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COMPARISON OF THE TAX SYSTEMS OF THE UNITED STATES, THE UNITED KINGDOM, GERMANY, AND JAPAN

SCHEDULED FOR A HEARING

BEFORE THE

SENATE COMMITTEE ON FINANCE

ON JULY 21, 1992

PREPARED BY THE STAFF

OF THE

JOINT COMMITTEE ON TAXATION

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JOINT COMMITTEE ON TAXATION

102d Congress, 2d Session

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INTRODUCTION

The Senate Committee on Finance has scheduled a public hearing on July 21, 1992, on a comparison of the United States' tax system with the tax systems of certain other countries. This pamphlet,[1] prepared by the staff of the Joint Committee on Taxation, provides a comparison of the tax systems of the United States, the United Kingdom, Germany, and Japan.

A country's system of taxation is one of governments' main economic policy tools, and it can have a significant impact on its economy. Comparing the United States' tax system to that of other countries may provide insight into one way in which their economies differ and potentially useful ideas about how other countries address the problems associated with raising revenue and promoting economic well-being.

The tax system may affect the economy by influencing people's choices about consumption, saving, labor supply, and investment, as well as by altering the after-tax distribution of income. In general, the ideal system of taxation is one that raises the necessary revenue without greatly distorting individual economic decisions and also fulfills a society's distributional goals.

For the purpose of this pamphlet's analysis, taxes can be broadly grouped into two classes: those that tax the return to capital, and those that do not. Examples of the former include individual income taxes levied on interest and dividend income and on the gains of appreciated assets, wealth taxes, and corporate taxes. Taxes that do not tax capital income include classic consumption taxes like sales taxes and consumption-based value-added taxes, as well as taxes on wage income, like payroll taxes.

Taxes on the return to capital may distort decisions about how much to save and to invest, and hence affect a country's stock of capital and level of wealth. Taxes may affect saving by reducing the return to saving and may affect the size and composition of investment by changing the cost of capital. Because increases in the quantity and quality of the capital stock are important factors fueling economic growth, people often focus on cross-country differences in capital income taxes to rationalize differences in economic growth.

This pamphlet describes the extent to which different countries rely on different taxes to raise revenue and provides some analysis of how their different tax systems affect their rates of investment, saving, and economic growth.

The pamphlet is organized as follows. Part I of the pamphlet presents an overview of the revenue sources of the United States, the

[1] This pamphlet may be cited as follows: *Joint Committee on Taxation, Comparison of the Tax Systems of the United States, the United Kingdom, Germany, and Japan* (JCS-13-92), July 20, 1992.

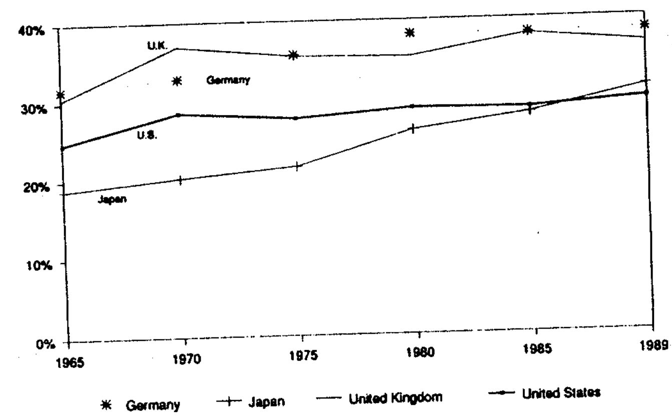
United Kingdom, Germany, and Japan. Parts II, III, IV, and V provide summary descriptions of the tax systems of the United States, the United Kingdom, Germany, and Japan, respectively. Part VI discusses economic trends in the four countries and provides an analysis of the role of taxes and investment, saving, and the cost of capital.

I. OVERVIEW OF THE TAX SYSTEMS OF THE UNITED STATES, THE UNITED KINGDOM, GERMANY, AND JAPAN

Comparison of tax receipts

The proportion of tax receipts as a share of gross domestic product (GDP) has risen over the past 25 years in all four countries reviewed here (the United States, the United Kingdom, Germany, and Japan), with relatively consistent increases in Germany and Japan (Figure 1). The United States experienced the smallest increase among the four countries over that period; by 1989, it had the smallest share of GDP collected as taxes.

Figure 1
Total Tax Receipts as Percentage of GDP



Source: Revenue Statistics of OECD Member Countries, 1965-1990.

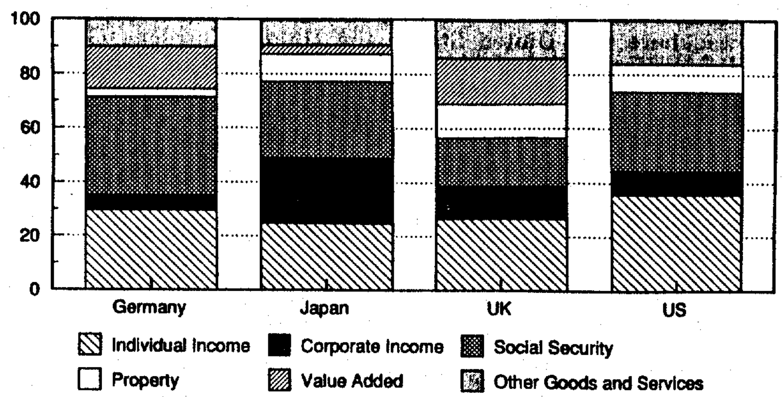
Composition of tax receipts across countries

The composition of tax receipts varies substantially across the four countries (Figure 2). Of the four countries, the United States relies most heavily on the individual income tax. The corporate income tax yields almost one-quarter of Japanese tax revenue, a proportion nearly twice as large as that in the United Kingdom and much higher than that in Germany and the United States.

Value-added taxes are significant revenue sources in Germany and the United Kingdom. In contrast, the United States does not impose a VAT, and Japan, which imposed a VAT in April 1989, collected only 3.3 percent of its tax revenue through its VAT in that year.

Figure 2

Composition of Total Tax Receipts (1989)



Source: Revenue Statistics of OECD Member Countries, 1965-1990

Table 1 shows the composition of taxes for each of the four countries at regular intervals over the period from 1965 to 1989. A number of trends may be discerned from the data. One is that three of the countries introduced a value-added tax over the period. For each of the three, the VAT appears approximately to have replaced as a source of revenue other taxes on goods and services. Another trend is that social security taxes increased as a share of total tax receipts in Germany, the United States, and, to a lesser degree, Japan. For Germany and the United States, both corporate income taxes and property taxes declined as a share of total taxes over the period reviewed. In the 1980s, the United Kingdom moved to a greater reliance on corporate income taxes.

Table 1

Selected Taxes as a Percent of GDP

Germany	1965	1970	1975	1980	1985	1989
Individual Income Tax	8.2%	8.8%	10.8%	11.3%	10.9%	11.3%
Corporate Income Tax	2.5%	1.9%	1.6%	2.1%	2.3%	2.1%
Social Security Tax	8.5%	10.0%	12.0%	13.1%	13.9%	13.9%
Property Taxes	1.8%	1.6%	1.4%	1.3%	1.2%	1.2%
Value Added Taxes	0.0%	5.6%	5.3%	6.3%	6.0%	5.9%
Other Taxes on Goods & Services	10.4%	4.8%	4.4%	4.0%	3.8%	3.9%
Total Tax Revenue	31.6%	32.9%	35.7%	38.0%	38.0%	38.1%
Japan	**1965**	**1970**	**1975**	**1980**	**1985**	**1989**
Individual Income Tax	4.1%	4.3%	5.1%	6.3%	6.9%	7.7%
Corporate Income Tax	4.2%	5.3%	4.4%	5.7%	5.9%	7.6%
Social Security Tax	4.1%	4.5%	6.2%	7.6%	8.5%	8.7%
Property Taxes	1.5%	1.5%	2.0%	2.1%	2.7%	3.2%
Value Added Taxes	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Other Taxes on Goods & Services	4.9%	4.5%	3.7%	4.2%	3.9%	2.9%
Total Tax Revenue	18.3%	19.7%	20.9%	25.4%	27.6%	30.6%
United Kingdom	**1965**	**1970**	**1975**	**1980**	**1985**	**1989**
Individual Income Tax	9.1%	11.6%	13.5%	10.5%	10.1%	9.8%
Corporate Income Tax	2.2%	3.3%	2.4%	2.9%	4.8%	4.5%
Social Security Tax	4.7%	5.1%	6.2%	5.8%	6.7%	6.4%
Property Taxes	4.4%	4.6%	4.5%	4.2%	4.5%	4.6%
Value Added Taxes	0.0%	0.0%	3.1%	5.1%	6.0%	6.2%
Other Taxes on Goods & Services	10.0%	10.6%	5.9%	5.2%	5.9%	5.2%
Total Tax Revenue	30.4%	36.9%	35.5%	35.3%	37.9%	36.5%
United States	**1965**	**1970**	**1975**	**1980**	**1985**	**1989**
Individual Income Tax	7.5%	10.0%	9.1%	10.6%	10.2%	10.6%
Corporate Income Tax	3.9%	3.6%	3.0%	2.9%	2.0%	2.5%
Social Security Tax	4.1%	5.5%	6.8%	7.6%	8.4%	8.7%
Property Taxes	3.8%	3.9%	3.7%	2.9%	2.9%	3.1%
Value Added Taxes	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Taxes on Goods & Services	5.4%	5.5%	5.1%	4.8%	5.1%	4.8%
Total Tax Revenue	25.9%	29.2%	29.0%	29.5%	29.2%	30.1%

Source: *Revenue Statistics of OECD Member Countries, 1965-1990*

For both Figure 2 and Table 1, the categorization of the types of taxes are made according to procedures developed by the Organization for Economic Co-operation and Development (OECD). The OECD attempts to make its classifications so that the data are comparable across countries. The classification of taxes into income taxes, property taxes, and goods and services taxes are generally governed by the base on which the tax is levied. Throughout Part I, the data represent combined tax receipts of all levels of government (Federal, State, and local) within a given country. The following definitions are employed by the OECD:

Income taxes—Taxes levied on the net income or profits of individuals and enterprises. These include social security contributions based on net income after deductions and exemptions for personal circumstances. When social security contributions are based on eligible earnings, payroll, or number of employees without deductions or exemptions for personal circumstances, the taxes are considered social security taxes (see below). For countries employing a credit imputation method for integrating individual and corporate income taxes (e.g., the U.K. advance corporation tax discussed in Part III.B.2.), the full amount of any credit is treated as a reduction in individual income taxes whether the credit reduces individual income tax liability or is paid as a cash refund. (Tax credits for corporations with respect to dividends paid to other corporations are deducted from the corporate income tax category.)

Social security taxes—All compulsory contributions that are paid to institutions of general government and are earmarked for the provision of social security benefits; are levied as a function of earnings, payroll, or the number of employees; and are made by insured persons or their employers. Social security benefits include unemployment insurance benefits and supplements; accident, injury and sickness benefits; old-age, disability and survivors pensions; family allowances; and reimbursements for medical and hospital expenses or for provision of hospital or medical services.

Property taxes—Recurrent and non-recurrent taxes on the use, ownership or transfer of property. These include taxes on immovable property or net wealth, taxes on the change of ownership of property through inheritance or gift, and taxes on financial and capital transactions. It does not include taxes on capital gains resulting from property sales.

Value-added taxes—All general consumption taxes charged on value-added, irrespective of the method of deduction or the stages at which the taxes are levied. But general sales taxes are included in the category below.

Other taxes on goods and services—All taxes and duties levied on the rendering of services and on the production, extraction, sale, transfer, leasing, or delivery of goods other than value-added taxes. This category includes multi-stage cumulative taxes (such as turnover taxes), general sales taxes (whether levied at manufacturing, wholesale, or retail level), specific excise taxes, import and export taxes, use taxes, and taxes on extractive processes.

II. DESCRIPTION OF UNITED STATES TAX SYSTEM

A. Overview

The U.S. Federal Government imposes and collects individual and corporate income taxes, social security taxes, excise taxes, estate and gift taxes, and customs duties and fees.

In addition, U.S. State and local governments independently impose and collect their own separate taxes. These governments often impose one or more of their own property and sales taxes and taxes of the types imposed by the Federal Government (other than customs duties). For the year 1990, approximately 49 percent of State tax receipts were from sales and gross receipts taxes; 32 percent were from individual income taxes and 7 percent were from corporate income taxes.[2]

B. Federal Income Taxation

1. Individual income tax

Tax rates

Citizens of the United States and aliens resident in the United States are subject to the U.S. individual income tax on their taxable incomes. For 1992, the individual income tax rate schedules are as follows:

Table 2.—Federal Individual Income Tax Rates for 1992

If taxable income is	Then income tax equals
Single individuals	
$0–$21,450	15 percent of taxable income.
$21,450–$51,900	$3,217.50, plus 28% of the amount over $21,450.
Over $51,900	$11,743.50, plus 31% of the amount over $51,900.
Heads of households	
$0–$28,750	15 percent of taxable income.
$28,750–$74,150	$4,312.50, plus 28% of the amount over $28,750.
Over $74,150	$17,024.50, plus 31% of the amount over $74,150.

[2] Prentice Hall, *All States Tax Guide*, para. 210-A, 1992.

Table 2.—Federal Individual Income Tax Rates for 1992—Continued

If taxable income is	Then income tax equals
Married individuals filing joint returns	
$0–$35,800	15 percent of taxable income.
$35,800–$86,500	$5,370, plus 28% of the amount over $35,800.
Over $86,500	$19,566, plus 31% of the amount over $86,500.
Married individuals filing separate returns	
$0–$17,900	15 percent of taxable income.
$17,900–$43,250	$2,685, plus 28% of the amount over $17,900.
Over $43,250	$9,783, plus 31% of the amount over $43,250.

The individual income tax brackets are indexed for inflation.

In addition, a refundable earned income tax credit is available to taxpayers who reside with a qualifying child and have earned income below a specified amount. For qualifying individuals, the credit acts like a negative income tax. Other nonrefundable tax credits are allowed to individuals for certain business expenditures (described in more detail in Item 2, below), certain child care expenditures, the elderly, and the disabled.

Tax base

For U.S. individual taxpayers, taxable income is determined by reducing gross income by certain allowable deductions to arrive at adjusted gross income ("AGI") and then reducing AGI by other allowable deductions and exemptions. Gross income generally means income from whatever source derived, including (but not limited to): compensation for services, gross profit derived from trade or business activity (discussed in more detail in Part 2 below), gains from dealings in property, interest (other than interest from certain indebtedness issued by State and local governments), rents, royalties, dividends, alimony and separate maintenance payments, annuities, income from life insurance and endowment contracts (other than certain death benefits), pensions, income from the discharge of indebtedness, distributive shares of partnership gross income, income from an interest in a trust or estate, and income in respect of a decedent. Gross income may be reduced by expenses properly allocable to rents, royalties, and trade or business income. Deductions generally are not allowed for losses from trades or businesses in which taxpayers do not actively participate.

In order to determine AGI, gross income is reduced by certain contributions to certain qualified retirement plans, certain tax and health-insurance expenses of self-employed individuals, penalties on early withdrawal of savings, and alimony payments. In order to determine taxable income, an individual may reduce AGI by personal exemptions and either the standard or itemized deductions. For 1992, the amount of the personal exemption is $2,300 and is allowed for the taxpayer, the taxpayer's spouse and each dependent. This exemption amount is adjusted for inflation and is phased out for taxpayers with incomes over certain thresholds. For 1992, the amount of the standard deduction is $3,600 for single individuals; $5,250 for heads of households; and $6,000 for married individuals filing jointly. Additional standard deductions are allowed for the elderly and the blind. An individual may deduct the amount of the individual's itemized deductions if it exceeds the amount of the applicable standard deduction. The itemized deductions are medical and dental expenses in excess of 7.5 percent of AGI; State and local income, real estate, and certain personal property taxes; home mortgage and investment interest expense; contributions to certain charitable organizations; casualty and theft losses in excess of 10 percent of AGI (and in excess of $100 per loss); moving expenses; and certain miscellaneous expenses in excess of 2 percent of AGI. The total amount of itemized deductions allowed to be deducted also is subject to limitation and is phased out for taxpayers with incomes over certain thresholds.

Savings incentives

Tax incentives are provided with respect to various retirement savings plans. Trusts established pursuant to qualified retirement plans generally are not subject to income tax, thus allowing earnings on amounts contributed to such trusts to accumulate tax-free. A contribution to a qualified trust by an employer on the behalf of its employees generally is deductible by the employer and not includible in the gross income of the employees until distributed from the trust.[3] In some instances, employees and self-employed individuals also may establish or make contributions to qualified plans on a tax-deductible basis. A plan beneficiary generally is not taxable with respect to qualified plan benefits until such benefits are distributed to the beneficiary. Various limitations and restrictions apply with respect to who may be a beneficiary under a qualified plan, how plan benefits vest, how much may be contributed to a plan, when and how benefits are distributed to the beneficiary, and how distributed benefits are taxed.

