the taxpayer and placed in the fuel tank of the purchaser's vehicle.

The amount of any person's allowable alcohol fuels credit is reduced to take into account any benefit received with respect to the alcohol under the excise tax exemptions for alcohol fuels mixtures or alcohol fuels.

The credit is scheduled to expire December 31, 1992.

¹⁰² The Deficit Reduction Act of 1984 (P.L. 98-369) increased the credit from 50 cents to 60 cents per gallon, effective January 1, 1985.

Excise tax exemptions for alcohol fuels mixtures and alcohol fuels

Alcohol fuels mixtures

Present law provides a 6-cents-per-gallon exemption from the excise taxes on gasoline, diesel fuel, and special motor fuels for fuels consisting of mixtures of any of those fuels with at least 10-percent alcohol (secs. 4041, 4081, and 6427).¹⁰³ (This is equivalent to 60 cents per gallon of alcohol in a 10-percent mixture.) The term alcohol is defined to include only alcohol derived from a source other than petroleum, natural gas, or coal. This exemption is scheduled to expire December 31, 1992.

Alcohol fuels

Present law provides a 9-cents-per-gallon exemption from the excise tax on special motor fuels for certain "neat" methanol and ethanol fuels derived from a source other than petroleum or natural gas. A 4-1/2-cents-per-gallon exemption is provided for these fuels when derived from natural gas (sec. 4041).¹⁰⁴ "Neat" alcohol fuels are fuels comprised of at least 85 percent methanol, ethanol, or other alcohol. This exemption is scheduled to expire December 31, 1992.

Duty on imported alcohol fuels

A 60-cents-per-gallon duty is imposed on alcohol imported into the United States for use as a fuel (19 U.S.C. 1202).¹⁰⁵

Administration Proposal

After December 31, 1985, the alcohol fuels credit would be available only for qualified alcohol fuels produced from facilities completed before January 1, 1986, and sold before January 1, 1993. The excise tax exemptions would be repealed, effective after December 31, 1985. The duty on alcohol imported for use as a fuel would not be changed.

Other Proposals

The Bradley-Gephardt (S. 409, H.R. 800) and Kemp-Kasten (H.R. 2222, S. 1006) bills would repeal the alcohol fuels credit, but would retain the excise tax exemptions and the import duty.

Analysis

Proponents of the alcohol fuels credit and excise tax exemptions suggest that these incentives are necessary to encourage development of viable alternatives to petroleum fuels. Proponents point to the United States dependence on imported oil and to actions by other countries disrupting international markets in recent years. Proponents argue that development of a domestic alternative fuels industry is essential to national security.

¹⁰³ The Deficit Reduction Act of 1984 (P.L. 98-369) increased the exemption from 5 cents to 6 cents per gallon, effective January 1, 1985.

¹⁰⁴ This 4-1/2-cent-per-gallon exemption was enacted in the Deficit Reduction Act of 1984, effective January 1, 1985.

¹⁰⁵ The Deficit Reduction Act of 1984 (P.L. 98-369) increased the duty from 50 cents per gallon, effective January 1, 1985.

Opponents of these incentives suggest that the incentives are inefficient and further that they are unnecessary subsidies in light of current world oil market conditions. Opponents point out, for example, that the 60-cents-per-gallon alcohol fuels credit and the equivalent subsidy provided by the alcohol fuels excise tax exemption produce a Federal Government subsidy equal to \$25.20 per barrel of oil equivalent.

V. OTHER CAPITAL-RELATED PROVISIONS

A. Expensing of Research and Experimentation Expenditures and Tax Credit for Increasing Research Expenditures

Present Law and Background

Expensing

In general

A taxpayer may elect to deduct currently the amount of research and experimental expenditures incurred in connection with its trade or business (sec. 174), notwithstanding the general rule that business expenditures to develop or create an asset which has a useful life extending beyond the taxable year must be capitalized. (Alternatively, the taxpayer may treat these expenditures as deferred expenses and deduct them over a period of not less than 60 months on a straight-line basis.) This provision was enacted in the 1954 Code in order to eliminate the need to distinguish research from business expenses for deduction purposes, and to encourage taxpayers to carry on research and experimentation activities.¹⁰⁶

The section 174 expensing election applies to "research and development costs in the experimental or laboratory sense." Treasury regulations define this term to include any such costs incident to the development or improvement of an experimental or pilot model, a plant process, a product, a formula, an invention, or similar property. These costs may be expensed if incurred directly by the taxpayer or by a contractor conducting research on behalf of the taxpayer.

The section 174 election does not apply to expenditures for the acquisition or improvement of depreciable property, or land, to be used in connection with research. Thus, for example, the total cost of a research building or of equipment used for research cannot be currently deducted in the year of acquisition. Under ACRS, machinery and equipment used in connection with research are classified as three-year recovery property and are eligible for a six-percent regular investment tax credit.

Use of deduction in tax shelters

In some circumstances, the section 174 expensing election has been allowed for research expenditures incurred prior to the time the taxpayer generally would be viewed as carrying on a trade or business (*Snow v. Comm'r*, 416 U.S. 500 (1974)). In the *Snow* case, the U.S. Supreme Court allowed a passive investor in a limited partnership, formed to develop an incinerator, to use his share of

¹⁰⁶ H. Rpt. No. 1337, 83d Cong., 2d Sess. at 28 (1954); S. Rpt. 1622, 83d Cong. 2d Sess. at 33 (1954).

the partnership's research expenditures to shelter income from other sources, although no product had been offered for sale during the year.

The Court construed the trade or business requirement in section 174 as less restrictive than that in section 162, citing Congressional intent to encourage research expenditures by an "oncoming business" as well as by an ongoing business. Holding that, for purposes of section 174, the taxpayer need not currently be producing or selling any product in order to obtain a deduction for research expenses, the Court allowed the deduction in light of evidence that expectations of sales were high, "profit motive was the sole drive of the venture," and the inventor-partner actively engaged in the research.