In addition, several income tax provisions provide incentives for owner-occupied housing. Individual taxpayers are allowed to deduct home mortgage interest (but not other consumer interest, unless related to a home equity loan) expense and real estate taxes. An individual may defer the recognition of gain on the disposition of a principal residence if a residence of comparable or greater value is acquired within a specified period. An individual age 55 or older may permanently exclude recognition of up to $125,000 of gain on the disposition of a principal residence. Moreover, the imputed

[3] For fiscal years 1993 through 1997, the estimated 5-year cost to the U.S. Treasury from foregone individual income taxes due to: (1) the net exclusion of pension contributions and earnings is $306.4 billion; (2) the exclusion of pension contributions and earnings for Individual Retirement Accounts is $38.3 billion; and (3) Keough (self-employed individual) plans is $15.4 billion. See, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 1993–1997* (JCS–8–92) April 24, 1992, p. 17 (hereinafter, *Federal Tax Expenditures*).

rental value of owner-occupied housing is not included in the gross income of the owner. Further, special tax benefits are provided for certain bonds used to provide home mortgage financing and for thrift institutions that hold a certain amount of home mortgage-related assets.[4]

Capital gains

The rate of Federal income tax on the net capital gains of an individual taxpayer may not exceed 28 percent. Net capital gains generally are the excess of (1) the net gains (over losses) on the sale or exchange of capital assets held more than one year over (2) the net losses (over gains) on the sale or exchange of capital assets held not more than one year. An individual may not deduct more than $3,000 of capital losses in excess of capital gains for any taxable year; any remaining unused loss may be carried over to another taxable year. In addition, losses on the sale of personal use property generally are not deductible. Capital assets generally mean property held by the taxpayer except property held by the taxpayer primarily for sale to customers, certain property used in a trade or business, certain property created by the taxpayer, accounts receivable, and certain publications of the U.S. Government. Thus, assets held by an individual for investment purposes (such as stocks and bonds) generally are treated as capital assets.

Capital gains and losses generally are recognized upon the sale or exchange of a capital asset. However, no gain or loss is recognized upon the transfer of an asset at death and the recipient of the property generally takes a fair market value basis in the asset, thus eliminating any capital gain that may have accrued during the life of the transferring decedent.

Minimum taxes

An individual is subject to an alternative minimum tax which is payable, in addition to all other tax liabilities, to the extent that it exceeds the taxpayer's regular income tax owed. The tax is imposed at a flat rate of 24 percent on alternative minimum taxable income in excess of an exemption amount.[5]

Alternative minimum taxable income is the taxpayer's taxable income increased by the taxpayer's tax preferences and adjusted by determining the tax treatment of certain items in a manner which negates the deferral of income resulting from the regular tax treatment of those items. Among the preferences and adjustments applicable to the individual alternative minimum tax are accelerated depreciation on certain property used in a trade or business, circulation and research and experimental expenditures, certain expenses and allowances related to oil and gas and mining explora-

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[4] For fiscal years 1993 through 1997, the estimated 5-year cost to the U.S. Treasury from foregone individual income taxes due to: (1) the deductibility of home mortgage interest is $257.5 billion; (2) the deductibility of property taxes is $76.3 billion; (3) the deferral of capital gains on the sale of principal residences is $75.1 billion; and (4) the exclusion of capital gains on the sale of principal residences by persons age 55 and over is $24.5 billion. See Joint Committee on Taxation, *Federal Tax Expenditures*, p. 13.

[5] The exemption amount is $40,000 in the case of joint returns and surviving spouses, $30,000, in the case of a single individual, and $20,000 in the case of a married individual that files a separate return. The exemption amount is phased out for individuals above certain income thresholds.

tion and development, certain tax-exempt interest income, and contributions of certain appreciated property to charities. In addition, personal exemptions, the standard deduction, and most itemized deductions are not allowed to reduce alternative minimum taxable income.

Where an individual pays the alternative minimum tax, a portion of the amount of the tax paid may be allowed as a credit against the regular tax of the individual in future years.

2. Income taxation of corporations and other persons carrying on business

Tax rates

Corporations organized under the laws of any of the fifty States (and the District of Columbia) and foreign corporations operating in the United States are subject to the U.S. corporate income tax on their taxable incomes.[6] The corporate income tax rate schedule is as follows:

Table 3.—Federal Corporate Income Tax Rates

If taxable income is:	*Then the income tax rate is:*
$0–$50,000	15 percent of such income
$50,001–$75,000	25 percent of such income
Over $75,000	34 percent of such income

The availability of the graduated rates described above is phased out such that most corporate taxable income is subject to a flat tax rate of 34 percent.

In addition, taxes at a rate of 28 percent may be imposed upon the accumulated earnings or personal holding company income of a corporation. The accumulated earnings tax may be imposed if a corporation retains earnings in excess of reasonable business needs. The personal holding company tax may be imposed upon the excessive passive income of a closely held corporation. The accumulated earnings tax and the personal holding company tax are designed to support the imposition of two levels (corporate and shareholder) of tax on corporate earnings.

Income of a business carried on as a sole proprietorship or a partnership of individuals is taxed at the individual income tax rates described in Part II.B.1., above.

Tax base

The taxable income of a corporation or other business generally is comprised of gross income, less allowable deductions. Gross income generally is income from whatever sources, including gross profit from the sale of goods and services to customers, rents, royalties, interest (other than interest from certain indebtedness issued

[6] In addition, many State and local governments impose income taxes on corporate income derived in the State or local jurisdiction. See the Appendix for a compilation of State income tax rates.

by State and local governments), dividends, gains from the sale of business and investment assets, and other income.

Allowable deductions include ordinary and necessary business expenditures, such as salaries, wages, contributions to profit-sharing and pension plans and other employee benefit programs, repairs, bad debts, taxes (other than Federal income taxes), contributions to charitable organizations (subject to an income limitation), advertising, interest expense, certain losses, selling expenses, and other expenses. Expenditures that benefit future accounting periods (such as the purchase of plant and equipment) generally are capitalized and recovered over time through depreciation, amortization or depletion allowances. A net operating loss incurred in one taxable year may be carried back 3 years or carried forward 15 years and allowed as a deduction in such year. Deductions are not allowed for dividends paid by a corporation to shareholders, expenses associated with earning tax-exempt income,[7] certain entertainment expenditures, contributions to political parties, a portion of the interest on certain high-yield debt obligations that resemble equity, and fines, bribes and other expenditures not in the public interest. Deductions are also allowed for certain amounts despite the lack of an underlying expenditure. For example, a deduction is allowed for all or a portion of the amount of dividends received by a corporation from another corporation; a depletion deduction is allowed for a percentage of the amount of income received from oil, gas, or mineral operations; and a bad debt deduction is allowed in an amount equal to a percentage of the income of certain qualified financial institutions.

There is no special rate of tax on the net capital gains of a corporation. A corporation may not deduct the amount of capital losses in excess of capital gains for any taxable year. Disallowed capital losses may be carried back three years and carried forward five years.

Tax-incentives

Tax incentives are provided with respect to various investments by businesses, including corporations. These incentives include allowing credits against the income tax liability of a business, allowing expenditures that benefit more than one accounting period to be deducted ("expensed") when incurred rather than capitalized, and allowing capitalized costs to be recovered more rapidly than the decline in economic value of the underlying asset would indicate. Investment tax incentives often are not allowed for purposes of computing the alternative minimum tax liability (described in the following section) of the taxpayer.

Among the tax credits granted to businesses are credits for producing fuels from nonconventional sources, the investment tax credit (applicable to investment in certain reforestation, renewable energy property, and the rehabilitation of certain real property), the targeted jobs credit (applicable to the hiring of certain disadvantaged individuals), the alcohols fuels credit (applicable to production of certain alcohol fuels), the research credit (applicable to

[7] For example, the carrying costs of tax-exempt State and local obligations and the premiums on life insurance policies are not deductible.

the incremental investment in certain research and experimental activities), the low-income housing credit (applicable to the investment in certain low-income housing projects), the enhanced oil recovery credit (applicable to the recovery of certain difficult-to-extract oil reserves), and the disabled access credit (applicable to the investment in certain property by small businesses). The credits generally are determined based on a percentage of the cost associated with the underlying activity and generally are subject to certain limitations.

Businesses are allowed to deduct, rather than capitalize, certain expenditures that benefit more than one accounting period. For example, in lieu of depreciation, small businesses are allowed to expense and deduct up to $10,000 of the cost of certain depreciable property placed in service in a taxable year. In addition, taxpayers are allowed to deduct costs associated with research and experimental activity, regardless of whether such activity leads to the creation or further development of a product or asset. Likewise, current deductions are allowed to oil and gas producers, timber growers, mining companies, and farmers for certain costs that are capital in nature.

Taxpayers are allowed depreciation deductions for the capitalized cost of property placed in service and used in a trade or business. The depreciation deductions generally are computed based on methods and lives that recover the cost of the property more rapidly than had the deductions been based on the economic depreciation of the property.[8]

Taxpayers engaged in the development and production of natural resources are allowed depletion deductions. Under cost depletion, taxpayers are allowed to deduct a percentage of the cost of the interests in natural resources, based on the ratio of the amount of the natural resource recovered in the year to the estimated total amount of the natural resources available. Alternatively, taxpayers may be allowed to use the percentage depletion method if it yields a greater deduction. Under percentage depletion, the depletion deduction is computed as a percentage of the amount of gross income received from oil, gas, or mineral operations. The use of the percentage depletion method allows taxpayers cumulative deductions in excess of the cost of the underlying natural resource property.

Minimum taxes

A corporation is subject to an alternative minimum tax which is payable, in addition to all other tax liabilities, to the extent that it exceeds the corporation's regular income tax owed. The tax is imposed at a flat rate of 20 percent on alternative minimum taxable income in excess of a $40,000 exemption amount.[9] Alternative minimum taxable income is the corporation's taxable income increased by the corporation's tax preferences and adjusted by determining the tax treatment of certain items in a manner which negates the

[8] For fiscal years 1993 through 1997, the estimated 5-year cost to the U.S Treasury from foregone business income taxes due to the benefits of accelerated depreciation (over deemed economic depreciation) is $144.4 billion. See *Federal Tax Expenditures*, pp. 13, 14.

[9] The exemption amount is phased out for corporations above certain income thresholds, and is completely phased out for corporations with alternative minimum taxable income of $310,000 or more.

deferral of income resulting from the regular tax treatment of those items.

Among the preferences and adjustments applicable to the corporate alternative minimum tax are accelerated depreciation on certain property, certain expenses and allowances related to oil and gas and mining exploration and development, certain preferences allowed with respect to shipbuilding, certain tax-exempt interest income, and contributions of certain appreciated property to charities. In addition, corporate alternative minimum taxable income is increased by 75 percent by the amount that the corporation's "adjusted current earnings" exceeds the corporation's alternative minimum taxable income (determined without regard to this adjustment). Adjusted current earnings generally are determined with reference to the rules that apply in determining a corporation's earnings and profits.

Where a corporation pays the alternative minimum tax, the amount of the tax paid is allowed as a credit against the regular tax in future years.

Treatment of corporate organizations, combinations, distributions, and liquidations

The taxation of a corporation generally is separate and distinct from the taxation of its shareholders.[10] A distribution by a corporation to one of its shareholders generally is taxable as a dividend to the shareholder to the extent of the corporation's current or accumulated earnings and profits. Thus, the amount of a corporate dividend generally is taxed twice; once when the income is earned by the corporation and again when the dividend is distributed to the shareholder. Conversely, amounts paid as interest to the debtholders of a corporation generally are subject to only one level of tax (at the recipient level) since the corporation generally is allowed a deduction for the amount of interest expense paid or accrued.

A distribution in excess of the earnings and profits of a corporation generally is a tax-free return of capital to the shareholder to the extent of the shareholder's adjusted basis (generally, cost) in the stock of the corporation; and is a capital gain if in excess of basis. A distribution of property other than cash generally is treated as a taxable sale of such property by the corporation and is taken into account by the shareholder at the property's fair market value. A distribution of stock of the corporation generally is not a taxable event to either the corporation or the shareholder.

The formation of a corporation generally is not a taxable event for either the new corporation or its shareholders. Likewise, a corporate reorganization generally is not a taxable event for either the corporation or its shareholders so long as certain control and continuity tests are met. Reorganizations generally include the merger or consolidation of two or more corporations, the acquisition by one corporation of the stock or property of another corporation through the issuance of voting stock of the acquiring corpora-

[10] For a more detailed discussion of the U.S. income tax treatment of corporations and their shareholders, see Joint Committee on Taxation, *Federal Income Tax Aspects of Corporate Financial Structures* (JCS-1-89), January 18, 1989.

tion, the transfer by one corporation of the stock or assets of another controlled corporation to the shareholders of the transferring corporation, a recapitalization of a corporation, the change in the identity, form, or place of organization of a corporation, or the transfer of the assets of a corporation pursuant to certain bankruptcy proceedings.

Amounts received by a shareholder in complete liquidation of a corporation generally are treated as full payment in exchange for the shareholder's stock. A liquidating corporation recognizes gain or loss on the distributed property as if such property were sold to the distributee for its fair market value. However, if a corporation liquidates a subsidiary corporation of which it has 80 percent or more control, no gain or loss is recognized to either the distributor or the distributing corporation.

Domestic corporations that are affiliated through 80 percent or more corporate ownership may elect to file a consolidated return, in lieu of filing separate returns. Corporations filing a consolidated return generally are treated as a single corporation, allowing the losses (and credits) of some corporations to offset the income (and otherwise applicable tax) of other affiliated corporations.

Noncorporate forms of business enterprise

Proprietorships and partnerships.—Sole proprietorships are not taxed separately, but rather the net income is taxed to the owner as individual income. A trade or business in the United States may be conducted in a form other than that of a sole proprietorship or a corporation. For example, business may be conducted as a partnership. For U.S. income tax purposes, a partnership generally is not subject to tax, but the activity of the partnership is attributed to its partners who are subject to tax on their respective shares of partnership income. For U.S. income tax purposes, certain publicly traded partnerships are treated as corporations.

S corporations.—Certain qualified small business corporations (known as S corporations) and their shareholders may elect to be treated in a manner similar to partnerships and their partners. A qualified small business corporation generally is a domestic corporation which does not have (1) more than 35 shareholders, (2) as a shareholder a person (other than an estate or certain trust) that is not an individual, (3) a nonresident alien as a shareholder, or (4) more than one class of stock.

Estates and trusts.—An estate or trust generally is a separate taxable entity for U.S. income tax purposes. The amount of income distributed from the estate or trust generally is deductible by the estate or trust, and is taxable to the recipient beneficiary. For 1992, the tax rates applicable to estates and trusts are as follows:

Table 4.—Federal Estate and Trust Income Tax Rates

If taxable income is:	*Then income tax equals:*
$0–$3,600	15 percent of taxable income.
$3,601–$10,000	$540 plus 28% of the amount over $3,600.
Over $10,900	$2,584 plus 31% of the amount over $10,900.

Other entities.—In addition, special tax rules apply to investment vehicles such as regulated investment companies, real estate investment trusts, real estate mortgage investment conduits, and common trust funds. The application of these rules generally allow or mandate a single level of income tax on the earnings from such investment vehicles. Other special tax rules apply to cooperatives, mutual companies, and other specialized entities.

3. Foreign aspects of U.S. tax law [11]

In general

The United States exerts jurisdiction to tax, subject to the allowance of a foreign tax credit, the worldwide income of U.S. citizens, residents, and corporations ("U.S. persons").[12] By contrast, the United States taxes nonresident aliens and foreign corporations only on income with a sufficient nexus to the United States.

The Internal Revenue Code generally provides two criteria for asserting jurisdiction to tax the income of nonresident aliens and foreign corporations (collectively, foreign persons), and a third criterion is found in treaties. Under the Code, certain gross income of a foreign person is subject to a 30-percent U.S. tax, without regard to deductions, if it is derived from U.S. sources as determined by statute. In addition, the United States asserts jurisdiction to tax on a net basis, in the same manner and at the same rates as the income of U.S. persons, the U.S. and foreign source income of foreign persons that is effectively connected with a U.S. business. Under treaties, the 30-percent gross basis tax is sometimes eliminated or reduced. In addition, most U.S. income tax treaties provide that the business profits of an enterprise carried on by a resident of the treaty partner are not taxable by the United States unless the enterprise carries on a business through a permanent establishment situated in the United States.

U.S. taxation of income earned through foreign corporations

U.S. persons that conduct foreign operations through a foreign corporation generally pay no U.S. tax on the income from those operations until the foreign corporation repatriates or is deemed to have repatriated its earnings to the United States.[13] The income

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[11] For a detailed discussion of U.S. taxation of foreign investment by U.S. citizens, residents, and corporations, see Joint Committee on Taxation, *Factors Affecting the International Competitiveness of the United States*, Part Two (JCS-6-91), May 30, 1991.

For a detailed discussion of the U.S. tax rules affecting investment in the United States by foreign persons, see Joint Committee on Taxation, *Background and Issues Relating to the Taxation of Foreign Investment in the United States* (JCS-1-90), January 23, 1990.

[12] As two exceptions to this principle however, possession (e.g., Puerto Rico) source income of U.S. corporations may be exempt from U.S. tax under the possession tax credit, and 15 percent of income from exports may be exempt from U.S tax through use of the Foreign Sales Corporation tax regime.

[13] The foreign corporation itself generally will not pay U.S. tax unless it has income effectively connected with a trade or business carried on in the United States, or has certain generally passive types of U.S. source income.

appears on the U.S. owner's tax return for the year that the repatriation or deemed repatriation occurs, and the United States imposes tax on it then, subject to allowance of a foreign tax credit.

Several existing regimes provide exceptions to the general rule under which U.S. tax on income earned indirectly through a foreign corporation is deferred. The primary anti-deferral regime involves rules applicable to controlled foreign corporations and their shareholders, discussed below. Anti-deferral regimes not discussed in this pamphlet include, among others, foreign personal holding company rules, passive foreign investment company rules, and rules applicable to foreign investment companies.

The controlled foreign corporation (or "subpart F") rules generally apply to any foreign corporation if U.S. persons own (directly, indirectly, or constructively) more than 50 percent of the corporation's stock (measured by vote or value), taking into account only those U.S. persons that own at least ten percent of the stock (measured by vote only). Deferral of U.S. tax on undistributed income of a controlled foreign corporation is not available for certain kinds of income (sometimes referred to as "subpart F income"). When a controlled foreign corporation earns subpart F income, the United States generally taxes the corporation's 10-percent U.S. shareholders currently on their respective pro rata shares of such income, as if the income had been repatriated to them. Earnings and profits of a controlled foreign corporation that are so included in the incomes of the U.S. shareholders are not taxed again when such earnings are actually distributed to the U.S. shareholders.

Subpart F income typically is income that is relatively movable from one taxing jurisdiction to another and that is subject to low rates of foreign tax.[14] Subpart F income primarily consists of foreign base company income and insurance income.[15] Foreign base company income includes five categories of income (reduced by allocable deductions): foreign personal holding company income,[16] income attributable to related party purchases and sales routed through the income recipient's country if that country is neither the origin nor the destination of the goods, income from services performed outside the country of the corporation's incorporation for or on behalf of related persons, income attributable to the international operation of ships and aircraft, and certain income attributable the non-extraction activities of international oil and gas firms.

Foreign tax credit

A credit against U.S. tax on foreign source income may be elected for foreign taxes, including foreign state and local income taxes that would, if imposed by a domestic state or locality, be deductible (but not creditable) for U.S. federal income tax purposes. Alterna-

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[14] Generally, subpart F income does not include income which incurs foreign tax at an effective rate which is at least 90 percent of the highest U.S. marginal tax rate applicable to U.S. corporations.

[15] Subpart F insurance income includes any income attributable to the issuing (or reinsuring) of any insurance or annuity contract in connection with risks in a country (for example, the United States) other than that in which the insurer is created or organized.

[16] Foreign personal holding company income generally consists of interest, dividends, annuities, passive rents and royalties, and net gains from sales of certain types of property.

tively, foreign taxes may be deducted. In addition, an indirect foreign tax credit is allowed to a U.S. corporation for foreign taxes paid by certain first-, second-, or third-tier foreign subsidiary corporations, and deemed paid by the U.S. corporation upon a dividend received by, or certain other income inclusions (e.g., subpart F income inclusions) of, the U.S. corporation relating to earnings of the foreign subsidiary.

An overall limitation on the foreign tax credit applies so that the total amount of the credit may not exceed the same proportion of the taxpayer's U.S. tax which the taxpayer's foreign source taxable income bears to the taxpayer's worldwide taxable income for the taxable year.[17] In addition, the foreign tax credit limitation is calculated separately for various categories of income generally referred to as "separate limitation categories" or "separate baskets." [18] That is, the total amount of the credit for foreign taxes *on income in each category* may not exceed the same proportion of the taxpayer's U.S. tax which the taxpayer's foreign source taxable income *in that category* bears to the taxpayer's worldwide taxable income for the taxable year. Taxes in excess of the limitation can be carried back two years and forward five years.

Because the United States has relatively low corporate income tax rates compared to some other countries, general limitation foreign source income is effectively exempt, in some cases, from U.S. income tax. Where an active foreign subsidiary of a U.S. corporation generates general limitation income, and repatriates it through dividends, interest, and royalties, "look-through" rules cause all such income to be subject to the general limitation. Thus, all such repatriations may be exempted from U.S. tax under the foreign tax credit.

Source rules

In general

Rules determining the source of income are important because the United States acknowledges that foreign countries have the first right to tax foreign income, but the United States generally imposes its full tax on U.S. income. The mechanism by which these goals are carried out in the case of U.S. persons is the foreign tax credit limitation; and the source rules primarily are important for U.S. persons insofar as these rules determine the amounts of their foreign tax credit limitations by determining the extent to which taxable income is from foreign sources.[19] Taxable income from foreign sources is computed by (1) determining the items of gross income that are from foreign sources, and then (2) subtracting from foreign source gross income the portion of the taxpayer's deductions that are allocable thereto.

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[17] As an additional limitation, the foreign tax credit may not offset more than 90 percent of a taxpayer's pre-credit alternative minimum tax.

[18] The separate limitation categories generally segregate classes of income that typically are subject to either relatively high or relatively low effective rates of foreign tax. For example, a separate limitation is applied to passive income if taxed by foreign jurisdictions at rates lower than the highest applicable U.S. marginal tax rate.

[19] With respect to foreign persons, the source rules primarily are important in determining the income over which the United States asserts tax jurisdiction.

Source of gross income

U.S. source gross income includes, generally, income from U.S. activities carried out in the United States, rents and royalties paid for the use of property in the United States, dividends paid by U.S. corporations, and interest paid by U.S. persons. Foreign source gross income includes, generally, income from foreign activities, rents and royalties paid for the use of property outside the United States, and dividends and interest paid by persons other than those described in the preceding sentence. International transportation income may have a divided source.

Income from sales of personal property and foreign exchange gains generally are sourced on the basis of the residence of the person earning the income. Income deemed to be from the sale (rather than the production) of inventory property, however, generally is sourced according to the place where title to the property passes to the buyer.

Allocation and apportionment of deductions

In general, deductions must be properly allocated and apportioned between domestic and foreign source gross income, respectively. Deductions which cannot definitely be allocated to some item or class of gross income generally are prorated among all classes of gross income.

The apportionment of interest expense generally is based on the approach that money is fungible, so that interest expense is properly attributable to all business activities and property of a taxpayer, regardless of any specific purpose for incurring an obligation on which interest is paid.[20] Interest expense must be allocated on the basis of assets (either tax basis or fair market value) instead of gross income.[21]

Transfer pricing

In the case of a multinational enterprise that includes both a U.S. and a foreign corporation, the United States may tax all of the income of the U.S. corporation under common control, but only so much of the income of the foreign corporation as satisfies the relevant rules for determining a U.S. nexus. The determination of the amount of income that properly is the income of the U.S. member of a multinational enterprise, and the amount that properly is the income of a foreign member of the same multinational enterprise, is thus critical to determining the amount the United States may tax as well as the amount other countries may tax. Due to the variance in tax rates (and tax systems) among countries, and possibly for other reasons, a multinational enterprise may have an incentive to shift income, deductions, or tax credits among commonly

[20] Consistent with this approach, interest expense is apportioned under a so-called "one taxpayer" rule. That is, for interest allocation purposes, all members of an affiliated group of corporations as defined for this purpose (which excludes foreign corporations) generally are treated as a single corporation.

[21] Even though the expenses, assets, and income of foreign members of a controlled group of corporations generally are ignored for expense allocation purposes, stock in such foreign corporations held by affiliated group members is considered an asset for purposes of apportioning interest expense.

controlled entities to the entity in the most favorable tax jurisdiction in order to arrive at a reduced overall tax burden.

Under the Code, the Secretary of the Treasury is granted broad authority to allocate tax items between any commonly controlled parties in order to prevent evasion of taxes or clearly to reflect income. Regulations have adopted the concept of the arm's length standard as the method of determining whether reallocations are appropriate. This standard attempts to identify the respective amounts of taxable income of the related parties that would have resulted if the parties had been uncontrolled parties dealing at arm's length.

C. Social Security Taxes

Social security benefits are financed primarily by payroll taxes on covered wages.[22] As part of the Federal Insurance Contributions Act (FICA), a tax is imposed on employers and employees measured by the amount of the wages paid to the employees. The tax is comprised of two parts: the old age, survivors, and disability insurance (OASDI) tax and the Medicare hospital insurance (HI) tax. Under FICA, in addition to other taxes, an employer is subject to an OASDI payroll tax equal to 6.2 percent of the covered wages (up to $55,500 in 1992) paid to each of its employees. An employee is subject to a like amount of tax, which is withheld from his or her wages by the employer and remitted to the Government. Employers are subject to the HI payroll tax in an amount equal to 1.45 percent of the covered wages (up to $130,200 for 1992) paid to each employee. Self-employed individuals are subject to a tax that parallels both the employer and employee portion of the OASDI payroll tax. In addition, employers are subject to a Federal unemployment insurance payroll tax equal to 6.2 percent of the total wages of each employee (up to $7,000). Employers are allowed a credit for a percentage of State unemployment taxes. Federal unemployment insurance payroll taxes are used to fund programs maintained by the States for the benefit of unemployed workers.

D. Federal Consumption Taxes

The U.S. tax system imposes excise taxes on selected goods and services, but does not contain a broad-based consumption tax such as a value-added tax or national sales tax.[23]

Among the goods and services subject to U.S. excise taxes are various fuels used by certain vehicles or vessels or stored in certain facilities, alcoholic beverages, tobacco products, certain highway vehicles, air and ship transportation, certain environmentally hazardous activities and products (e.g., hazardous substances, fuels stored in underground tanks, ozone depleting chemicals), telephone communications, vehicles lacking in fuel efficiency, cargo loaded or unloaded at U.S. ports, sport fishing equipment, bows and arrows, firearms, luxury items (specifically, with respect to certain passen-

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[22] For purposes of this pamphlet, the term "social security benefits" is used, consistently with the usage in the OECD data, to refer to certain benefits provided outside the Federal Social Security Act (e.g., unemployment compensation), as well as within it.

[23] Most States and many State political subdivisions impose sales taxes on retail sales.

ger vehicles, boats, aircraft, jewelry and furs),[24] coal, certain vaccines, foreign insurance policies, and wagering.[25]

Revenues generated from some of the U.S. excise taxes are dedicated to trust funds, to be used for specific purposes.

E. Federal Taxation of Wealth

The United States does not impose general wealth taxes but does impose estate and gift taxes. The estate and gift taxes are unified so that a single graduated rate schedule is applied to an individual's cumulative taxable gifts and bequests. A unified credit equivalent to a $600,000 exemption is allowed; thus, estate and gift taxes are not imposed until cumulative transfers are greater than $600,000. For 1992, after the application of the unified credit, the U.S. estate and gift rates effectively begin at 37 percent on taxable transfers over $600,000 and reaches 55 percent for taxable transfers in excess of $3,000,000. For transfers occurring after 1992, these rates are scheduled to decline to 50 percent for transfers in excess of $2,500,000.[26]

The gift tax is imposed on the donor and is based on the fair market value of the property transferred. Annual gifts of $10,000 or less per donor per donee generally are not subject to tax.

The estate tax is imposed on the estate of the decedent and generally is based on the fair market value of the property passing at death. Bequests to the surviving spouse of the decedent and to charities reduce the taxable amount of the estate. A generation-skipping transfer tax, that is essentially equivalent to the estate tax, is imposed on certain transfers to younger generations.

A credit is allowed against the Federal estate tax for a portion of State death taxes.

F. State and Local Taxes

States and local governments impose a variety of taxes, and they may cover many of the same subjects as the Federal taxes—e.g., income,[27] estates and gifts, excises, or wage-based premiums for unemployment compensation. In addition, States and localities impose sales taxes,[28] and generate a significant amount of revenue from real and personal property taxes. Further, States and local governments often impose taxes on specific industries operating within the taxing jurisdiction (such as public utilities, hotels, motels, restaurants, and insurance companies). In the area of income taxation, States generally impose their tax on a base that resembles the Federal income tax base, but is limited territorially.

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[24] H.R. 11 (Revenue Act of 1992) as passed by the House of Representatives on July 2, 1992, and H.R. 3040 (Tax Extension Act of 1992) as reported by the Senate Finance Committee on June 19, 1992, would repeal the luxury excise tax on boats, aircraft, jewelry and furs, and would index the base of the tax on automobiles.

[25] See Joint Committee on Taxation, *Schedule of Present Federal Excise Taxes (as of January 1, 1992)* (JCS-7-92), March 27, 1992, for more details on current Federal excise taxes.

[26] H.R. 11 (Revenue Act of 1992), as passed by the House of Representatives, would postpone the scheduled rate reduction until after 1997.

[27] See the Appendix for a compilation of State income tax rates.

[28] For 1990, the State sales tax rates of those States imposing sales or gross receipts taxes generally were 3 to 7 percent of the retail value of goods or services sold. Prentice Hall, *All States Tax Guide*, para. 250, 1992.

A more detailed description of the separate State and local tax laws is beyond the scope of this pamphlet.

III. DESCRIPTION OF UNITED KINGDOM TAX SYSTEM [29]

A. Overview

Not unlike the U.S. tax system, the U.K. tax system includes income-based taxes, transaction-based taxes, taxes based on property values, social security contributions, and other taxes. Income taxes in the United Kingdom include income and capital gains taxes on individuals, a corporate income tax, and a special tax imposed on persons engaged in the extraction of oil and gas from sources within the United Kingdom. Unlike the U.S. tax system, the U.K. tax system has partially integrated the corporate and individual income taxes.

Transaction-based taxes in the United Kingdom are comprised of a national value added tax, customs and excise duties on certain goods and products, a stamp duty (although the scope of this duty has been significantly reduced in recent years), and a wealth transfer tax. Other taxes levied include national insurance contributions to fund the national social security system and taxes imposed by local governments, including property taxes and a community charge.

Business operations in the United Kingdom generally are conducted under one of the following organizational structures: corporations, partnerships, or sole proprietorships. As is the case under U.S. tax law, U.K. tax law generally treats a partnership as a conduit. That is, the partners of the partnership are subject to income tax on their respective shares of the income derived by the partnership.

B. Income Taxation

1. Individual income tax

In general

The United Kingdom has two separate mechanisms for taxing the income of individuals—an income tax and a capital gains tax. As a general matter, U.K. resident individuals are subject to income tax and capital gains tax on worldwide income and gains respectively.[30] The foreign source income of individuals who are resident in the United Kingdom but domiciled abroad is not subject to current income or capital gains tax in the United Kingdom.

[29] The following discussion of the United Kingdom tax system has been compiled from secondary sources including: Price Waterhouse, *Doing Business in the United Kingdom*, (1991); Darlington & Sandison, *Business Operations in the United Kingdom—Taxation*, (BNA Tax Management Foreign Income Portfolio No. 68-8th); Kay & King, *The British Tax System*, (1990); Coopers & Lybrand International Tax Network, *1992 International Tax Summaries: A Guide for Planning and Decisions*, (ed. D. Wright 1992).

[30] Taxes imposed by the United Kingdom on income or gains derived from foreign sources may be reduced by means of a foreign tax credit.

Rather, tax is imposed upon remittance of the income to the United Kingdom.

Non-U.K. resident individuals are subject to U.K. income tax only on income arising from U.K. sources. Capital gains of such persons incur U.K. tax only in the case of the disposal of assets situated in the United Kingdom that are connected with a trade or business carried on there by the individual.[31]

Tax rates

The U.K. individual income tax has a graduated rate structure similar to that of the U.S. individual income tax. Since 1988, the basic U.K. income tax rate has been 25 percent.[32] A higher marginal tax rate of 40 percent applies to taxable income in excess of 23,700 pounds sterling ($45,492).[33]

Prior to 1985, an individual's investment income was subject to an additional income tax of 15 percent to the extent that it exceeded 6,250 pounds ($11,997). This levy generally has been repealed, but a similar surcharge of ten percent still applies to the income of certain trusts.

Income subject to tax

As a general rule, all income of a U.K. resident individual (other than capital gains, which are subject to a separate tax) is subject to the U.K. individual income tax. As such, all remuneration related to employment, including employer-provided benefits, generally is taxable. Employees (other than directors) who earn less than 8,500 pounds per year ($16,315), however, are not subject to tax on certain benefits. In addition, certain employee benefits are granted special treatment under the U.K. tax system. For example, contributions by an employer on behalf of an employee to a qualified pension plan are not taxed to the employee. Amounts paid by the plan to the employee are taxed, however. Moreover, contributions by employers to certain employee stock ownership plans are tax-exempt to the employees if the stock is held in trust for at least five years. The conveyance of stock options to employees under a qualified plan also is exempt from U.K. income tax, as is the issue of stock upon the exercise of such an option. Gains realized by employees on the disposition of such stock are subject to the capital gains tax.

For individual income tax purposes, different kinds of income are taxed under five (formerly six) different schedules (e.g., income from land located in the United Kingdom is computed under one

[31] As of 1989, U.K. law also imposes capital gains tax on a nonresident individual's unrealized gains attributable to the removal from the United Kingdom of assets connected with a business formerly operated there by the individual.

[32] The 25-percent basic rate reflects a gradual rate reduction over the past decade. The basic rate from 1979 to 1986 was 30 percent. The rate was reduced to 29 percent for 1986, and was further reduced to 27 percent for 1987.