Pointing out that *Snow* had not eliminated the statutory trade or business test in section 174, the U.S. Tax Court recently concluded that for the expensing election to be available, the taxpayer must be engaged in a trade or business "at some time" (*Green v. Comm'r*, 83 T.C. 667 (1984)). Hence, the taxpayer's activities in connection with a product must be examined to determine whether they are sufficiently substantial and regular to constitute a trade or business for section 174 purposes. In *Green*, a limited partnership had, on the same day, acquired four inventions, agreed to pay a patent development company \$650,000 over three years to develop the inventions, and granted that company an exclusive license to manufacture and sell the developed products.

The Tax Court disallowed deductions totaling \$650,000 claimed by the partnership under section 174. The Court held that these expenditures had not been incurred in connection with a trade or business since the partnership never intended to enter into, nor was it financially capable of, carrying on an active trade or business; the partnership functioned only as an investment vehicle. The Tax Court noted that section 174 was intended to encourage "up-and-coming" small businesses to engage in research, not to allow passive investor entities to obtain current deductions.

Incremental tax credit

Under a provision enacted in the Economic Recovery Tax Act of 1981, the taxpayer also may claim a nonrefundable 25-percent income tax credit for certain research expenditures paid or incurred in carrying on an existing trade or business (sec. 30). The credit applies only to the extent that the taxpayer's qualified research expenditures for the taxable year exceed the average amount of the taxpayer's yearly qualified research expenditures in the specified base period (generally, the preceding three taxable years). Under present law, the credit will not be available for expenses paid or incurred after December 31, 1985.

Research expenditures eligible for the incremental credit consist of (1) in-house expenditures by the taxpayer for research wages and supplies used in research, plus certain amounts paid for research use of laboratory equipment, computers, or other personal property; (2) 65 percent of amounts paid by the taxpayer for contract research conducted on the taxpayer's behalf; and (3) if the taxpayer is a corporation, 65 percent of the taxpayer's expenditures (including grants or contributions) pursuant to a written research agree-

ment for basic research to be performed by universities or certain scientific research organizations.

The credit provision adopts the definition of research used for purposes of the section 174 expensing provision, but subject to three exclusions: (1) expenditures for research which is conducted outside the United States; (2) research in the social sciences or humanities; and (3) research to the extent that it is funded by any grant, contract, or otherwise by another person (or any governmental entity).

Under present law, the amount of the section 174 deduction is not reduced by the amount of the research credit.

Administration Proposal

Expensing

The Administration proposal would not modify the expensing of research expenditures under section 174. Depreciable property used in research and experimentation would qualify for the most rapid depreciation available under the proposal, as under present law.

Incremental tax credit

The research credit would be extended at the present 25-percent rate for an additional three years, through December 31, 1988.

The definition of qualified research would be revised in an effort to limit the credit to research activities involving a process of true experimentation intended to result in technological innovations in products and production processes. The Administration proposal does not include a detailed explanation of the contemplated revisions, but the definition in the Senate-passed version of the Deficit Reduction Act of 1984¹⁰⁷ is cited favorably.

Other Proposals

Expensing

Neither the 1984 Treasury report nor the Bradley-Gephardt bill (S. 409, H.R. 800) propose modifying the expensing of research expenditures. The Kemp-Kasten bill (H.R. 2222, S. 1006) would replace actual expensing of these costs with recovery through depreciation; the depreciation system in this bill is intended to generate deductions whose present value is economically equivalent to expensing.

¹⁰⁷ The Senate provision is explained in Senate Comm. on Finance, "Deficit Reduction Act of 1984: Explanation of Provisions Approved by the Committee on March 21, 1984," S. Prt. 98-169 (Vol. I), 98th Cong., 2d Sess. 899-912. The Senate provision was not accepted in conference. Under that provision, qualified research would be defined as either (1) planned or systematic investigation undertaken to discover information that may be useful in developing a technologically new or improved business component of the taxpayer, or (2) application of the results obtained from such research activity, or other knowledge, to develop a technologically new or improved business component of the taxpayer. This definition of research would include design, construction, and testing of models or prototypes, or an experimental pilot plant. The limitations on qualified research would include requirements that the taxpayer's new business component contain or embody new or improved technological characteristics and that substantially all of the qualified research activities constitute elements of a process of qualified experimentation. The Senate provision would specify certain activities ineligible for the credit, including reverse engineering, adaptation, and post-production activities.

Incremental tax credit

The proposal in the 1984 Treasury report to extend the credit for three years, with modifications, is the same as that in the Administration proposal. The Bradley-Gephardt and Kemp-Kasten bills would not extend the credit.

Analysis

Governmental support for research

Even without special tax preferences or other government assistance, businesses are induced to undertake research activities to obtain the competitive advantages of innovations. At the same time, all of the profits derived from commercial research may not inure to the business that conducted the innovative research, because products developed by others as variations of the initial innovation may siphon off shares of the profits, and because innovations may have uses that are unrelated to the business of the firm that conducted the research. Nonetheless, an inability to capture the full profit potential of an innovation may not represent a significant disincentive to research when compared to the competitive rewards of innovation.

Because of the possible inability of a business to capture all the benefits of its investment in research, and because of the degree of risk and the long-term nature of some experimentation, economists have concluded that companies acting only in their self-interest tend to invest less in certain types of research than the maximum amount of such research desirable for society. At the same time, some firms engage in duplicative research (often called "reverse engineering"), investigating a product developed by another firm in an effort to duplicate it without the expense of licensing. Also, firms may emphasize short-term projects such as the development and refinement of products and production processes; approximately 75 percent of industry research and development spending is for development rather than for basic or applied research.

The economy as a whole benefits from research that has social returns exceeding the private rewards to the innovator, through increased efficiency, productivity, and ability to compete in international trade. Accordingly, it is generally agreed that the government should seek to facilitate additional investments by business in research where the market may fail to induce sufficient expenditures. This is particularly true in the case of basic research—i.e., fundamental experimentation not having a specific commercial objective—which may involve greater risks of not achieving a commercially viable result, longer-term projects, and larger capital costs than ordinary product development.