[33] For the convenience of the reader, references to foreign currency amounts in this pamphlet are accompanied by U.S. dollar amounts. The dollar amount does not purport to be an exact equivalent, but merely the foreign currency amount multiplied by a recent exchange rate—in the case of pounds sterling, the rate of 1.9195 U.S. dollars to the pound, applicable on July 14, 1992, as reported by the *New York Times* of July 15, 1992. Internal differences between the U.S. and foreign economies as to, for example, consumer purchasing power and the distribution of income may cause the dollar amounts shown to deviate from a true economic equivalent to the corresponding foreign currency amounts, assuming that the foreign economic system were to use U.S. dollars instead of its own currency.

schedule while income from a trade or business is computed under another). The tax is computed in different ways for income under the different schedules.

Deductions allowable against income

Expenses of an individual which are wholly, exclusively, and necessarily related to business conducted by that person generally are deductible for income tax purposes. Although the U.K. tax system allows individuals certain nonbusiness-related deductions and personal exemptions, the extent of these is not as great as the scope of itemized deductions permitted for U.S. individual income tax purposes. For example, under U.K. law, there is no general allowance of deductions for payments of interest, casualty losses, medical expenses or charitable contributions.

An individual is permitted to claim deductions for interest payments on the first 30,000 pounds ($57,585) of a mortgage loan attributable to the person's principal residence. Most other interest payments are not deductible, however.

A payment under a charitable deed of covenant is deductible in computing taxable income, but other charitable donations by individuals of less than 600 pounds ($1,152) generally are not deductible. In certain cases, however, employees may agree to have annual deductions from their wages of up to 600 pounds transferred by their employer to specified charities under a qualified payroll deduction plan. These charitable donations are deductible in computing the employee's U.K. income tax. In addition, a deduction is allowed for an individual's single contribution to a charity in an amount of money ranging between 600 ($1,152) and 5 million pounds ($9,597,500), if the contribution satisfies certain conditions.

Every U.K. resident individual is entitled to a personal allowance (or exemption). There are no specific allowances for dependents of the taxpayer, however. For 1991-1992, the amount of the personal allowance is 3,295 pounds ($6,325).[34] In addition to the standard personal allowance, each married person is permitted to claim a married couple's allowance of 1,720 pounds ($3,301) on his or her tax return.[35] Additional personal allowances are granted for persons over 65 years of age whose incomes do not exceed specified levels, and for blind persons.

Tax credits

As a general rule, only two types of tax credits are available to individual taxpayers in the United Kingdom. First, U.K. resident individuals are allowed a credit corresponding to the advance corporation tax (discussed in detail below) paid by a U.K. corporation with respect to dividend distributions made by the company to the individual. This credit only covers the individual's basic rate (25 percent) income tax liability with respect to the dividend. Thus, the individual would be liable for the additional tax liability if the dividend were subject to tax at the higher rate (40 percent).

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[34] The personal allowance amount is adjusted annually to account for inflation.

[35] There currently is no provision of U.K. law that allows married persons to file tax returns jointly.

Second, individuals are permitted to claim credit against U.K. income tax on foreign source income to the extent they incurred foreign tax on that income, subject to certain limitations.

Investment incentives

Business expansion scheme

The Business Expansion Scheme (BES) provides income tax advantages to individuals who invest in newly issued common stock of qualifying companies.[36] A company generally may not issue shares qualifying for BES benefits in excess of a subscription price of 750,000 pounds ($1,439,625) in any 12-month period. The purpose of the BES, which was enacted in 1983, is to provide additional sources of equity capital to companies whose securities are not publicly traded.

In general, the BES permits qualifying individuals to deduct up to 40,000 pounds ($76,780) per year against income subject to the higher rate of tax for investments in newly issued common stock of qualifying companies. In order to qualify for the deduction, the stock purchased generally may not have any preference vis-a-vis outstanding existing shares. In addition, the investing individual must have no connection to the company (i.e., he or she must not be an employee, partner, director, or controlling shareholder) at the time of the investment or during the succeeding five-year period.

Personal equity plan

U.K. resident individuals may invest up to 6,000 pounds ($11,517) per taxable year in a personal equity plan (PEP).[37] Under the PEP rules, investments by the plan are limited to investments in shares of companies quoted on the U.K. stock market and in certain unit and investment trusts. As a general rule, capital gains arising from the disposition of plan assets are exempt from capital gains tax. An investor's share of losses incurred by the plan may not be used to offset any gains realized by the investor outside the plan. Dividends on plan investments are exempt from U.K. income tax to the extent they are reinvested by the plan.

Tax-exempt special savings account

Beginning in 1991, an individual may open a tax-exempt special savings account (TESSA). In order to qualify for special tax benefits, the individual may deposit no more than 3,000 pounds ($5,759) in the first 12 months that the account exists, and no more than 1,800 pounds ($3,455) in each of the four succeeding twelve-month periods. Total deposits into the account may not exceed 9,000 pounds ($17,276). If these conditions are satisfied, income earned in the account is exempt from income tax during the five-year period.

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[36] Qualifying companies under the BES are corporations registered, managed and controlled, and mainly doing business, in the United Kingdom. Investments in companies engaged in certain lines of business, such as providing financial, legal, or accounting services, do not qualify for BES benefits.

[37] Generally, a PEP consists of funds contributed by numerous investors and must be managed by a person authorized to carry on an investment business.

Capital gains tax

Capital gains tax was introduced in the United Kingdom in 1965. Having previously implemented a system of indexation of asset bases, the capital gains tax is now only assessed on net gains attributable to periods after April 1982. The bases of assets held at that time were adjusted to fair market value, and since that time have been increased to take account of monthly movements in the retail price index. There is no corresponding indexation of liabilities.

The capital gains tax is determined on a taxable year basis and generally is levied on the total amount of taxable gains less allowable losses arising in the year. The first 5,500 pounds ($10,557) of an individual's net gains in a year, however, are exempt from tax. No deduction is permitted for capital losses in excess of capital gains. Any unused capital losses may be carried over for offset against capital gains arising in future years. The amount of an individual's capital gains is added to his or her taxable income for income tax purposes and is subject to the income tax rates applied on the sum of includible capital gains plus other income. Thus, in the case of an individual who pays the higher rate (40 percent) of income tax on his or her taxable income for a taxable year, any net capital gains (above the 5,500 pound exemption amount) realized in that year will also be taxed at the higher rate.

Certain asset dispositions are not subject to the capital gains tax. For example, gains resulting from the disposition of a taxpayer's principal residence are tax exempt. Also exempt from tax are gains attributable to the disposition of tangible personal property if the sales price does not exceed 6,000 pounds ($11,517).

2. Corporate income tax

In general

Companies that are considered residents of the United Kingdom for income tax purposes are subject to U.K. corporation tax on worldwide income and gains.[38] By contrast, non-U.K. resident companies are subject to U.K. corporation tax only on income and gains connected with trade or business operations carried on in the United Kingdom through a branch or agency.

Tax rates

For U.K. corporate tax purposes, taxable years generally are from April 1 through March 31. The general corporate tax rate for 1991 (i.e., the taxable year ended March 31, 1992) is 33 percent. This represents a reduction in the general rate that has applied for previous years.[39]

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[38] A corporation may be considered a U.K. resident for either of two reasons. First, any company that is incorporated under U.K. law is a resident of the United Kingdom and subject to U.K. corporate tax on its global income. Second, a company incorporated outside of the United Kingdom may still be treated as a U.K. resident if it is managed and controlled in the United Kingdom.

[39] For the 10-year period 1973 to 1982, the general corporate tax rate was 52 percent. The rate was reduced to 50 percent for 1983, 45 percent for 1984, 40 percent for 1985, and 35 percent for the 1986 through 1989 tax years. For 1990, the applicable rate was 34 percent.

Lower rates are applicable to corporations in certain circumstances. For example, the small company rate applies to U.K. resident companies (and nonresident companies under an applicable tax treaty) whose profits do not exceed 250,000 pounds ($479,875). Currently, the small company rate is 25 percent. Taxable income between 250,000 pounds ($479,875) and 1,250,000 pounds ($2,399,375) is subject to tax at an effective rate of 35 percent, thereby phasing out the benefits of the small company rate.

Capital gains

Unlike the U.K. taxes on individuals, there is no separate tax on capital gains realized by corporations. Rather, net capital gains of corporations incur corporation tax at the same rate as applies to their other income.[40] As discussed above, U.K. law allows taxpayers to increase the bases of their assets to account for the effects of inflation that has occurred since 1982.

Certain exceptions apply to the taxation of corporate capital gains that allow for deferral or exemption of gains realized. For example, asset transfers between related companies (generally 75-percent common ownership) are not subject to tax.[41] In addition, U.K. law embodies a concept allowing for deferral of gains on like-kind exchanges similar to the U.S. like-kind exchange rules.

Determination of taxable income

The calculation of a company's taxable income for a taxable year generally follows the calculation of its profits for U.K. financial accounting purposes. However, certain adjustments to book income are required in arriving at taxable income. Generally, taxable income must be computed under the accrual method of accounting and items must be treated consistently from period to period.[42] The company's accounting records should present an overall picture that is not in any way misleading and the company should disclose information that is material to a proper understanding of those records.

Adjustments that are required to be made to financial income include adjustments for depreciation, certain liabilities that have accrued for financial accounting purposes but are not yet accruable for tax purposes, and business entertainment expenses.

For corporate income tax purposes, different kinds of income are taxed under the schedular concept discussed above applicable to the individual income tax. The tax is computed in different ways for income under the different schedules.

Inventory valuation [43]

Inventory generally is required to be accounted for at the lower of cost and net realizable value under any of the following accounting methods: unit cost, average cost, FIFO, LIFO, base cost, or discounted selling price. Costs directly associated with the production

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[40] Prior to 1987, corporate capital gains were taxed at a flat rate of 30 percent.
[41] In this case, the recipient company takes a carryover basis in the asset for tax purposes.
[42] Non-business income, such as interest, generally is subject to tax when received rather than when accrued.
[43] The following inventory valuation rules are also applicable to partnerships and sole proprietorships.

of inventory, including interest, must be capitalized into the basis of the inventory. Moreover, production overhead, but not other indirect costs, must be so capitalized.

Deductions

Generally, in computing taxable business profits, expenses must be wholly and exclusively incurred for the purposes of the business in order to be deductible. Certain expenses are expressly deductible by statute. These include, among others, interest on amounts borrowed for business purposes from a bank actively engaged in business in the United Kingdom, research and development costs, contributions to qualified employee pension plans, certain business start-up costs, and, subject to an overall limit, charitable contributions.

Capital expenditures [44]

The U.K. tax system does not allow a deduction for depreciation. However, under a concept similar to depreciation, capital allowances are granted for the costs of purchasing certain fixed assets for use in business. Capital allowances generally are not available for the cost of goodwill, trademarks, land, or non-industrial buildings such as offices, retail outlets, etc. Following are some of the classes of fixed assets for which capital allowances are permitted.

Machinery and plant.—Prior to 1984, a *first year allowance* of 100 percent (i.e., a current deduction for the full cost) was granted for the costs of most kinds of machinery or plant incurred after 1970. First year allowances generally were repealed in 1984. In their place, a system of *writing down allowances* was established. Under this system, expenditures on machinery and plant generally qualify for an annual writing down allowance of 25 percent of remaining basis less disposal value. (This is similar to the declining-balance method of depreciation.). For example, assume a taxpayer purchases qualifying equipment for 1,000 pounds. In year one, the writing down allowance is 250 pounds, resulting in a remaining basis of 750 pounds.[45] In year two, a writing down allowance equal to 25 percent of remaining basis, or 187.50 pounds, is permitted. This process continues until the taxpayer disposes of the asset.

Industrial buildings and structures.—Capital expenditures related to the construction, repair, or improvement of an industrial building or structure qualifies for an annual writing down allowance of four percent of the expenditure. In addition, 100-percent initial allowances are allowed for costs of certain structures located in enterprise zones (see discussion of enterprise zones below).

Mines and oil wells.—Generally, a writing down allowance of 25 percent on a declining balance basis is granted for certain capital costs related to mineral exploration and extraction activities. Costs attributable to the abandonment of a mineral property may be written off in the year of abandonment.

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[44] The following rules regarding the treatment of capital expenditures are also applicable to partnerships and sole proprietorships.

[45] This assumes the asset has no disposal value.

Scientific research.—100-percent capital allowances (i.e., immediate deductions) are allowed for research-related capital costs (other than the cost of land) related to a trade or business.

Interest expense

Short interest (i.e., interest on loans with maturities of less than one year) and U.K. bank interest generally are deductible in computing trading income. Other types of deductible interest are treated as charges on income (i.e., they are deducted from total income), which generally entails less favorable tax treatment (e.g., limitations on loss sharing).

Non-deductible items

As a general matter, any expenditure that is incurred other than wholly and exclusively for business purposes is not deductible. Other expenditures for which deductions are not allowed include capital expenditures (see discussion of capital allowances above), provisions for bad debt reserves (except for banks), provisions for other reserves against anticipated future losses, interest on underpayments of U.K. income tax, costs related to tax appeals, and foreign taxes (unless no foreign tax credit is claimed).

Group relief

United Kingdom tax laws treat every company as an independent taxable entity. That is, no consolidated group tax treatment is available. Certain other types of relief are provided to commonly controlled companies, however. For these purposes, a controlled group generally consists of two or more resident companies where one owns directly or indirectly 75 percent or more of the stock of the other or others, and all the members of the group are effectively 51-percent owned by the group's parent company. In addition, a U.K. company is considered owned by a consortium if at least 75 percent of its stock is held by other U.K. resident companies of which none individually owns less than 5 percent.

The most important group-relief provision available under U.K. law permits trading (i.e., business) losses to be surrendered by one group company to another member of the controlled group.[46] This produces a result similar to what occurs when a controlled group of U.S. companies files a consolidated U.S. income tax return. As mentioned previously, capital assets generally can be transferred between group members without realization of gain or loss. U.K. law also includes some provisions allowing the reorganization of U.K. companies to be accomplished without incurring full taxation.

[46] Actually, a trading loss may be utilized in any one of the following ways: (1) It may be set against the company's total non-trading profits generated in the same accounting period; (2) If the trading loss exceeds other taxable income for the taxable year, the excess generally may be carried back and offset against any profits of the taxpayer for its previous three taxable years; (3) Losses unused under (1) or (2) may be carried forward indefinitely to be used as an offset against the taxpayer's future trading profits from the same line of business; or (4) It may be surrendered to another group company and used to offset the other company's taxable income for the same taxable year.

credit against some or all of their individual income tax liability on dividends from U.K. corporations. Excess imputation credits are refundable. Dividends received by one U.K. resident company from another U.K. resident company are exempt from corporation tax.

Advance corporation tax (ACT)

As a general rule, the payment of a dividend by a U.K. resident corporation subjects the corporation to a requirement to make an advance payment of corporation tax. The ACT is not a withholding tax on the shareholder's dividend. Rather, it constitutes an additional amount required to be paid by a distributing corporation. The payment of ACT is treated as an advance payment of the company's corporate tax liability for the taxable year of the dividend payment.[47] Thus, the company may take credit for the ACT payment on its corporate tax return for that year. In addition, the amount of shareholder credit that is granted is equal to the amount of the ACT payment. The rate of ACT is established so that it will be equal to individual income tax at the basic rate on the cash amount of the dividend plus the credit. Currently, the basic rate of individual income tax is 25 percent. Thus, the rate of ACT is 25/75 of the cash dividend amount. The shareholder's imputation credit does not cover individual income taxed at the higher rate.

Kingdom has negotiated a number of double tax treaties, including its tax treaty with the United States, under which part of the ACT credit is allowed to residents of the other country.

Investment incentives

Under present U.K. tax law, certain incentives are granted to taxpayers investing in Northern Ireland or in certain designated enterprise zones. For corporations investing in Northern Ireland, refunds of up to 80 percent of corporation tax are available.

In the 1980s, 26 Enterprize Zones were designated at various locations in the United Kingdom. The purpose of the Enterprise Zone designation is to encourage investment within the designated localities by granting certain favorable tax treatment to persons making such investments within a 10-year period. Extension of the Enterprise Zone legislation has been under review by the U.K. Government.

Under the Enterprise Zone program, businesses located in designated areas are exempt from local property taxes. Moreover, for U.K. income tax purposes, 100-percent capital allowances are allowed for the cost of all buildings (but not plant and machinery) located in an Enterprise Zone. Also, in some Enterprise Zones, loans with favorable terms may be available from Enterprise Agencies.

3. Treatment of foreign income

Foreign tax credit

As stated previously, the worldwide income and gains of U.K. resident individuals and corporations generally are subject to current U.K. tax.[48] In order to prevent an item of non-U.K. source income from being taxed by the source country and again by the United Kingdom, U.K. tax law provides a foreign tax credit (i.e., a credit against U.K. tax on that income to the extent of foreign taxes incurred on that income).

Certain limitations are placed on the ability of taxpayers to utilize foreign tax credits. For instance, the foreign tax credit allowable with respect to a specific item of income is limited to the amount of U.K. income tax (or capital gains tax, if appropriate) attributable to that income, less applicable deductions. In computing foreign source taxable income for purposes of applying this foreign tax credit limitation, however, any deductions from the taxpayer's total profits are allocated to particular items of income in the manner most beneficial to the taxpayer.

The foreign tax credit is available only on a source-by-source (i.e., country-by-country) basis. Thus, excess foreign taxes attributable to one source generally may not offset the residual U.K. tax on untaxed or low-taxed foreign income from a different source. However, taxpayers are able to achieve some degree of averaging of foreign taxes through the use of so-called "mixing" corporations.