With enactment of the patent system early in the country's history, the United States decided to facilitate innovation by helping inventors retain the profits from their discoveries. In addition, the Federal Government directly undertakes or funds research and development activities. At present, the government funds about 50 percent of total research and development expenditures in the United States. Although some 70 percent of government research and development expenditures are related to national defense,

these expenditures often have considerable spill-over benefits for the economy as a whole.

A fundamental issue raised by the proposals is whether the research needs of the nation are being adequately met through direct government support in the form of extensive expenditures for research grants and contracts, and through indirect government support of industry-funded research in the form of the patent protection system and the tax incentive under section 174 allowing expensing of certain capital costs of research. If it were determined that additional government support is needed, the basic question is whether such support should be provided directly by increasing government research expenditures, or indirectly through tax incentives in addition to section 174 expensing, such as the incremental research tax credit.

Direct government funding can be targeted to defined areas of national needs, such as basic research generally, development of advanced computers, or space technology, and is subject to government oversight. By comparison, some contend that a major disadvantage of the tax credit is that it is not targeted by type of research, field of research, or type of industry to which the subsidy is available. Instead, the tax credit operates in a manner akin to an entitlement program; that is, the tax benefit is automatically available for any increase in expenditures that can be characterized as research, regardless of the social value of the product of the research, the significance of the innovation, the degree of risk undertaken by the taxpayer, etc. The tax benefit of expensing operates similarly; the definition of research for purposes of section 174 sweeps broadly to cover all research and development costs, in the experimental or laboratory sense, of developing or improving products, formulae, plant processes, inventions, pilot models, and similar property.

It can be argued that this failure to target tax incentives, together with the elusiveness of defining the outer boundaries of qualifying expenditures, dilutes the social value of total research investments eligible for tax benefits and therefore calls into question the justification for providing the tax incentives. On the other hand, if increasing direct government funding for research is not feasible, then it could be argued that even a relatively ineffective tax subsidy with a low social rate of return may still be desirable, especially in view of the need for increased competitiveness of U.S. firms in international trade. Further, some would contend that the marketplace may have a broader range of ideas that may prove useful than government agencies focused on specified areas or objectives.

Proponents of tax incentives argue that (1) patent protections for inventions of a highly technological nature are inadequate; (2) private businesses are in a better position than Federal agencies to determine which research projects should be undertaken; and (3) governmental assistance is needed to offset assistance that foreign governments make available for research. Proponents also stress that the incremental credit serves to provide equity in light of the disproportionate tax burden generally borne by high technology companies. According to this view, the credit for research investments benefits high technology companies and counterbalances the bene-

fits of the investment tax credit and accelerated depreciation for manufacturing companies that were enacted in ERTA.

Others question whether the tax incentives have been effective in stimulating additional research commensurate with the associated revenue loss (more than \$1 billion annually), and criticize many types of tax-favored expenditures as lacking a public purpose that might merit public support. They also point out that a counterbalancing of tax incentives between high technology and other companies would no longer be needed in the context of tax reform proposals which would scale back those incentives for other companies. At the same time, proponents of the credit state that even after comprehensive tax reform, market forces alone would fail to compensate firms fully for the costs and risks of research spending, and hence that tax incentives for research would remain desirable.

Effectiveness of tax credit

Economists agree with the general proposition that tax incentives to encourage certain activities tend to increase taxpayers' involvement in those activities. The main area of disagreement is about measuring the degree of response to the tax incentives.

Testimony concerning the effectiveness of the incremental tax credit that was presented at the 1984 Ways and Means Oversight Subcommittee hearings was mixed. Some observed that the total annual expenditures for industry-funded research have increased both in nominal and constant dollar terms since enactment of the credit. Others note that the growth rate of such expenditures appears to be about the same or lower after enactment of the credit as it was in the years immediately preceding, suggest that factors such as foreign competition and decreased inflation also have affected research spending, and question whether there is any clear evidence that the credit has significantly increased research spending by businesses. Explanations of why there has not been a greater response to the credit have included: (1) insufficient time for plans to be made and reflected in statistics, given lags in collecting and processing data; (2) the 1981-1983 recession delayed expansion; (3) some firms have no tax liability and thus cannot make immediate use of the incentives; and (4) the mechanics of the incremental credit have reduced its effectiveness.

Survey data also reflect different views about the effectiveness of the credit. In one National Science Foundation survey, more than half the companies responding reported that the credit had not significantly affected their research budgets. A survey by the Conference Board of corporation officers showed that 17 percent thought the research credit "very important" to include in the tax law after tax reform; 40 percent thought it "not too important;" and 43 percent thought it "unimportant."

Business executives and industry representatives testifying at congressional hearings have agreed that the credit has been an important factor in encouraging their firms to expand their research activities, and that the credit would have an even stronger incentive effect if it were made permanent. Also, representatives of universities reported that industry sponsorship of university basic research has increased since 1981 because such grants or expenditures are eligible for the credit, and said that industry support

would grow larger if the credit for university research were modified as under the 1984 Senate provision.¹⁰⁸

Some have argued that the stimulative potential of a tax credit for research has not been fully realized because of the following aspects of the present-law incremental tax credits:

(1) Companies whose annual research expenditures fluctuate widely may not gain the full benefits of the credit because a year of relatively low expenditures could fall below the base period average;

(2) Research expenditures exceeding twice the base period average may deprive the company of the full credit because under present law, the base period average is deemed to be at least 50 percent of current expenditures; this provision affects companies with sharply increasing expenditures (e.g., to exploit a unique opportunity) and start-up companies;

(3) The research credit (like other business credits) is nonrefundable; and

(4) The credit is calculated by reference to a moving average of the taxpayer's own most recent research expenditures (rather than, e.g., by reference to a fixed base or an industry base), thus lowering the benefit of the credit in future years because of current increases in research.

While the structure of the credit (if extended) could be modified in response to these items, changes expanding the availability of the credit would increase the revenue cost of the credit.

Under present law, the credit also is allowable for dollar increases in research spending that are attributable solely to the effect of inflation. To that extent, the credit is available to a company that spends more but maintains the same real level of research activities, although no incentive objective has been served. The Treasury Department has estimated that up to 30 percent of amounts qualifying for the credit in 1981 might have been attributable solely to inflation. Also, research spending that may be viewed as offering no special return to the economy as a whole, such as duplicative research and routine product development, is eligible for the credit.

Expenditures eligible for the credit

In general.—The Treasury Department has reported that the imprecision of the current definition of qualified research has given taxpayers unwarranted flexibility in classifying business costs as research expenditures for credit purposes. Early data on the credit reflects that taxpayers had claimed the credit for activities that, Treasury stated, frequently did not involve high technology or high risk research, including expenditures in such lines of business as fast food restaurants, baked goods, home building, publishing,

¹⁰⁸ See note 107, *supra*. Under that provision, a new 25-percent credit would apply to the excess of (1) 65 percent of corporate cash expenditures for university basic research over (2) the sum of the greater of two fixed research floors (the average of the corporation's credit-eligible university basic research expenditures for 1981-1983 or one percent of the average amount of all the corporation's credit-eligible research expenditures for those years), plus an amount reflecting any decrease in nonresearch giving to universities by the corporation during a moving base period. The excess credit-eligible expenditures to which the new credit would apply would not also enter into the computation of the incremental research credit.

banking, stock brokerage, and movie production. Accordingly, the Administration proposal would generally seek to limit the credit (but not the section 174 expensing provision) to research and experimentation that is aimed at developing technologically innovative products and processes.

The proposed definition of qualified research, apparently similar to that in the Senate version of the Deficit Reduction Act of 1984,¹⁰⁹ is intended to be more restrictive than the present law definition, in part by limiting the extent to which the credit may be claimed for developmental activities that involve little innovation or experimentation (such as reverse engineering, adaptation, post-production activities, routine development of internal-use computer software, or retooling a production line for annual model changes of an existing product). Inasmuch as the Treasury has estimated that the revised research definition in the 1984 Senate bill would have reduced the revenue loss from the credit by only \$75 million annually, this aspect of the proposal may not be viewed as accomplishing a significant narrowing of the definition of research.

Rental costs.—Expenditures for the right to use personal property in research, such as expenditures to lease laboratory equipment, could be limited to payments for the use of computer time by a person other than the principal user of the computer. The inconsistent treatment under present law between depreciable property used for research, which is not eligible for the credit, and any leasehold for such depreciable property, which is eligible for the credit, skews the taxpayer's investment decision in favor of leasing. Others have suggested that depreciation allowances for equipment used in research should be eligible for the credit.

Other considerations

Both the Bradley-Gephardt bill and the Kemp-Kasten bill address the treatment of excess credits that were earned prior to the proposed reductions in marginal tax rates and are carried over to a year when the lower tax rates are in effect. In each bill, carryovers would be reduced so that they shield the same amount of income from tax as they would have if the credits had been used when earned.

For example, a \$1 million credit now offsets tax on about \$2.2 million of income for a large corporate taxpayer in the 46-percent rate bracket. If carried over to a year when the top rate had dropped to 33 percent, the same credit would offset tax on \$3 million of income. According to the principle contained in the Bradley-Gephardt bill and the Kemp-Kasten bill, the carryover amount in this example would be reduced so that it would offset the original \$2.2 million of income when used at the lower tax rate.

An adjustment of this kind is not included in the Administration proposal to extend the research credit at the present 25-percent rate. Thus, for a corporation paying the highest marginal tax rate, the combined current benefit of expensing and the research credit for \$1 of creditable research expenditures, which is now equivalent

¹⁰⁹ See note 107, *supra*.

to a deduction of \$1.54, would increase to the equivalent of a \$1.76 deduction.

Modifications to expensing deduction

In reviewing the desirability and effectiveness of tax incentives for research, the Congress could consider the following aspects of the section 174 expensing provision.¹¹⁰

(1) Under one possible proposal, no deduction would be allowed for that portion of the taxpayer's qualified research expenditures during a taxable year which is equal to the amount of credit allowable for that year. For example, assume that a taxpayer has qualifying research expenditures during the year of \$1 million, and that the base period amount is \$600,000. Under present law, the research credit is 25 percent of the \$400,000 increase in research expenditures, or \$100,000, and the full \$1 million amount is deductible. Under the proposal, the \$1 million deduction would be reduced by the \$100,000 credit, leaving a deduction of \$900,000.

The allowance of the credit, which reduces the taxpayer's income tax liability by an amount equal to the specified percentage of incremental research expenditures, may be viewed as equivalent to a Federal payment to a taxpayer of the credit amount. Accordingly, since under this view the taxpayer in effect does not pay for its research expenditures to the extent a credit is provided, it could be argued the taxpayer's deduction should be reduced by that amount. There is precedent in tax law for so adjusting the deduction. For example, the amount of the 15-percent or 20-percent credit for certain qualified rehabilitation expenditures reduces the basis of the property for deduction (depreciation) purposes. Similarly, under the targeted jobs credit, the employer's deduction for wages qualifying for the credit is reduced by the amount of the credit.

On the other hand, a deduction disallowance equal to the amount of the credit would reduce the tax incentives for research expenditures. The Congress determined, in enacting the credit, that substantial tax incentives for research expenditures were needed to overcome the reluctance of many companies to allocate funds for the uncertain rewards of research programs.