Finally, there is no allowance for a carryback or carryforward of unused foreign tax credits. In cases where credits would go unused,

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[48] However, if the earnings of a foreign branch cannot be remitted to the United Kingdom as a result of foreign restrictions, deferral of payment of U.K. tax on that income is allowed.

taxpayers may elect to forego the foreign tax credit and instead claim a deduction for foreign taxes.

U.K. law also provides for an indirect foreign tax credit in the case of certain dividend income earned by a U.K. resident company. Where the dividend is from a non-resident company, the foreign tax credit applies to any tax directly withheld from the dividend, as well as to a portion of the foreign taxes incurred by the payor corporation with respect to the profits so distributed. In order to qualify for the indirect foreign tax credit, the U.K. company (or its parent company) must directly or indirectly own at least ten percent of the foreign company's voting stock.

Income earned through foreign subsidiaries

Income earned by non-U.K. subsidiaries (except to the extent they are connected to business operations in the United Kingdom) is not subject to U.K. tax until it is repatriated in the form of dividends. In 1984, special legislation covering controlled foreign companies (CFCs) was introduced. This legislation eliminated the deferral of U.K. tax on certain earnings of foreign subsidiaries.[49] It mainly applies to operations located in tax haven countries.

Under these anti-deferral rules, a controlled foreign corporation is a company that (1) is resident outside the United Kingdom for U.K. tax purposes, (2) is controlled by U.K. residents, and (3) is subject to a lower level of taxation in its home country.[50] If a CFC meets these criteria, certain exceptions may still apply to allow it to retain the benefits of deferral. For example, the CFC may pay a dividend to U.K. resident shareholders during the taxable year equal to at least one-half of its distributable net profits. Another exception applies if the CFC is engaged in real commercial operations with unrelated parties throughout the taxable year. Still another exception applies if the taxpayer can show that obtaining the benefits of deferral was not one of the main reasons for the CFC's existence during the taxable year. Additional exceptions apply to certain publicly traded companies and to companies that earn de minimis amounts of income.

Investments in offshore funds

The legislation enacted in 1984 also contained anti-deferral provisions concerning taxation of investments in certain "offshore funds" (e.g., unit trusts and investment companies located outside the United Kingdom). A U.K. investor subject to these provisions who disposes of a material interest in a qualifying offshore fund is subject to U.K. income tax (rather than capital gains tax) on any gain attributable to the disposition.

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[49] The loss of deferral is accomplished by the Inland Revenue Department's treatment of the relevant earnings of the CFC as having been deemed distributed to its U.K.-resident corporate shareholders, who are in turn subject to U.K. tax on the deemed distributions. Individual shareholders are not subject to the anti-deferral regime.

[50] For this purpose, a company is treated as being subject to a lower level of taxation in its home country if its effective tax rate for the taxable year is less than one half of the applicable U.K. effective tax rate.

Incentives for outbound investment

Generally, the internal tax laws of the United Kingdom provide no tax incentives for outbound investment other than the allowance of deferral on certain earnings of foreign subsidiaries. However, in certain cases where foreign countries have provided "tax sparing" relief to encourage inbound investment, the United Kingdom has agreed in tax treaties with those countries to allow a credit against U.K. tax for the foreign tax so spared.

C. Consumption Tax (Value-Added Tax)

Like the other members of the European Communities (the "EC"), the United Kingdom imposes a consumption-based, value-added tax (VAT) on most goods and services supplied by taxable businesses in the United Kingdom. The VAT liability for any period is determined under the credit-invoice method, pursuant to which (1) the amount of taxable sales is multiplied by the applicable VAT rate (which generally equals 17.5 percent) and (2) a credit is allowed for the amount of VAT paid with respect to most taxable purchases as shown on required invoices. If the credit for the amount of VAT paid with respect to taxable purchases exceeds the amount of taxable sales multiplied by the applicable VAT rate, the excess is refundable to the taxpayer.

The U.K. VAT is based on the destination principle. Under this principle, imports are subject to tax at the applicable VAT rate while exports are zero rated, which means that businesses are not subject to VAT on exports but are allowed a credit for the amount of VAT paid on taxable purchases that are attributable to exports. In addition to exports, the United Kingdom provides a zero rate for: (1) most food for human consumption; (2) non-business users of water, fuel, and power; (3) new residential buildings; (4) passenger transportation; (5) children's clothing; (6) prescription drugs and medicines; and (7) books and newspapers.

The United Kingdom also provides an exemption from the VAT for: (1) the sale and leasing of land and buildings (other than newly constructed buildings); (2) insurance; (3) banking and financial services; (4) certain health services; and (5) education. For an exempt good or service (unlike for zero-rated good or service), no credit is allowed for VAT paid on taxable supplies. For this reason, under the U.K. VAT, a seller of land or used commercial buildings or a lessor of commercial or residential buildings may elect to waive the VAT exemption, in which case a credit is allowed to the seller or lessor for the VAT paid on taxable supplies.

A business that provides goods and services in the United Kingdom in excess of a specified amount (for 1991, 23,600 pounds ($45,300) per year) is required to register with the United Kingdom agency responsible for administering the VAT. A taxable business is generally required to file a VAT return on a quarterly basis. In the case of a business with excess VAT credits (which generally occurs in the case of a business that is engaged in the provision of zero-rated goods or services), a return may be filed on a monthly basis.

D. Taxation of Wealth

The United Kingdom levies an inheritance tax on certain asset transfers during a person's lifetime or at death.[51] The U.K. inheritance tax operates in a fashion similar to the U.S. estate and gift taxes. For individuals who are domiciled in the United Kingdom, the inheritance tax applies to all of their assets whether physically located inside or outside of the United Kingdom.[52] For other individuals, the tax applies only to property actually situated in the United Kingdom.

The rate of inheritance tax is 40 percent. The tax is levied on the decedent's estate to the extent that its value exceeds 140,000 pounds ($268,730).[53] Transfers of assets between spouses who are both domiciled in the United Kingdom are exempt from the inheritance tax. If only one spouse is U.K. domiciled, cumulative asset transfers up to 55,000 pounds ($105,572) in value are tax exempt. In addition, gifts of up to 250 pounds ($480) per person per year and gifts not in excess of 3,000 pounds ($5,758) in total per year are exempt from the inheritance tax.

E. Other Taxes

Social security

All employed persons, as well as their employers, pay contributions to the national insurance system. Employees are entitled to receive retirement, medical, and unemployment benefits. Self-employed persons are also responsible for social security contributions, but they are entitled to benefits on a more restricted basis. Individuals are required to make contributions to the system based on their level of earnings. Persons earning less than 52 pounds ($100) per week are required to pay only two percent of earnings; persons making in excess of that amount must pay nine percent on the excess up to 390 pounds per week ($749). The highest rate of social security tax on employers is 10.4 percent. There is no upper limit (i.e., wage cap) on an employer's contributions.

Excise taxes

The United Kingdom imposes specific excise taxes on certain goods, wherever produced, including most alcoholic beverages, tobacco products, and oil and refined petroleum products. Excise taxes are also imposed on certain legalized gambling activities.

Stamp duties

Originally established in 1891, stamp duties continue to be levied today on certain types of transactions, for instance property sales

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[51] With respect to transfers of assets during a person's lifetime, the tax applies only with respect to those transfers that are made within seven years before the transferor's death.

[52] As a general rule, a person is treated as domiciled in the country which that person considers his or her permanent home. Moreover, for purposes of the inheritance tax, an individual is treated as U.K. domiciled if the individual has been a U.K. resident for income tax purposes for at least 17 out of the previous 20 taxable years.

[53] Because it generally is impossible to identify whether a gift made during the donor's lifetime is made within seven years of that person's death, inheritance tax is not levied at the time of the gift. If it turns out that the transfer is subject to inheritance tax, the tax is levied at death under the applicable rates prevailing at the time of death.

and leases.[54] Stamp duties are duties on written documents such as contracts for sales of goods. It is the document itself, and not underlying transaction, that establishes liability for the stamp duty. Such documents are required by law to be stamped, and liability for the duty arises upon stamping of the document. If a document is not duly stamped, it is inadmissible as evidence in a U.K. court of law.

Petroleum revenue tax

The Petroleum Revenue Tax (PRT) is imposed on oil and gas extraction profits attributable to oil and gas production within the United Kingdom and its continental shelf. The PRT has a unique set of rules for determining taxable profits. For example, taxpayers generally are permitted to deduct all expenditures incurred in exploring for and extracting oil or gas, even if they are capital in nature. No deduction is permitted, however, for the costs of land, buildings, or interest.[55] The rate of PRT is 75 percent. The tax is levied prior to, and is deductible for purposes of, the corporate income tax.

Local taxes

Local taxing authorities in the United Kingdom do not impose income taxes. Rather, the cost of services provided to local residents by these authorities generally are funded by property taxes or "rates"—based on the annual rental value of business properties—and a community charge or "poll tax"—a per person levy on adults residing within the jurisdiction.[56]

Car tax

A car tax is imposed at a rate of 10 percent on the wholesale value of cars produced in or imported into the United Kingdom.

[54] In recent years, the stamp duty has been repealed with respect to several categories of transactions. In addition, the stamp duties on corporate stock and other securities (and the 0.5-percent stamp duty reserve tax on certain stock transactions) are to be repealed sometime in 1992.

[55] In order to compensate for the loss of interest deductions, the amount deductible for certain capital expenditures are increased by 35 percent.

[56] The poll tax is not imposed in Northern Ireland. Instead, property taxes continue to be levied on both business and non-business properties (including residences).

IV. DESCRIPTION OF GERMAN TAX SYSTEM [57]

A. Overview

Germany has three levels of government: federal, state (Laender), and municipal, which share the collection responsibilities and ultimate receipts from major elements of the German tax system. There are approximately 40 different federal, state, and municipal taxes. Revenues received by the state and municipal governments are often collected pursuant to federal legislation; revenues received by the federal government may be collected through state tax authorities. The receipts under four major federal tax laws, the individual income tax, the value-added tax (VAT), the corporate income tax, and the trade tax, are apportioned in several ways and ultimately shared to one extent or another among multiple levels of government.

Individual income tax rates range between 19 and 53 percent. For the last half of 1991 and the first half of 1992, an additional surcharge of 7.5 percent of assessed income tax applies. The standard VAT rate is 14 percent, and is scheduled to rise to 15 percent in 1993; basic food and certain other items are taxed at 7 percent. Corporate income tax generally is 50 percent on retained earnings, and 36 percent upon distribution of the earnings. The 36-percent tax borne by the distributing corporation is fully creditable against income tax liability of the distributee. The rate of trade tax is determined by applying a municipal multiplier (adopted by each municipality) to a basic amount equal to 5 percent of trade profits and (generally) 0.2 percent of trade capital. Typical municipal multipliers range between 200 and 400 percent.

Other taxes include revenues from fiscal monopolies, customs duties, and insurance taxes received by the federal government. Revenues from the wealth tax, the inheritance tax, and the real estate transfer tax are received by the states. Revenues from a real estate, or land, tax is received by municipalities. Various excise tax revenues may be shared or collected and used separately at all

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[57] The following discussion of German tax has been compiled from secondary English-language sources and, in one case, from an English translation of parts of one German tax statute. Sources include the following: *German Tax & Business Law Guide (CCH Europe)*, of which the German law firm of Droste Killius Triebel is general editor; Price Waterhouse, *Doing Business in Germany* (reflecting material assembled June 30, 1991); H. Ault & A. Raedler, *The German Corporation Tax Law with 1980 Amendments* (1980); J. Killius, *Business Operations in West Germany*, (BNA Tax Management Portfolio No. 174-5th); H. Gumpel, J. Rudden, K. Ramin, & P. Gumpel, *Taxation in the Federal Republic of Germany (CCH-Harvard Law School World Tax Series)* (2d ed. 1991); Dengel, "Federal Republic of Germany," in *Comparative Tax Systems: Europe, Canada, and Japan* (ed. J. Pechman 1987); Coopers & Lybrand International Tax Network, *1992 International Tax Summaries: A Guide for Planning and Decisions* (ed. D. Wright 1992); M. King & D. Fullerton, eds., *The Taxation of Income from Capital: A Comparative Study of the United States, the United Kingdom, Sweden, and West Germany* (1984); and periodical literature cited below.

levels of government. A church tax is collected from members of certain religious organizations, on behalf of the organizations.

Germany also has a comprehensive social security system covering health insurance, sick pay, old-age benefits, unemployment benefits, and workmen's compensation. The system is funded by employer and employee contributions generally totaling over 30 percent of compensation up to monthly limits.

Rules applicable to taxes in general (e.g., administrative and procedural details of the tax system, definition of residence) are contained in the General Tax Code (*Abgabenordnung*, or "AO"). Other statutes, some of which are mentioned below, determine the substance of the tax liabilities imposed.

B. Income Taxation

1. Individual income tax

Individual income tax is governed by the Income Tax Act (*Einkommensteuergesetz*, or "EStG").

Tax rates

Under internal German law, a resident of Germany is subject to "unlimited" German income tax liability—that is, generally, tax on worldwide income (alternative treatment of foreign source income in certain circumstances is discussed below). Net taxable income in excess of DM 5,616 ($3,786) (for joint returns, DM 11,232 ($7,572)) is taxed at rates beginning under 19 percent, rising to 53 percent for taxable income over DM 120,041 ($80,931) (for joint returns, DM 240,082 ($161,863)).[58] Prior to 1991, the maximum individual income tax rate was for a number of years constant at 56 percent. From July 1, 1991 through June 30, 1992, in cases where tax is collected by withholding, there is a surcharge of 7.5 percent of assessed tax, levied in connection with financing the cost of German unification (the so-called "solidarity surcharge"). On a taxable year basis, the rates for 1991 and 1992 are increased by 3.75 percent of the otherwise applicable tax.

Certain capital gains are untaxed or taxed at half the regular income tax rate, as described below.

Tax base

The tax rates are imposed on the total net income from the following categories: (1) income from a trade or business; (2) income from performing independent personal services; (3) income from performing services as an employee or worker; (4) income from investments; (5) income from agriculture or forestry; (6) income from the rental of property and royalties for the right to use intangible property; and (7) certain miscellaneous items of income.

(1) *Business income.*—Net income from business is computed by reference to the income and expenses of a sole proprietorship, or, where the taxpayer is a partner in a partnership carrying on a business, the taxpayer's share of the partnership income. Business

[58] All currency conversions in this section are made at a rate of $0.6742 per Deutschemark. This was the rate prevailing on July 14, 1992, as reported in the *New York Times* of July 15, 1992.

income also includes gains from the sale of an unincorporated business, the sale of a partner's interest in a business partnership, and sale of stock in a corporation in which the taxpayer held an interest in excess of 25 percent for more than six months. Such gains are taxed at half the regular rate. (Similar rules apply to the sale of a professional practice, gain from which is nominally in a separate category of income from business income, but whose tax treatment bears similarities to the treatment of business income.)

As discussed below in connection with corporate income tax, tax accounting under German law is closely tied to financial accounting. The financial statements generally control for tax purposes (and vice versa) absent a specific rule to the contrary. The following are some features of the computation of income:

Deferred compensation liabilities may be deducted by additions to unfunded pension reserves, by contributions to funded pension plans or relief funds (which are themselves tax-exempt), or the purchase of insurance.

Inventories are valued at the lower of cost or net realizable value. For manufactured goods, costs include direct manufacturing costs and directly attributable administrative and financing costs. Costs may be allocated to specific items of inventory on a direct basis, average basis, or by LIFO or FIFO if they are shown to be appropriate.

Tax depreciation, amortization, and depletion generally conform to depreciation for financial reporting purposes. Regular depreciation allowances may be taken on the straight-line method, three times straight-line on a declining balance, subject to a maximum in any one year of 30 percent, or a production method (i.e., a method based on output and utilization). Acquired goodwill can be depreciated over 15 years on a straight-line method. Goodwill acquired in a fiscal year beginning before 1987 is treated as if acquired in the first fiscal year beginning after 1986. Buildings completed after 1924 may be depreciated on a straight-line basis over a 50 year life, or a shorter life if one can be shown. If the construction permit was applied for after March 1985, depreciation in some cases may be over a 25 year life as follows: 10 percent per year for the first four years, 5 percent during the next three years, and 2.5 percent for the next 18 years. The cost of mineral deposits or other natural resources which the taxpayer exploits can be deducted on the straight-line basis or in proportion to the exhaustion of the deposit. The tax authorities publish guidelines as to useful lives of various types of property, which may be deviated from where a more appropriate life can be shown.

Prior to unification, accelerated depreciation was allowed for investments in "Land Berlin" (Berlin (West)) and areas along the eastern border of the territories in which the tax laws of the Federal Republic of Germany were in force. Use of accelerated depreciation and other special tax benefits in these areas is generally terminated by December 31, 1994. However, accelerated depreciation is in force for all of Berlin and the territories of the former German Democratic Republic (GDR). In general, it applies to up to 50 percent of the cost of eligible property incurred from 1991 to 1994, and is taken in addition to regular depreciation in the year of acquisition or production and the following four years. Because of the conformity between book and tax accounting, use of accelerated depreciation for tax purposes generally must be accompanied by the same depreciation method for financial accounting purposes.

Special accelerated depreciation is also available for investments in small business, ships and aircraft, pollution reduction, and certain buildings, among other things.

The trade tax, excise taxes, property taxes, and transfer taxes, along with additions to tax and interest, are deductible.

(2) *Income from employment.*—Compensation is taxed when earned, except that pension income generally is taxed generally when received. Expenses related to employment that may be deducted include commuting expenses, job-hunting expenses, and expenses for work clothes. Alternatively, the taxpayer can take a standard employment-related deduction of DM 2,000 ($1,348) per year.

(3) *Rental income and owner-occupied housing.*—There is no tax on imputed income from an owner-occupied residence. Mortgage interest is only deductible against income from the property. There is a credit, however, allowed for the first eight years after construction or acquisition of a residence, starting at 2.5 percent of cost (up to a maximum cost of DM 330,000 ($222,486)) and going down to 1.5 percent.

(4) *Capital investment income.*—Unlike the United States, Germany collects the ordinary income tax on dividends through withholding at 25 percent. Under the imputation system, dividends from German resident companies are grossed up by 9/16, and carry a 36-percent credit for the corporate tax (in addition to the credit for the withholding tax) that may be used by the shareholder against his income tax liability, or refunded to the shareholder if the credit exceeds his liability. (See discussion of integration in Part B.3., below.)

Short-term (sometimes referred to as "speculative") capital gains from the sale of investment securities (gains where the holding period is 6 months or less) or of real estate (gains where the holding period is 2 years or less) are taxed at ordinary rates, although a net short-term gain of under DM 1,000 ($674) during the year is exempt from tax. Other capital gains on securities and real estate investments (other than gains that are business income, as described above) are exempt from income tax.

Currently, interest on certain debts with equity features is subject to 25-percent withholding. Under pending legislation, interest income generally would be subject to 30-percent withholding beginning in 1993.[59]

From items of investment income, the taxpayer may deduct certain investment expenses or, in the alternative, claim a standard deduction of DM 100 ($67) (DM 200 ($134) for a joint return) and a general deduction of DM 600 ($404) (DM 1,200 ($809) for a joint return). The general allowance would be raised ten-fold under the pending legislation regarding interest withholding.

(5) *Computation of combined individual tax base.*—Income and loss from the above-mentioned categories generally is combined. In

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[59] Minor, "German Parliament Committee Compromises on New Interest Withholding Tax Bill," 5 *Tax Notes Int'l* 63 (July 13, 1992).

addition, so-called "special expenses" (*Sonderausgaben*) can be deducted from the sum. These include the full amount of church tax and income tax return preparation expense. Premiums for insurance, social security contributions, and payments to building and loan associations are deductible up to a ceiling dependent on family status. Contributions to charities, political parties, and certain other groups are deductible up to various limits. Political contributions, for example, are deductible up to DM 60,000 ($40,452) (DM 120,000 ($80,904) for a joint return) per year. The cost of education of a child over age 17 is deductible up to DM 2,400 ($1,618). For children not living at home, the deduction is DM 4,200 ($2,831) (DM 1,800 ($1,213) if the child is under age 18). A deduction of DM 1,512 ($1,019) (DM 3,024 ($2,038) for a joint return) is also allowed for each dependent. Residents of the territory of the former GDR are entitled to a special allowance of DM 600 ($404). Deductions for personal expenses in certain cases of hardship are permitted, if the expenses exceed a given percentage of income. Hardship allowances also apply to handicapped persons or those who have to be cared for.

2. Corporate income tax

The income of an entity taxed as a corporation is taxed in accordance with the provisions of the Corporation Tax Act (*Koerperschaftsteuergesetz,* or "KStG"). However, the provisions of the Income Tax Act that govern the business income of individuals (described above) generally govern corporate income taxation, unless a different rule is prescribed in the Corporation Tax Act. Various government-related entities, charitable organizations, professional, union, or political organizations, and pension or other employee benefit funds are exempt in whole or in part from tax.

Tax rate

Under a form of integrated corporate tax that was introduced into German law in 1977, a German resident entity that is taxed as a corporation (for example, an *Aktiengesellschaft* ("AG") or a *Gesellschaft mit beschraenkter Haftung* ("GmbH")) is subject to a "split rate" on its income. Currently, the tax rate on retained earnings (or "statutory burden") generally is 50 percent. From 1977 to 1990 the corresponding rate was 56 percent. The corporate-level tax on distributed earnings (or "distribution burden") is 36 percent. (As described more fully in Part B.3., below, a German dividend recipient can receive a (refundable) tax credit for the amount of the distribution burden.)

Under the German tax system, the taxable profits of a German permanent establishment of a foreign corporation are taxable at a flat rate, rather than under the split rate system. Currently, the flat rate is 46 percent.

Corporations are also subject to the 3.75-percent income tax surcharge from 1991 and 1992. Corporations do not receive a reduced rate on income from capital gains.

Tax base

German corporations are required by law to publish various financial statements that must, as noted above in connection with individual income tax, be used as the basis for their income tax accounting, absent a specific rule to the contrary. In view of the credits carried by dividends paid by German corporations, there is no domestic exclusion of dividend income of a German corporation. However, because that credit is given to the extent of 36 percent of every (grossed-up) dividend received by an unlimited German taxpayer, there are additional corporate rules to ensure that the 36-percent tax is actually paid, if not at the time the income of the corporation was earned (due to an exemption, for example), then no later than the time when the dividend is paid. (These rules are described in Part B.3., below.)

Because of the integration system, it is possible for a taxpayer with a loss to obtain a refund of tax paid by its subsidiary corporation on the latter's income. In addition, a corporation can elect to share its loss with its shareholder if the two taxpayers are part of an *Organschaft*—that is, a group of taxpayers between which there is sufficient nexus between the subsidiary and the stockholder as to ownership (generally over 50 percent of the voting stock must be owned by the shareholder), business (for example, the shareholder must be engaged in business), and management (the shareholder must exercise some control over management of the subsidiary). Loss sharing in this situation is allowed if a profit and loss sharing agreement is entered into, for a period no less than 5 years, under which the shareholder is treated as owning the income and loss of the subsidiary. Neither of the above methods for consolidation of income and loss in related entities requires the shareholder to be a corporation, but in each case, the subsidiary must be a corporation.

3. Integration of individual and corporate income tax

At present, Germany imposes a 25-percent withholding tax on dividends. The dividend tax is fully refundable to resident shareholders (persons subject to unlimited tax liability in Germany).

In addition to the refundable 25-percent withholding tax, Germany provides "integration," or relief from the taxation of corporate earnings at both the corporate and individual shareholder levels, through two other features of its tax treatment of dividends. First, as described above, Germany imposes a "split rate" on corporate income; under this system, earnings distributed by German resident companies as dividends are often subject to a lower corporate income tax rate than are retained earnings. Second, German resident shareholders that are unlimited taxpayers receive an imputation credit for the corporate-level distribution burden. The credit is applied against the shareholder's German income tax liability or, if the credit exceeds the liability, the excess is refunded to the shareholder. There are no refunds to German resident entities that are tax-exempt (e.g., pension plans).

Under the German imputation system, German resident shareholders generally receive a "gross-up" of their dividend, and a corresponding equal imputation tax credit, equal to a percentage of the dividend. The credit and gross-up are currently 56.25 percent (9/16, or 36/64) of the dividend, or 36 percent of the grossed up dividend. (For simplicity, use of the terms "dividend" and "grossed up dividend" here ignores the 25-percent withholding mechanism under German law.) The grossed up dividend represents the pre-tax corporate profits distributed to the shareholder.

For example, assume that a German corporation with a single German shareholder earns 100 before corporate tax. The statutory burden is 50. Assume that the remaining 50 is distributed. This results in a decrease of 14 in the corporate tax burden if the full 14 is also distributed. Assume that this is the case. The shareholder has received a cash dividend of 64 (ignoring withholding taxes). This dividend must be grossed up by 56.25 percent (9/16, or 36/64) in computing the shareholder's taxable income. The gross up here equals 36, or 36/64ths of 64. The shareholder's income associated with the dividend therefore equals 100, or 64 plus 36. (This is also the amount of the corporation's pre-corporation tax income.) Because the amount of the gross-up is also a tax credit to the shareholder, this 100 of shareholder income carries a credit of 36, which equals the corporate tax paid and not previously refunded to the corporation. The income tax imposed on these earnings will thus be whatever tax is imposed on the 100 at the individual level, minus 36. This, in turn, may be approximately the same income tax that would have been imposed had the 100 been earned directly by the shareholder. The credit, when considered together with the split rate system, alleviates the double income taxation of distributed profits earned by German companies.

For practical reasons, the credit is allowed under German law for dividends treated as having been derived from corporate profits on which the payor corporation did not, at the time those profits were earned, pay at least the distribution burden, i.e., the lower of the two corporate rates. In such cases, an increased corporation tax will be imposed in the period of distribution to compensate for the amount of the shareholder credit in excess of the corporate tax previously paid. If dividends are treated as having been derived from profits on which the payor corporation paid the statutory burden, then the corporation is entitled to a refund of the difference between the two rates.

An ordering rule determines what tax burden is deemed to have been borne by particular distributed earnings. Equity (*Eigenkapital* or "EK") is divided into classes. Distributions are treated as coming out of these classes generally in the following order: Fully taxed profits are referred to as EK 50 (taxed since 1990 at the 50-percent rate) or EK 56 (taxed between 1977 and 1990 at 56 percent). Their distribution results in a tax refund to the corporation. Next are profits treated as taxed at 36 percent (EK 36). Their distribution results in no refund to the corporation and no additional corporate tax. Profits treated as untaxed are classified in one of several categories: post-1976 foreign source exempt income (EK 01); other post-1976 exempt earnings (EK 02); and pre-1977 equity available for distribution (EK 03). Their distribution requires the corporation to pay additional corporate income tax of 36 percent. Finally, post-1976 contributions to capital are referred to as EK 04. Distributions of EK 04 are not subject to additional corporate tax.

Under this system, a German parent corporation that receives a dividend from a German subsidiary corporation out of the latter's EK 50 typically incurs a tax liability of 50 percent (assuming no loss sharing agreement applies in the case of an *Organschaft*) and a credit of 36 percent. At the same time, the subsidiary earns a refund of 14 percent. Thus, while there is no dividends received deduction, there generally is no systematic double corporate-level taxation, and no reduction in overall corporate income tax liability.

As shown in Figures 1 and 2 and Table 1 in Part I (Overview of the Tax Systems of the United States, the United Kingdom, Germany, and Japan) above, the ratio of corporation income tax to individual income tax was lower in 1989 for Germany than for Japan, the United Kingdom, or even the United States. As noted in Part I of this pamphlet, the data treat taxes that give rise to imputation credits as corporate taxes, rather than individual taxes. Because of the shareholder level credit for these taxes, however, they could alternatively be viewed as individual income taxes, at least in the year when the credit is taken. (For example, presumably the data treat the 25-percent withholding tax on dividends as an individual income tax and not a corporate income tax.) Under this assumption, the ratio of German individual income taxes to corporate income taxes could be viewed as being greater than is reflected in the figures and tables mentioned above.[60]

4. Adjustments to transactions between related domestic entities

When the tax authorities believe that a transaction between corporation and shareholder does not meet an arm's-length standard (as in the case of excessive compensation of a shareholder), the transaction can be recast as a constructive or hidden distribution of corporate profit.

5. Investment/savings incentives

There is no investment tax credit in German income tax law. As explained above, relative to U.S. law, German tax is reduced in some ways on income of individuals from savings—e.g., through the capital gains exemption, corporate-individual income tax integration, the standard investment income deduction, and the deductions for social security contributions, insurance, and building and loan payments. On the other hand, the top German income tax rates are 22 percentage points higher than the top U.S. rates. Preferential treatment is given to business income and capital and to personal income in the former GDR through accelerated depreciation, the exemption from the trade tax on capital and the net assets tax, and the additional DM 600 ($404) personal allowance. Outside the tax system, investment subsidies and grants between 8 and 23 percent may be available in some cases for investments in the former GDR.[61] In addition, special accelerated depreciation is available in certain cases beyond the former GDR, and investment grants are available in specific activities outside the GDR, for example, in research. There is no minimum tax (but accelerated depreciation for tax purposes must be reflected in financial statements as well).

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[60] The same assumption may apply, to a lesser extent, to the data concerning U.K. corporate and individual income tax.

[61] See generally Bauer & Sonnemann, *Investment incentives in East Germany—Computer Aided Benefit Analysis*, 1992 Intertax 218; Oho, *Tax incentives for investments in East-Germany ('Neue Bundesleander')*, 1991 Intertax 509.

6. Treatment of foreign income

In general

Disregarding treaties, an unlimited taxpayer (i.e., a German resident) generally owes German tax on worldwide income. Foreign income of an active foreign corporation controlled by one or more German taxpayers generally is not taxed in Germany unless repatriated to Germany.

German tax law contains some rules that might be analogized to U.S. anti-deferral rules. Similar to subpart F under the Internal Revenue Code, provisions of the Foreign Transaction Tax Act (*Aussensteuergesetz,* or "AStG") cause the German resident shareholders to be treated as if they received income that a controlled foreign corporation earns generally from sources other than active operations. However, these rules do not alter the corporate-level exemption provided under treaties, described below.

In order to be subject to this regime, the foreign corporation must be majority-owned by German residents. Furthermore, its non-active income must be taxed abroad at less than a 30-percent rate. The rate is determined, for this purpose, taking various factors into account, including both the nominal foreign rate and German tax principles. The tax authorities publish lists of countries treated as having rates below 30 percent. Active operations include agriculture, forestry, manufacturing, mineral extraction, ordinary commercial banking and insurance. Sales, service, and rental operations can be active or not depending on whether the operation avoids base company characterizations analogous to corresponding U.S. foreign base company income definitions. Similarly, dividends may or may not comprise income from an active operation, depending on the nature of the payer and its relation to the controlled foreign corporation.

As in the case of the passive foreign investment company (PFIC), foreign investment company (FIC), and foreign personal holding company (FPHC) rules of the Internal Revenue Code, German law also provides for inclusions of income with respect to holdings by German residents in certain foreign mutual funds or other passive investment vehicles. In a case where a German resident taxpayer holds at least a 10-percent share in the foreign corporation, these rules may cause current income inclusions despite the otherwise applicable treaty exemption of foreign source income.

Relief from double taxation

A taxpayer may obtain relief from double taxation of foreign income through a credit for foreign income taxes it incurs. For this purpose, foreign income can be business income attributable to a foreign permanent establishment. By contrast to U.S. law, business income from sales of property is not classified as foreign on the basis of, for example, the place where title to the property passes to the buyer. Other types of income (e.g., income from investment or employment abroad) may also be treated as foreign source income. Alternatively, foreign income taxes may be deducted.

The credit is limited on a per-country basis—that is, there is no cross-crediting of high foreign taxes against German tax on income from another, lower-tax, country. (Cross-crediting is also limited due to the treaty exemptions from German tax on certain foreign source income, as described below.) On the other hand, there is no reduction of the limitation for one country by losses in another country. Thus, a loss in one country would not reduce the creditable portion of the taxes imposed by another country. A taxpayer can elect separately on a country-by-country basis whether to take the credit or the deduction. For a country and a year for which the credit is taken, foreign tax in excess of the foreign tax credit limitation cannot be carried forward or back or deducted.

In 1991, the German Supreme Tax Court held that foreign income taxes are further limited by the ratio of the foreign income tax base to the German income tax base. Thus, where a foreign country imposes tax on a gross basis, while Germany imposes tax on the same income after allowance of deductions, the amount of the foreign tax that can be credited would be cut back by the ratio that the deductions bear to the gross income. The tax administration stated in February 1992 that it disagreed with the position of the Court.[62]

German tax on dividends from a foreign corporation to a German resident corporation that owns 10 percent or more of the stock of the foreign corporation can be offset by a credit for foreign income tax paid by the foreign corporation. There is also available against German tax on a dividend from such a foreign corporation a credit for taxes paid by a second-tier foreign subsidiary where the second-tier subsidiary paid a dividend to the first-tier subsidiary in the same year as the dividend from the latter to the German resident. Indirect foreign tax credits below the second tier are not allowed.

Dividends from a developing country subsidiary, as defined under the Developing Countries Tax Act (*Entwicklungslaender-Steuergesetz,* or "EntwlStG"), may be exempt from German tax via a deemed indirect foreign tax credit equal to the German tax which would be payable absent a foreign tax credit (cf. Internal Revenue Code section 936). Argentina, China, Greece, India, Mexico, Portugal, and Spain are some of the countries included in this category.

In lieu of the foreign tax credit, state tax ministries are authorized to partly or completely forgive the tax on foreign source income, or determine the tax at a flat rate, assuming that the federal authorities approve and the adjustment is in the interest of Germany's national economy or the application of the regular rules raise substantial difficulties in a particular case.

Certain income from operation of German-registered, German-flag merchant ships in international transportation is taxed at half the statutory rate.

Treaty exemptions from German tax on foreign income

Under treaties, foreign source income may be exempt from German tax. Approximately 60 tax treaties are in force. These exemptions apply to business income of a foreign permanent establishment, and dividends received by a German corporation from a foreign corporation owned at least 10 or 25 percent by the German

[62] See Killius & Rieger, "International Aspects of Income Tax," in *German Tax & Business Law Guide (CCH Europe)* para. 140-820 (1992).

corporation. For example, under the U.S.-German income tax treaty, there is excluded from the German tax base of a German resident any item of U.S. source income that, according to the treaty, may be taxed in the United States. In the case of dividends, the exemption applies only to U.S. source dividends paid to a German company directly owning 10 percent or more of the voting shares of the payer. In general, the treaty also prevents the United States from taxing U.S. source interest and royalties paid to German residents.