(2) Aside from any modification to reflect the effect of the credit, section 174 could be modified by requiring straight-line amortization of research costs over a period of years (e.g., five years), instead of allowing expensing of such costs, which often may have a useful life of more than one year. It could be argued that, particularly in light of other incentives which would be repealed or cut back under tax reform proposals, expensing of research costs would give a disproportionate tax benefit to one type of business investment. On the other hand, the Congress has already indicated that such tax benefits for research are desirable. Also, the section 174 expensing deduction may serve a simplification function; i.e., as-

¹¹⁰ The issue of whether the expensing of research expenditures under sec. 174 should be a preference item for purposes of a corporate minimum tax is discussed in a separate pamphlet (prepared by the staff of the Joint Committee on Taxation) on tax reform proposals relating to tax shelters and the minimum tax (JCS-34-85), August 7, 1985. Under the present-law alternative minimum tax for individuals, the excess of the section 174 expensing deduction over the deduction allowable if the research expenditures had been capitalized and amortized ratably over a 10-year period is a preference item.

suming the credit were not extended, the deduction eliminates the need to distinguish research from other business expenses.

(3) The definition of research and development expenditures eligible for expensing under section 174 could be narrowed, if it were considered desirable to target the tax incentives of expensing to particular types of research activities or fields. This possible proposal raises the issues discussed above in connection with targeting the research tax credit.

(4) Another aspect of the section 174 deduction that could be reviewed is the availability of the deduction to passive investors in research and development limited partnerships. One issue is whether present-law restrictions generally applicable to tax shelters have been effective in precluding abusive situations.¹¹¹ Another issue involves the scope and effectiveness of the trade or business requirement applicable under section 174, which is less restrictive under present law than the trade or business test applied for purposes of the research tax credit.

Financing research through limited partnerships can offer sponsoring companies significant benefits as compared to equity or debt financing. By lowering the cost to the company of attracting investments and thereby raising the rate of return, limited partnership financing provides a tax incentive to research.

Some argue that the tax rules applicable to research limited partnerships should be liberalized, and that the research tax credit also should be allowed to passive investors in such partnerships. Others argue that projects financed through limited partnerships tend to involve product development, and thus produce fewer benefits to the economy than would basic research activities. In addition, use of limited partnerships as vehicles for research activities may result in relatively poor targeting of the tax benefits of such activities, and could be viewed as permitting the marketing of tax incentives rather than stimulating new research activities.¹¹² Thus, they assert, the rules applicable to research limited partnerships and the availability of the research credit in that context should not be liberalized.

¹¹¹ In a recent case involving transactions arising prior to the tax shelter restrictions imposed by the Tax Reform Act of 1976 and subsequent tax legislation, the U.S. Tax Court found that "specious nonrecourse notes were employed with reckless abandon" to increase deductions under section 174 claimed by investors in a limited partnership engaged in developing an automobile engine.

¹¹² The use of limited partnerships as tax shelter vehicles is discussed in a separate pamphlet. See Joint Committee on Taxation, *Tax Reform Proposals: Tax Shelters and Minimum Tax* (JCS-34-85), August 7, 1985.

B. Tax Credit for Rehabilitation Expenditures

Present Law and Background

A three-tier investment tax credit is provided for qualified rehabilitation expenditures. The credit is 15 percent for nonresidential buildings at least 30 years old, 20 percent for nonresidential buildings at least 40 years old, and 25 percent for certified historic structures (including residential buildings). The Economic Recovery Tax Act of 1981 (ERTA) established this three-tier tax credit, expanded from the prior (1978) extension of the regular 10-percent investment tax credit to rehabilitation expenditures for nonresidential buildings at least 20 years old.

A certified historic structure is defined as a building (and its structural components) that is listed in the National Register of Historic Places, or is located in a registered historic district and certified by the Secretary of the Interior.

The rehabilitation credit is available only if the taxpayer elects to use the straight-line method of cost recovery with respect to rehabilitation expenditures. If the 15- or 20-percent investment credit is allowed for qualified rehabilitation expenditures, the basis of the property is reduced by the amount of credit earned (and the reduced basis is used to compute cost recovery deductions) (sec. 48(q)(1) and (3)). The basis is reduced by 50 percent of the 25-percent credit allowed for the rehabilitation of a certified historic structure.

Expenditures qualify for the credit only if incurred in connection with a substantial rehabilitation. The test of substantial rehabilitation generally is met if the qualified expenditures during the 24-month period ending on the last day of the taxable year exceed the greater of the adjusted basis of the building as of the first day of the 24-month period, or \$5,000.

Administration Proposal

The special tax credits for rehabilitation expenditures would be repealed, effective as of January 1, 1986. Expenditures incurred on or after the effective date would be aggregated with prior expenditures for purposes of determining whether there has been a substantial rehabilitation. Thus, a credit would be allowed with respect to pre-effective date expenditures, even though the amount of such expenditures would not by itself qualify under the test for a substantial rehabilitation.

Other Proposals

Both the Bradley-Gephardt bill (S. 409, H.R. 800) and the Kemp-Kasten bill (H.R. 2222, S. 1006) would repeal the credit for rehabilitation expenditures.

Analysis

In 1981, Congress restructured and increased the tax credit for rehabilitation expenditures. Congress was concerned that the tax incentives provided to investments in new structures (e.g., accelerated cost recovery) would have the undesirable effect of reducing the relative attractiveness of the prior-law incentives to rehabilitate and modernize older structures, and might lead investors to neglect older structures and relocate their businesses.

Proponents of repeal contend that special incentives to rehabilitate older structures are unnecessary if the tax incentives available to other types of investment are reduced or repealed. It is also argued that non-tax factors are far more important to business decisions about relocation, and that, in any case, economic growth requires the free mobility of resources. Opponents of repeal stress the social and aesthetic values of rehabilitating and preserving older structures, the importance of which is not necessarily taken into account in investors' profit projections. Additionally, it is argued that a tax incentive is needed because market forces would otherwise channel investments away from the extra costs of undertaking rehabilitations of historic buildings.