Thus, assume for example that a German company owns all the stock of a U.S. corporation from which it receives dividends, interest, and royalties. The dividends are exempt from German tax (and carry no direct or indirect foreign tax credits onto the German company's German tax return). The royalties and interest, on the other hand, are taxable by Germany, and there are no U.S. withholding taxes to credit against the German tax. Thus, such U.S. source income may well bear a full 50 percent income tax in Germany. By contrast, were the parent a U.S. company and the subsidiary German, there might be no U.S. tax imposed on the dividends, interest, or royalties after application of the direct and indirect German tax credits carried by the dividend against the U.S. tax on these items of income.

Treatment of foreign taxes under integration

For purposes of the integration system, foreign earnings not taxed by Germany generally are treated as untaxed, without regard to the amount of foreign tax imposed. Thus, payment by a German corporation of a dividend deemed to have been made out of foreign earnings will cause the German corporation to pay the 36-percent distribution burden. In a case where such foreign earnings are distributed to a foreign shareholder, the shareholder may be entitled to apply for a refund of the distribution burden, subject to the same withholding tax (e.g., the statutory 25-percent withholding) that applies on the distribution itself.

Allocation of profits among related taxpayers

The Foreign Transactions Tax Act permits the tax authorities to reallocate income if there has been a deviation from arm's length terms in an international business transaction between related persons. Persons are treated as related if there exists actual common control or one holds at least 25 percent of the interests in the other. Guidelines, not totally dissimilar from the U.S. Treasury Department regulations under section 482 of the Internal Revenue Code, for the application of this law have been promulgated administratively. These guidelines do not address the issue of thin capitalization. Recently, moreover, beliefs have been expressed that German tax courts have cast doubt on the validity of a 1987 Finance Ministry statement which was intended to deal with the issue of thin capitalization.[63]

[63] See generally Borstell, *German Federal Supreme Tax Court on Shareholder Debt Financing*, 1992 Intertax 61; Killius & Rieger, "International Aspects of Income Tax," in *German Tax & Business Law Guide* (CCH-Europe) para. 142-050; Rubinstein, *World Tax Scene*, 1992 Intertax 303, 306.

7. Treatment of foreign taxpayers

A person other than a German resident is subject to limited tax liability—e.g., tax only on German source income—in Germany. Disregarding treaties, this includes the business income attributable to a German permanent establishment, income from providing services in Germany, dividends from a German resident corporation, certain types of interest that involve the right to participate in profits, rents from German situs property, royalties for uses by a German permanent establishment or for uses of rights registered in Germany, gains from the sale of German real estate and from the sale of German corporation stock by substantial shareholders. Final tax is in some cases imposed by withholding on a gross basis (25 percent in the case of dividends, royalties, personal property rents, and interest from certain types of debt with equity features, or 46 percent in the case of interest on certain loans secured by German immovable property) or by normal assessment in the case of other income. However, income of a German permanent establishment of a foreign corporation is taxed at a flat 46-percent rate, rather than the split rates of 50 and 36 percent.

Treaties can restrict the application of these taxes, in some cases reducing tax to zero. For example, treaties often contain a narrower definition of permanent establishment than internal German law. Treaties may reduce or eliminate the tax on royalties, rents, or interest. Treaties do not eliminate the German tax on dividends paid by German corporations to foreign persons. Moreover, neither internal law nor treaties permit foreign shareholders of German corporations to receive the full German tax credit (or German refund) available to resident shareholders under the German integration system. Because of the split rate system, however, the final German *corporate* tax on German corporate earnings distributed to nonresidents is 36 percent, regardless of whether the nonresident recipient is an individual or corporation, and regardless of the recipient's local tax burden. By contrast, German corporate earnings distributed to a German corporation bear a 50 percent tax.

The European Economic Community parent-subsidiary directive of 1990 will require Germany to eliminate its tax on certain dividends paid by German resident corporations to substantial shareholders resident in other member countries of the European Communities (the "EC").[64] However, while the directive requires most EC countries to eliminate the tax by January 1, 1992, it gives Germany the right to impose a 5-percent tax until mid-1996.[65] Given its split rate system, this permits Germany to compensate in part for the fact that the full German statutory corporate tax burden is not imposed on earnings that are distributed to foreign corporations and not to individuals.

C. Trade Tax

The trade tax *(Gewerbesteuer)* is a combined income and capital tax that generally is confined to income from German business operations, excluding independent personal services. The income por-

[64] 90/435/EEC.
[65] *Id.* at art. 5, para. 3.

tion of the tax is imposed on the German business establishment's income base for income tax purposes, with some differences. For example, one-half of the interest incurred for long-term debts is not deductible. One-half of rent paid to those not liable for the trade tax is not deductible. Direct investment dividends are excluded from income. Loss carryovers are treated differently than they are under the income tax, and may not be carried back. Real property income may be excluded or a percentage of the assessed value of German real property can be deducted.

The capital portion of the tax is based on the assessed value of the business, with adjustments that correspond somewhat to the adjustments in the income tax base. Thus, for example, the capital tax base is increased by one-half the principal amount of certain long-term debts, and decreased by the value of certain direct stock investments and real estate investments. Currently the capital portion of the trade tax does not apply in the territories of the former GDR.

The trade tax, which is paid to the municipalities, is computed by multiplying a base amount times a municipal multiplier. The base amount is 5 percent of the trade tax income base plus a fraction (generally 0.2 percent) of the trade tax capital base. The final tax can be 3 or 4 times the base amount. Thus, for example, the trade tax on income may be as high as 20 percent.

In Figures 1 and 2 and table 1 in Part I (Overview of the Tax Systems of the United States, the United Kingdom, Germany, and Japan) above, the income portion of the trade tax is included in the categories "individual income tax" and "corporate income tax" to the extent that it is imposed on the income of individuals and corporations, respectively. The capital portion of the trade tax is included in the category "property tax." Considered separately, trade tax *(Gewerbesteuer)* receipts in 1989 were DM 36.7 billion ($24.7 billion), as compared to DM 34.2 billion ($23.1 billion) collected under the corporation tax *(Koerperschaftsteuer)*.[66]

D. Value-Added Tax (VAT)

A consumption-based, value-added tax (VAT) has been imposed in Germany since 1968. The German VAT, which was enacted in connection with Germany becoming a member of the EC, replaced a turnover tax that applied to each taxpayer in a multi-stage production or distribution process with no credit or other allowance for tax paid by another taxpayer earlier in the process.

Most goods and services provided by taxable businesses in Germany are subject to tax at the standard VAT rate of 14 percent (the standard VAT rate is scheduled to increase to 15 percent in 1993). A reduced VAT rate of 7 percent applies to the sale of basic food items, books, newspapers, and antiques. Unlike many other countries that are members of the EC, Germany does not impose a higher VAT rate on luxury goods.

The German VAT utilizes the credit-invoice method to determine the amount of VAT due. Under the credit-invoice method, the VAT

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[66] *Statistisches Jahrbuch* 1990, as reported in Price Waterhouse, *Doing Business in Germany* 115 (1991).

liability for any period equals (1) the amount of taxable sales multiplied by the applicable VAT rate, reduced by (2) a credit for the amount of VAT paid with respect to taxable purchases as shown on required invoices. If the credit for the amount of VAT paid with respect to taxable purchases exceeds the amount of taxable sales multiplied by the applicable VAT rate, the excess is refundable to the taxpayer.

Under the German VAT, imports are subject to tax at the applicable VAT rate. Exports and services rendered in connection with the export of goods (for example, transportation, storage, and certain agency charges) are zero rated. Consequently, businesses are not subject to VAT on exports and related services, but are allowed a credit for the amount of VAT paid on taxable purchases that are attributable to exports and related services.

Germany provides an exemption from the VAT for: (1) most transactions by banks and insurance companies; (2) the sale of land and buildings; and (3) the rental of land and buildings. Unlike a zero-rated good or supply, a credit for VAT paid on taxable supplies is not allowed if the good or service to which the supply relates is exempt from the VAT.

A business that has sales of not more than DM 25,000 ($16,855) for the preceding taxable year and expects sales of not more than DM 100,000 ($67,420) for the current taxable year may elect to be exempt from the German VAT. A taxable business generally is required to file a VAT return on a monthly basis.

E. Wealth and Wealth Transfer Taxes

The wealth tax *(Vermoegensteuer)* is an annual tax on taxable net assets of individuals and corporations. Assessed asset values of real property may be less than fair market value, and deductions are allowed in the case of an individual of DM 70,000 ($47,194) per family member, or in the case of corporation, DM 125,000 ($84,275). For individuals, the tax rate is 0.5 percent of the base; for corporations, 0.45 percent. The tax currently does not apply in the former territories of the GDR.

There is also an inheritance and gift tax *(Erbschaftsteuer und Schenkungsteuer).* The rates and exclusions that apply to particular transfers depend upon the closeness of relationship between the donor and donee, and may depend on the nationality or residence of the donor or donee. At the most tax-favored end of the rate scales (which applies on transfers to spouses and direct descendants), the top rate is 35 percent; at the least favored end (which applies, for example, on transfers to cousins), the corresponding rate is 70 percent. Except in certain cases involving nonresidents, transfer to a spouse is exempt up to at least DM 250,000 ($168,550); to cousins, up to DM 3,000 ($2,022). Revenue from this tax and the net assets tax goes to the states.

F. Social Security

Germany has a comprehensive social security system covering health insurance, sick pay, old-age benefits, unemployment benefits, and workmen's compensation. It generally covers all persons other than the self-employed (or manager/owners of closely held companies) mandatorily. (Participation in the health insurance program, however, generally is only mandatory up to a certain income level.) The system also may cover self-employed artists, treating their publishers, producers etc. as their employers. Contribution rates change at least annually. Premiums for health insurance and sick pay as of the beginning of 1992 were approximately 14 percent of compensation up to a periodic limit (DM 61,200 ($41,261) per year or DM 5,100 ($3,438) per month in the former Federal Republic of Germany (FRG)), generally shared equally by the employer and employee. Corresponding premiums for old-age benefits were 17.7 percent up to DM 81,600 ($55,014) per year or DM 6,800 ($4,584) per month. Contributions for unemployment benefits were 3.15 percent for the employees and the same for the employer up to DM 6,800 ($4,584) per month in the former FRG. Contributions for workmen's compensation vary by industry, and contributions for all benefits under artist's insurance are based on various percentages of royalties.

G. Other Taxes

Perhaps the most significant taxes not described above are numerous excise taxes, including those on mineral oil, tobacco, and alcoholic beverages. Insurance premiums are subject to a 7-percent excise tax.

Sales of real property are taxed at 2 percent of purchase price. Revenue from this tax goes to the states. Other taxes dedicated to the states include a motor vehicles tax, a beer tax, and a tax on gambling casinos.

The land tax is an annual tax on assessed value of real property. Its rate varies among the municipalities, which are the recipients of the revenue from this tax.

Prior to 1992, Germany had a tax on capital contributions to a German corporation, and a tax on drafts and bills of exchange. Prior to 1991, there was transfer tax of 0.25 percent of the value of transferred stock or securities of a GmbH. These taxes are no longer in effect.

V. DESCRIPTION OF JAPANESE TAX SYSTEM [67]

A. Overview

Taxes are imposed in Japan on income, payroll, consumption, inheritances and gifts, real and personal property, and certain transactions and products. The income tax system of Japan follows a pattern similar to the income tax systems of Western countries, including the United States (and, as is true of Western systems, the Japanese income tax system has its own unique characteristics). Domestic taxpayers, including domestic corporations and resident alien individuals, are subject to income taxation on their worldwide incomes. Corporate income is subject to taxation generally at a flat rate, while individuals are subject to graduated rates of tax on their incomes (including distributed corporate earnings). Japan's corporate income tax and its individual income tax generate the bulk of tax revenues at the national level. Other national-level taxes include a new consumption tax (value-added tax), inheritance and gift taxes, a securities transfer excise tax, and certain other excise taxes. Income and property taxes are also imposed at subnational levels of government in Japan.

B. Income Taxation

1. Individual income tax

· ***Tax rates***

Japan's national individual income tax is imposed at marginal rates that reach a maximum of 50 percent on incomes that exceed 20 million yen ($160,000). The following table shows the marginal tax rates that apply to varying levels of taxable income.

Table 5.—Marginal Individual Income Tax Rates in Japan (1992)

Marginal rate	Taxable income (yen)	Dollar equivalent[67]
10 percent	0–2,999,999	$0–24,000
20 percent	3,000,000–5,999,999	24,000–48,000
30 percent	6,000,000–9,999,999	48,000–80,000

[67] The following discussion of Japanese tax has been compiled from English-language secondary sources, including the following: T.A. Barthold & T. Ito, "Bequest Taxes and Accumulation of Household Wealth: U.S.-Japan Comparison" (1991), forthcoming in *The Political Economy of Tax Reforms and Their Implications for Interdependence*, (T. Ito & A.O. Krueger, eds.) (1992) Price Waterhouse, *Doing Business in Japan*, (updated March 31, 1991); H. Ishi, *The Japanese Tax System* (1989); T. Ito, *The Japanese Economy*, (1992); Kimura, "The Current Tax Situation Affecting Foreign Enterprises Doing Business With or in Japan," 4 *CCH J. Asian Pacific Taxation*, 26-28; (1992); Ministry of Finance, Tax Bureau, *An Outline of Japanese Taxes* (1991); Way, Brockman & Otsuka, *Business Operations in Japan*, 51-7th Tax Management Portfolio (updated February 10, 1992); and other periodical literature cited below.

Table 5.—Marginal Individual Income Tax Rates in Japan (1992)—Continued

Marginal rate	Taxable income (yen)	Dollar equivalent[67a]
40 percent	10,000,000–19,999,999	80,000–160,000
50 percent	20,000,000 and above	160,000 and above

[67a] All currency conversions in this table and this section are made at a rate of 125 yen to the dollar. This was the rate prevailing on July 14, 1992, as reported in the *New York Times* of July 15, 1992.

Tax base

Similar to U.K. income tax law, but in contrast to U.S. Federal income tax law, an individual can have one of three types of residence status under Japanese national income tax law: permanent Japanese residence, nonpermanent residence, and nonresidence.

(1) Permanent residents of Japan are subject to individual income taxation in Japan on their worldwide income, whether or not remitted to Japan, at graduated rates (citizenship or nationality is not a criterion for taxation on a worldwide basis).[68]

(2) Nonpermanent residents of Japan are subject to individual income taxation in Japan, at the usual graduated rates, on their income from sources within Japan and on their income from sources outside Japan to the extent that the foreign source income is either remitted to Japan or paid within Japan (or charged against the income of a Japanese company).[69]

(3) Nonresidents of Japan are subject to income taxation in Japan, generally at flat rates, only on certain types of income from sources in Japan. These types of income generally include interest, dividends, rents from real estate, and compensation for services rendered in Japan. If the compensation for services rendered in Japan is paid by a foreign employer, that income may be treated as foreign source, and thus exempt from Japanese tax, in cases where the employee is physically present in Japan for 183 days or fewer in the taxable year. The Japanese source income of nonresidents generally is subject to tax on a gross basis (i.e., no deductions are allowed), and generally is collected by withholding. Tax treaties to which Japan is a party modify both the types of Japan-source income taxable to nonresidents and the rates at which taxation is imposed.

An individual's ordinary income subject to the national income tax is the sum of the individual's income in eight categories: interest income, dividend income, rental income, business income, employment income, certain capital gains, occasional income, and miscellaneous income.

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[68] Residents of Japan who are Japanese citizens are presumed to be permanent residents of Japan, while residents of Japan who are not Japanese citizens are presumed to be permanent residents of Japan only after residing in Japan for five years.

[69] Nonpermanent residents of Japan are those individuals who come to Japan with the intention to be domiciled in Japan for at least one year but not permanently. Citizens of countries other than Japan who come to Japan to engage in business (including employment) generally are presumed to be nonpermanent residents of Japan for the first five years after they arrive in Japan.

Four types of income are treated separately from aggregate ordinary income. Forestry income is subject to special, favorable treatment. Long-term gains from the sale of land and buildings are eligible for a 50-percent exclusion.[70] Short-term gains from the sale of land and buildings, along with business income from the short-term sale of land[71] (but not buildings) are taxed at higher rates than apply to ordinary income. Retirement income (including both private pensions and government social insurance) generally is subject to a 50-percent deduction after a generous statutory exclusion based on years of service, and is treated separately for purposes of the graduated income tax rates.

Specific features of Japan's national income tax

Notable features of Japan's national income tax, by comparison with U.S. Federal income taxation, are summarized below.

Collection.—Tax generally is collected by withholding, with employers required to adjust withholding rates late in the year to reflect income and deductions from sources other than employment. Interest and dividend income generally is subject to withholding at the rate of 20 percent.

Savings incentives (including capital gains).—Net gains from the sale of corporate stock and other securities generally are taxable at the flat rate of 20 percent, and are otherwise excluded from the computation of taxable income. Taxpayers trading through securities companies may elect, in lieu of 20-percent net taxation, to be taxed at the flat rate of 1 percent (0.5 percent in the case of convertible bonds) of the gross proceeds. Gains on the sale of ordinary coupon bonds are exempt from tax.