Additional issues arise if Congress decides to retain and modify the rehabilitation credit. First, the Administration has expressed a concern about whether the Department of the Interior should have sole authority to determine eligibility for the credit allowed for the rehabilitation of an historic structure, since the subsidy is not included in that department's budget. Second, the rate of credit could be reviewed in conjunction with the proposed reduction in marginal tax rates and changes in cost recovery allowances. At present, the 25-percent credit offsets 50 cents of income for every \$1 of rehabilitation expenditures made by a taxpayer in the top, 50-percent bracket; if the top tax rate were cut to 35 percent, a 17.5-percent credit would accomplish the same offset to income. Similarly reduced credits would produce the same offsets to income as the current 15-percent and 20-percent rehabilitation credits. At present, the combination of the 25-percent credit, straight-line cost recovery, and basis adjustment for one-half the credit allowed is economically equivalent to expensing when recovery allowances are discounted at 8 percent per year and the taxpayer is in the top tax bracket. If the top marginal tax rate were cut to 35 percent, CCRS were substituted for ACRS, and the rehabilitation credit rules were not amended, the benefits for historic rehabilitation expenditures would be considerably more generous than expensing.

C. Rapid Amortization Provisions

1. Special Expensing, Rapid Amortization, and Investment Credit Provisions Affecting Agriculture and Forestry

Present Law

Soil and water conservation expenditures

A taxpayer engaged in the business of farming may elect to expense amounts that are paid or incurred during the taxable year for the purpose of soil or water conservation in respect of land used for farming, or for the prevention of erosion of land used for farming (sec. 175). The maximum amount that may be expensed in any taxable year may not exceed 25 percent of the taxpayer's gross income derived from farming during that year. Any amount not deductible in any year because of the 25 percent of gross income limitation may be deducted in succeeding taxable years as long as no year's deduction under this provision exceeds 25 percent of gross income from farming for that year. If a taxpayer disposes of farm land which has been held for fewer than 10 years, a percentage of amounts expensed is recaptured as ordinary income (sec. 1252).

Expenditures by farmers for fertilizer and soil conditioning

A taxpayer engaged in the business of farming may elect to expense otherwise capitalized amounts that are paid or incurred during the taxable year for materials to enrich, neutralize, or condition land used in farming, or for the application of such materials to the land (sec. 180). For this purpose, land is used in farming if it is used, either before or simultaneously with the expenditures described above, by the taxpayer or his or her tenant for the production of crops, fruits, or other agricultural products, or for the sustenance of livestock.

Expenditures by farmers for clearing land

A taxpayer engaged in the business of farming may elect to treat expenditures paid or incurred in a taxable year to clear land for the purpose of making such land suitable for use in farming as a currently deductible expense (sec. 182). For any taxable year, this deduction may not exceed the lesser of \$5,000 or 25 percent of the taxable income derived from farming. Amounts expensed under this provision are subject to recapture under the same rules that apply to expenditures for soil and water conservation (sec. 1252).

Amortization of and investment credit for reforestation expenditures

Taxpayers may amortize over a 7-year period up to \$10,000 of reforestation expenditures incurred in each taxable year (sec. 194). A 10-percent investment credit also is allowable for these expenditures (sec. 48(f)). Reforestation expenditures qualifying for amorti-

zation and credit include the cost of site preparation, seed or seedlings, labor, and tools. Amortized expenditures are subject to recapture if the underlying property is disposed of within 10 years from the year of the expenditure. The credit is subject to the general investment credit recapture rules.

Administration Proposal

The elections to expense certain expenditures for soil and water conservation, fertilizer and soil conditioning, and land clearing would be repealed, effective for expenditures paid or incurred after December 31, 1985. Additionally, the special amortization and investment credit provisions for reforestation expenditures would be repealed, effective for expenditures paid or incurred after December 31, 1985.

Other Proposals

The 1984 Treasury report is the same as the Administration proposal.

The Bradley-Gephardt bill (S. 409, H.R. 800) would repeal the special amortization and investment credit provisions for reforestation expenditures. That proposal also would restrict eligibility for the expensing provisions for soil and water conservation, fertilizer and soil conditioning, and land clearing expenditures to persons engaged in farming who were eligible to use the cash accounting method under revised rules governing that practice.

The Kemp-Kasten bill (H.R. 2222, S. 1006) would repeal the expensing provisions for soil and water conservation and land clearing expenditures, and the amortization and investment credit provisions for reforestation expenditures.

Analysis

Proponents of repealing these provisions argue that the private return on investments in land improvement and reforestation generally is sufficient reward to motivate these investments, and that spending programs are preferable to tax incentives in cases where the private return is insufficient.

Opponents of repeal respond that the benefits of soil conservation and reforestation are typically enjoyed by other persons as well as by the one who makes the investment. Thus, the opponents suggest that the private return understates the social benefit, leading to underinvestment in the absence of public subsidies. For example, downstream users gain from clearer water when conservation expenditures are made upstream.

2. Other Amortization Provisions

Present Law

Five-year amortization of trademark and trade name expenditures

Taxpayers may elect to amortize over a period of at least 60 months expenditures for the acquisition, protection, expansion, registration, or defense of a trademark or trade name, other than an

expenditure which is part of the consideration for an existing trademark or trade name (sec. 177).

Five-year amortization of pollution control facilities

Taxpayers may elect to amortize the cost of a certified pollution control facility over a 60-month period (sec. 169). To the extent that a pollution control facility has a useful life in excess of 15 years, a portion of the facility's cost is not eligible for 60-month amortization, but must be recovered through depreciation.

In general, a certified pollution control facility is a treatment facility used to abate or control water or air pollution, in connection with a plant or other property that was in operation before January 1, 1976, if (1) the facility is certified by the appropriate authorities as meeting certain pollution control standards, (2) the facility does not significantly increase the output, extend the life, or reduce the operating costs of the plant or other property, and (3) the costs of the facility are not expected to be recovered over its useful life.

Five-year amortization of expenditures to rehabilitate low-income housing

Taxpayers may elect to amortize over a 60-month period expenditures to rehabilitate low-income rental housing (other than hotels or other similar facilities primarily serving transients) (sec. 167(k)). Expenditures qualify for the election only if they are incurred for additions or improvements to property with a useful life of at least five years. Expenditures with respect to a dwelling unit are eligible only if the aggregate of such expenditures over two consecutive taxable years including the taxable year exceeds \$3,000. In addition, expenditures with respect to a dwelling unit are not generally eligible for five-year amortization to the extent that the aggregate of such expenditures exceeds \$20,000. In certain cases, this limitation is increased to \$40,000.

The election is scheduled to expire for expenditures incurred after December 31, 1986 (except in cases where rehabilitation began, or a binding contract for such expenditures was entered into, before January 1, 1987).

Fifty-year amortization of qualified railroad grading and tunnel bores

Current law permits domestic railroad common carriers to amortize the cost of qualified railroad grading and tunnel bores over a 50-year period (sec. 185). "Qualified railroad grading and tunnel bores" include all land improvements (including tunneling) necessary to provide, construct, reconstruct, alter, protect, improve, replace, or restore a roadbed or right-of-way for railroad track.

Administration Proposal

The Administration proposal would repeal the special amortization elections for expenses related to trademarks and trade names, pollution control facilities, low-income housing rehabilitation, and railroad grading and tunnel bores, for expenditures paid or incurred on or after January 1, 1986.

Other Proposals

The 1984 Treasury report is generally the same as the Administration proposal but contains transitional rules for expenditures under binding contracts in effect prior to 1986.

The Bradley-Gephardt bill (S. 409, H.R. 800) would repeal the special amortization elections for expenses related to pollution control facilities and low-income housing rehabilitation, but would retain present law with respect to expenditures for trademarks and trade names and railroad grading and tunnel bores. The Kemp-Kasten bill (H.R. 2222, S. 1006) would retain the present law treatment of these four items.

Analysis

The four special amortization provisions described above allow taxpayers to enjoy deductions for certain capital expenditures in advance of the otherwise applicable cost recovery allowances. In general, absent the special amortization provisions, expenses for trademarks and trade names and railroad grading and tunnel bores would be capitalized and recovered on disposition of the asset in the absence of any showing of a shorter determinable useful life. Expenses for pollution control facilities and low-income housing would be recovered in accordance with the generally applicable depreciation schedules.

The election provisions were enacted to create incentives or subsidies for investment in certain assets or activities. For example, amortization for pollution control facilities was enacted in 1969 in part to help industries to adjust to governmental standards restricting emitted pollutants. Some believe that this purpose has been achieved and that the tax preference, because available only for certain approaches to pollution abatement, now distorts private decisions with respect to choosing the most effective or least expensive form of abatement. The subsidy is available only for depreciable assets, and thus provides no incentive for other ways of reducing pollution from existing plants, such as using cleaner but more expensive grades of fuel and other raw material inputs. Similarly, it is argued that the preference may discourage complete replacement of production technologies which generate considerable pollution in any event. Others argue that the beneficiaries of pollution control include parties on whom the pollution control costs cannot be imposed through normal market processes, leading to underinvestment in the absence of some type of public subsidy.

For a second example, many view rapid amortization of rehabilitation expenditures on low-income housing as one component of governmental policy to increase the supply of affordable housing to low-income persons. The Administration, on the other hand, argues that direct spending results in more housing than tax preferences of the same amount, because much of the benefit of the tax preference goes to middleman's fees and other transactions costs of organizing investors who can take advantage of the tax benefits.

Congress enacted the special amortization provision for trademark and trade name expenditures in 1956 in part because of a perception that certain large companies whose in-house legal staff handled trademark and trade name matters were able in some

cases to deduct compensation with respect to these matters, because of difficulties of identification, while smaller companies that retained outside counsel were required to capitalize such expenses.¹¹³

The possibility that some taxpayers may fail accurately to compute nondeductible expenses is not limited to trademark and trade name expenditures and is arguably not a justification for permitting rapid amortization. Furthermore, to the extent such mischaracterization occurs, a five-year amortization provision only partially alleviates any unfairness. The Administration contends that there is no basis for a presumption that a trademark or trade name will decline in value. The Administration further contends that investment in trademarks and trade names does not produce special social benefits that market forces might inadequately reflect and a tax incentive for trademark or trade name expenditures is therefore inappropriate.

Congress enacted the special amortization provision for railroad grading and tunnel bore expenditures in 1969 to encourage investment in light of uncertainties about the useful life of such property. The scope of the provision was extended in 1976, to cover expenditures for pre-1969 property. The Administration contends that continuation of the benefit is inappropriate, in part on the ground that the value of the benefit depends on a railroad's taxable income, but profitable railroads may not be those the benefit was originally intended to assist.

3. Certain "Deadwood" Provisions

Present Law

Five-year amortization of certain expenditures for qualified child care facilities

Employers could elect to amortize over a 60-month period capital costs incurred before January 1, 1982, to acquire, construct, or rehabilitate child care facilities for their employees (sec. 188.)

Five-year amortization of certain railroad rolling stock

Taxpayers could elect to amortize over a 60-month period the adjusted basis of railroad rolling stock placed in service after 1968 and before 1976 (sec. 184).

Administration Proposal

The Administration proposal would delete sections 188 and 184 from the Code as deadwood.

Other Proposals

The 1984 Treasury report is the same as the Administration proposal.

Neither the Bradley-Gephardt bill (S. 409, H.R. 800) nor the Kemp-Kasten bill (H.R. 2222, S. 1006) would affect sections 188 and 184; thus, these sections would remain in the Code as deadwood.

¹¹³ See, S. Rep. No. 1941, 84th Cong. 2d Sess., pp. 8-9 (1956).

D. Merchant Marine Capital Construction Fund

Present Law and Background

The Merchant Marine Act of 1970

The Merchant Marine Act of 1970 provides Federal income tax incentives for U.S. taxpayers who own or lease vessels operated in the foreign or domestic commerce of the United States or in U.S. fisheries.

In general, qualified taxpayers are entitled to deduct from income certain amounts deposited in a capital construction fund pursuant to an agreement with the Secretary of Transportation or, in the case of U.S. fisheries, the Secretary of Commerce. Earnings from the investment or reinvestment of amounts in a capital construction fund are excluded from income. The purpose of these provisions is to provide a tax inducement to aid the U.S. shipping and shipbuilding industries.

The tax treatment of a withdrawal from a capital construction fund depends on whether it is "qualified." A nonqualified withdrawal of previously deducted or excluded monies by a taxpayer from a fund will generate income to the taxpayer. A qualified withdrawal does not generate income to the taxpayer. A qualified withdrawal is a withdrawal for the acquisition, construction, or reconstruction of a qualified vessel, or for the payment of principal on indebtedness incurred in connection with the acquisition, construction, or reconstruction of such a vessel. A qualified vessel is a vessel (including barges and containers) constructed or reconstructed in the United States, documented under U.S. laws, and which is to be operated in the U.S., foreign, Great Lakes, or noncontiguous domestic trade, or in U.S. fisheries.

Capital cost recovery

Because provision is made for the deduction (or exclusion) of certain amounts deposited in a capital construction fund and their tax-free withdrawal in the case of a qualified withdrawal, the amount of funds withdrawn reduces the tax basis of the qualified vessel. This provision is designed to prevent double deductions, which would occur if a taxpayer was permitted to take depreciation deductions for amounts the taxpayer had already deducted from—or never included in—income.

Investment tax credit

In general, the amount of investment tax credit for eligible property is determined with reference to the basis. Under Treasury regulations, if the basis of eligible property is reduced, for example, as a result of a refund of part of the cost of the property, then the credit is recaptured (Treas. Reg. sec. 1.47-2(a)(1)). A taxpayer may,

however, compute the investment tax credit for a qualified vessel (i.e., one that was financed in whole or in part by qualified withdrawals from a capital construction fund) by including at least one-half of qualified withdrawals in basis.

Administration Proposal

The rules providing special tax treatment for capital construction funds would be repealed. In general, taxpayers would be unable to make tax-free contributions to a capital construction fund after 1985.

Under a transitional rule, a taxpayer could continue to make contributions with respect to a vessel that the taxpayer owned on January 1, 1986, or a vessel with respect to which a substantial amount of construction or reconstruction occurred before that date. Any amounts remaining in a capital construction fund on January 1, 1989, would be treated as withdrawn at that time.

Other Proposals

Both the Bradley-Gephardt bill (S. 409, H.R. 800) and the Kemp-Kasten bill (H.R. 2222, S. 1006) would repeal the special tax treatment for capital construction funds.

Analysis

Proponents of repeal argue that the present law provides tax benefits in excess of those which would be allowed under a system permitting current expensing of the cost of a vessel financed by means of a qualified withdrawal. That result occurs because funds ultimately used in acquiring a qualified vessel are deductible (or excludible) from income before the vessel is placed in service, or, perhaps, even before a contract to acquire the vessel is entered into. To the extent any investment credit is allowed with respect to a qualified withdrawal of previously deducted or excluded funds, the tax benefits increase. It is also argued that to the extent a capital construction subsidy is justified, the subsidy would be better provided outside the tax system.

Opponents of repeal point out that Congress has adhered to a policy of providing tax incentives to the domestic shipping industry for many years, and that the elimination of such incentives, coupled with reduced appropriations for maritime construction, would injure the industry. There is a concern that, because of comparative shipbuilding and operating cost disadvantages, peacetime demand for U.S.-flag vessels would not reflect possible wartime needs.

E. Tax Credit for Orphan Drug Clinical Testing

Present Law and Background

A 50-percent tax credit is allowed for a taxpayer's qualified clinical testing expenses paid or incurred in the testing of certain drugs ("orphan drugs") for rare diseases or conditions (sec. 28). The credit is not refundable. A rare disease or condition is one that occurs so infrequently in the United States that there is no reasonable expectation that businesses could recoup the costs of developing a drug for it from U.S. sales of the drug. These rare diseases and conditions include Huntington's disease, myoclonus, ALS ("Lou Gehrig's disease"), Tourette's syndrome, and Duchenne's dystrophy, a form of muscular dystrophy.

Testing expenditures eligible for the 50-percent credit may be expensed as research and experimental expenditures under section 174, without reduction for the amount of the credit. A taxpayer may not claim the 25-percent credit for increasing research activities (sec. 30) with respect to expenditures for which the orphan drug credit is claimed. Present law provides that the orphan drug credit will not be available for amounts paid or incurred after December 31, 1987.

Under the Orphan Drug Act, the government directly finances initial clinical tests by independent researchers, which (if successful) provide data on the basis of which a research-oriented drug firm might decide to undertake more extensive testing.

Administration Proposal

The orphan drug credit would be allowed to expire December 31, 1987, as provided under present law.

Analysis

The orphan drug credit was enacted to encourage clinical testing of medications for rare diseases that have such low incidence that there is no prospect for commercially profitable production. The issue raised is whether this objective should be accomplished through the tax system or through extension of the grant program under the Orphan Drug Act (which recently was reauthorized through fiscal year 1988).

If the credit is extended, an issue is whether a taxpayer that expends its clinical testing expenditures under section 174 should be required to reduce the amount of that deduction by the amount of the orphan drug credit allowable for such expenditures. The allowance of the credit, which reduces the taxpayer's income tax liability by an amount equal to the specified percentage of clinical testing expenditures, may be viewed as equivalent to a Federal payment of the credit amount to a taxpayer. Accordingly, since the

taxpayer in effect does not pay for its research expenditures to the extent a credit is provided, it could be argued that the taxpayer's deduction under section 174 should be reduced by that amount.

On the other hand, a deduction disallowance equal to the amount of the credit would reduce the tax incentives for such clinical testing expenditures. The Congress determined, in enacting the credit in 1982, that substantial tax incentives for such expenditures were needed to overcome the reluctance of many companies to allocate funds for research into drugs for which there likely will be no commercially viable market.

○