Broad categories of interest income may be taxed only at the 20-percent withholding rate, and otherwise excluded from the tax base. Individuals over age 65, along with certain widows and disabled persons, may exclude most interest income[72] from all taxation.

An individual who receives dividends from a single company aggregating not more than 100,000 yen[72a] in a year may elect to be taxed on those dividends only at the 20-percent withholding rate, and to otherwise exclude the dividends from gross income. If the individual receives dividends from a single company aggregating not more than 500,000 yen[72b] in a year and owns less than five percent of the company's stock, the same treatment may be elected at a withholding tax rate of 35 percent.

An incremental research and development credit is available only to individuals who file special "blue returns." Blue returns, which are available on an elective basis only to certain taxpayers reporting business income, offer favorable treatment in certain

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[70] A five-year holding period is required for long-term characterization.

[71] This category of taxation is intended to prevent avoidance of the severe tax on short-term gains from the sale of land by classification of such gains as ordinary business income. Way, Brockman & Otsuka, *Supra*, at A-119.

[72] Qualifying for this exclusion is interest income from postal savings accounts, which have been a major vehicle for tax-favored investment in Japan. Postal savings accounts provide most of the funding for a program of governmental capital investment, which is more than half the size of Japan's general-account budget. See Ito, *Supra*, at 163-164.

[72a] Approximately $800.

[72b] Approximately $4,000.

areas but require the use of a standardized systematic method of accounting.[73]

Other special features.—A special deduction is allowed against employment income in a decreasing marginal percentage. The deduction permits the first 650,000 yen [73a] of employment income to be deducted plus 40 percent of employment income in the first bracket above that amount, with the highest earners eligible to deduct 2,095,000 yen plus 5 percent of their employment income over 10 million yen.[73b] Instead of the employment income deduction, taxpayers may deduct their total expenses for commuting, relocation, education necessary for the employee's work, and travel expenses to return home from an assignment away from the employee's family.

Employee benefits that are excluded from employment income include reimbursement of commuting expenses (beyond amounts treated as covered by the employment income deduction) as well as substantial housing subsidies.

Personal interest expense, including mortgage interest on the principal residence, is not deductible. Limited tax credits are available, however, with respect to mortgage interest payments in certain circumstances. In addition, interest paid on a residential mortgage may be capitalized and added to the basis in the property.

No deductions are permitted for local income or property taxes (except for the local enterprise tax, which is deductible in computing business income for national income tax purposes).

Gain is not recognized on the disposition of property transferred as a contribution to a government entity or to certain designated public interest organizations. Nor is gain recognized on the disposition of property transferred as a payment in kind to satisfy inheritance tax liability (even though the transfer satisfies tax liability to the extent of the fair market value of the property).[74]

Although gifts and bequests from individuals are excluded from income, gifts from corporations are subject to income tax as occasional income.

Deductions are allowed for all premiums paid by an individual for social insurance, including amounts withheld by the employer. In addition, a portion of commercial insurance premiums are deductible for life insurance (up to 50,000 yen per year) and for household casualty insurance (up to 15,000 yen per year).

A tax credit is allowed for construction of a new residence, or acquisition of a residence less than 10 years old, meeting certain conditions. The credit is 1 percent of the outstanding balance up to 20 million yen of loans used to construct or acquire a qualifying residence, plus 0.5 percent of the outstanding balance over 20 million but less than 30 million yen of such loans. The credit may be taken in the year of acquisition and in the next four years, but not in any

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[73] Some features of the corporate tax system, including some features available to corporations filing blue returns, are available to individuals only if they file blue returns.

[73a] Approximately $5,200.

[73b] Approximately $80,000.

[74] As noted below, although property generally is valued at its fair market value at death for inheritance tax purposes, inherited property generally is not "stepped up" to that value for the heir's income tax purposes.

year for which the taxpayer's taxable income exceeds 20 million yen.[74a]

Certain undistributed profits from certain designated tax-haven subsidiaries (discussed under "3. Treatment of foreign income," below) are taxable as miscellaneous income.

Individual taxpayers generally are required to use the accrual method of accounting for tax purposes.

Japan employs no system of taxpayer identification numbers. However, a governmental tax panel is reportedly undertaking a study of proposals to introduce a numbering system.[75]

Minimum tax.—Japan imposes no separate minimum tax.

Local income taxes

Local inhabitants income taxation is imposed by prefectures and municipalities in Japan. The tax base for local income taxation is substantially the same as for national income taxation (including income from sources outside the jurisdiction). The principal difference is that charitable contributions are not deductible for local income tax purposes. Marginal prefectural income tax rates reach a maximum of 4 percent on incomes above 5 million yen. The standard municipal income tax rates reach a maximum marginal rate of 11 percent on incomes above 5 million yen, but may be increased by up to 50 percent (to a maximum marginal rate of 16.5 percent) by any individual municipality.

Local enterprise taxation is imposed by prefectures on most types of rental and other business income.[75a] After a special entrepreneur's deduction (for local enterprise tax purposes only) of 2 million yen, tax is imposed at a flat standard rate of 5 percent, but may be increased by up to 10 percent (to a maximum rate of 5.5 percent) by any individual prefecture.

2. Corporate income tax

Tax rates

The national corporate tax is imposed on most companies at a flat rate of 37.5 percent. Japanese companies are also subject to local inhabitants tax at a rate that cannot exceed 20.7 percent of the national corporate rate, plus local enterprise tax at a typical rate (for Tokyo) of 12.6 percent. The local enterprise tax is deductible against national corporate tax. In addition, Japan imposes a temporary corporate income surtax at the rate of 2.5 percent, which was enacted in connection with Japan's financial obligations to support Operation Desert Storm. For most corporate taxpayers, the surtax applies to the taxable year ending March 31, 1992, through the taxable year ending March 31, 1994.

Tax base

Private business entities established in Japan, regardless of form of organization, are subject to Japanese corporate taxation. Corpo-

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[74a] Approximately $160,000.

[75] See "Japanese Government Tax Panel to Review Variety of Tax Proposals," *Daily Report for Executives*, Bureau of National Affairs (Washington, D.C.), July 6, 1992, at G-1.

[75a] Income from sources in foreign countries is excluded from the computation of local enterprise tax.

rate tax thus is imposed on corporations (*kabushiki kaisha*), limited companies (*yugen kaisha*), and commercial partnership companies (*gomei kaisha* and *goshi kaisha*). Corporate tax is imposed on the entity's worldwide income, including foreign income of branches (whether or not remitted to Japan) but excluding the income of foreign subsidiaries other than certain designated tax-haven subsidiaries (discussed under "3. Treatment of foreign income," below).

Specific features of Japan's corporate income tax

Notable features of Japan's corporate income tax, by comparison with U.S. Federal corporate income taxation, are summarized below.

Investment incentives.—Capital gains are subject to full corporate taxation, with no specific preference.

Accelerated depreciation generally is allowed only for specified types of assets. These include newly constructed rental housing, certain energy-related equipment, certain pollution-control equipment, certain new machinery of small corporations, and certain plant and equipment located in specified underdeveloped areas of Japan. Accelerated depreciation takes the form of additional depreciation allowed in the first year, in amounts ranging from an additional nine percent of acquisition cost in the case of certain aircraft, to a total first-year allowance of 50 percent of the cost of machinery and equipment used in the Okinawa free-trade zone. Depreciation after the first year follows the taxpayer's normal method (straight line or declining balance) and schedule. Useful lives are prescribed by statute, and include such periods as 65 years for reinforced concrete buildings (commercial), 26 years for wooden buildings (commercial), 10 years for aircraft used in international service, four years for automobiles, six years for computers, 14 years for steel manufacturing plants, 15 years for metal office furniture, and eight years for patent rights.

Intangible assets (including purchased goodwill) may be amortized over periods as short as five years.

An incremental research and development credit is available.

Other special features.—Japanese corporations are not permitted to file tax returns on a consolidated basis. Financial reporting is required to be consolidated, however, for all corporations listed on a stock exchange in Japan.

Japanese tax laws require certain adjustments from generally accepted accounting principles for purposes of filing corporate tax returns. For this reason, and to eliminate the administrative burdens of maintaining separate financial and tax books, most Japanese corporations use tax accounting rules for purposes of their financial books as well as their tax books.[76] Japanese corporations generally are required to use the accrual method of accounting, and typically use a taxable year ending on March 31.

Transfer pricing is important in Japanese corporate taxation not only for international transactions but also for purely domestic related-party transactions on account of the inability to file consoli-

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[76] Way, Brockman & Otsuka, *Supra*, at A-24.

dated returns. In the case of a transaction with a related foreign party, the law specifically requires that an arm's length price be determined on the basis of a comparable price standard, a reseller's profit standard, a cost plus supplier's profit standard, or (if impossible to use one of the three specified methods) by taking into account the taxpayer's expenses, assets, and other factors. Similar principles are applicable in the case of domestic transactions.

Japan enacted thin-capitalization rules in 1992. Under these rules, if a Japanese company's aggregate borrowings from a controlling foreign shareholder exceed three times the value of the company's net assets, the interest accruing on such excess borrowings generally is not deductible as a business expense.[77]

Any corporation may apply for the privilege of filing a blue return. As in the case of individual taxpayers, blue returns require the use of a standardized systematic method of accounting and offer favorable treatment in certain areas. Corporations filing blue returns are permitted to carry operating losses back one year [78] and forward five years, use accelerated depreciation, establish certain reserve accounts, and take certain tax incentive deductions and credits. These tax incentives include benefits for investment in developing countries, natural resources, nuclear power, and international economic cooperation, and allow special deductions for reserves against price fluctuations and overseas investment losses.

Minimum tax.—Japan imposes no separate minimum tax.

Integration.—Japan previously applied a split-rate system for the taxation of corporate earnings, where a reduced tax rate applied to corporate earnings that were distributed to individual shareholders, and the corporation's interest expenses of holding corporate shares were not deductible. The split-rate system was repealed in 1990.

3. Treatment of foreign income

In general

As discussed above, Japanese taxpayers are subject to income tax on their worldwide incomes, including income derived by foreign branch operations that is not remitted to Japan. Japanese taxpayers generally are not subject to taxation in Japan on the earnings of foreign corporations in which they own interests until the profits are repatriated to Japan (in the form of dividend or liquidating distributions, or upon sale of the interests). This general rule of deferral, however, does not apply to certain tax-haven subsidiaries.

Taxation of undistributed profits of certain tax-haven subsidiaries

Under tax-haven legislation enacted in 1978, certain Japanese taxpayers are taxable currently on their pro rata shares of the undistributed profits of Japanese-controlled corporations established in designated tax havens. Japanese taxpayers subject to this treatment are those owning (directly, indirectly, or constructively) five

[77] See Kimura, *Supra*, at 26.

[78] The privilege to carry losses back to the previous tax year has been suspended for a period of two years. See *Id.*, at 28.

percent [79] or more of the stock in a tax-haven subsidiary that is owned (directly, indirectly, or constructively) more than 50 percent by Japanese taxpayers. The test of 50-percent ownership includes all Japanese ownership, not merely those owning at least five percent of the stock. "Undistributed profits" generally include all types of income, regardless of whether a type of income ordinarily may be subject to significant foreign income taxation.

"Designated tax-haven subsidiaries" generally are all Japanese-controlled corporations established in designated tax havens. Also included are Japanese-controlled corporations established elsewhere and either managed and controlled in a tax haven (and therefore treated not as residents of their jurisdictions of incorporation) or operating through a branch in a tax haven. Japan's Ministry of Finance has designated 41 jurisdictions as tax havens, classified in three categories. They are: [80] jurisdictions where all corporate income is tax exempt or taxed at a low rate,[81] certain jurisdictions where foreign-source income of a local corporation is tax exempt or taxed at a low rate,[82] and jurisdictions where corporate income from certain but not all lines of business is tax exempt or taxed at a low rate.[83]

A corporation established in a designated tax haven may avoid classification as a designated tax-haven subsidiary only by satisfying all of the following five tests: (1) It must have a fixed place of business in the tax haven; (2) its business must be managed and controlled by a local staff in the tax haven; (3) its principal business must be other than leasing vessels or aircraft, licensing intangibles, or holding stock or securities; (4) it may receive dividends from other designated tax-haven subsidiaries in amounts not exceeding five percent of its total revenue; and (5) most of its business transactions must be in the tax haven, or, in the case of sales, banking and trust, securities, insurance, shipping, and air freight companies, most of its business must be conducted with unrelated parties.

In 1992, amendments to the tax-haven law expanded the definition of a tax haven. Tax-haven countries now include any country where the effective rate of tax applicable to the Japanese-controlled corporation in question is "substantially low," which is defined in a Cabinet order as 25 percent or less. The effective rate of tax generally is computed under principles of Japanese law, and includes not only local taxes actually paid but also local taxes that are exempted or reduced to the extent that the exemption or reduction qualifies for a tax-sparing credit under the local country's tax treaty with Japan.[84]

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[79] Prior to the 1992 tax law amendments, this ownership threshold was 10 percent.

[80] Way, Brockman & Otsuka, *Supra*, at C&A-4.

[81] Andorra, Anguilla, Bahamas, Bahrain, Bermuda, British Channel Islands, British Virgin Islands, Cayman Islands, Djibouti, Hong Kong, Isle of Man, Liechtenstein, Macao, Maldives, Monaco, Nauru, New Caledonia, Turks and Caicos Islands, and Vanuatu.

[82] Costa Rica, Panama, Solomons, St. Helena, and Uruguay.

[83] Antigua, Aruba, Barbados, Cook Islands, Cyprus, Grenada, Gibraltar, Jamaica, Liberia, Luxembourg, Malta, Montserrat, Netherlands Antilles, Nevis, Seychelles, St. Vincent, and Switzerland.

[84] See Kimura, *Supra*, at 26.

Actual distributions of previously taxed tax-haven profits are free of additional income tax if distributed within the next five years after the undistributed profits are taxed.

Foreign tax credit

Japanese corporations may credit certain foreign taxes against income taxes payable to Japan on foreign source income. Both direct and deemed-paid taxes are eligible for the credit, with 25-percent ownership in the foreign corporation generally required for deemed-paid credits. Deemed-paid credits are allowed for only first-tier and second-tier foreign corporations.[85] The ownership threshold is waived for purposes of deemed-paid credits with respect to certain shareholders in designated tax-haven subsidiaries—any corporation that is taxable on its pro rata share of the undistributed profits of a designated tax-haven subsidiary is eligible for deemed-paid foreign tax credits with respect to those taxable profits. The ownership threshold also is reduced in certain tax treaties. For example, under the United States-Japan tax treaty, Japanese shareholders in U.S. corporations may take deemed-paid credits with as little as 10-percent ownership.

The foreign tax credit is subject to a limitation computed on an overall (as opposed to a per-country) basis. The limitation is computed on the basis of the national income tax only, although excess credits may be used, to a limited extent, against the corporation's local inhabitants income tax. Excess credits may be carried forward (but not back) for up to three years, and excess limitation may also be carried forward for up to three years (in effect, yielding a result similar to a carryback).

For purposes of determining the foreign tax credit limitation fraction, only one third of a taxpayer's foreign source income that is not subject to any foreign tax may be included in the numerator as foreign source income (although all of such income is included in the denominator as worldwide income), and the numerator (foreign source income) may not exceed 90 percent of the denominator (worldwide income). In addition, export sales from Japan are treated as foreign source income only if they are sold through a fixed place of business in a foreign country, or if the income from the export sales is subject to tax in a foreign jurisdiction.

Tax sparing

Japan has entered into a number of tax treaties that provide "tax sparing" benefits with respect to tax holidays or other incentives granted by developing countries to foreign investors. Under tax sparing, Japanese investors in business operations in the other treaty country may take foreign tax credits against their Japanese tax liability as if they had actually paid the foreign taxes that were "spared" pursuant to the tax holidays. Japan currently offers tax sparing in its treaties with Brazil, India, Ireland, Korea, Malaysia, Pakistan, the Philippines, Singapore, Spain, Sri Lanka, Thailand, and Zambia.

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[85] Deemed-paid credits for second-tier foreign corporations have been allowed only since Japan's 1992 tax amendments. See *Id.*, at 27.

C. Social Security Taxes

Japan's social security system is funded through payroll taxes. The health insurance tax is collected at the rate of 8.3 percent of standard regular monthly wages (i.e., not including bonuses), up to a maximum of 38,930 yen tax on wages of 710,000 yen [86] or more, shared equally by the employer and the employee. There is also a temporary tax of 0.8 percent of bonuses, of which 0.5 percent is paid by the employer and 0.3 percent by the employee. The welfare pension insurance tax on regular wages is collected at the rate of 14.3 percent for males (other than mine workers), 13.8 percent for females, and 16.1 percent for mine workers. The tax is shared equally by the employer and the employee, and is imposed on regular monthly wages up to 530,000 yen.[87] The unemployment insurance tax is collected generally at the rate of 1.45 percent of all compensation including bonuses, of which 0.90 percent is paid by the employer and 0.55 percent is paid by the employee. For certain designated industries such as forestry and construction, the unemployment insurance tax rate is 1.65 or 1.75 percent. The workmen's compensation accident insurance tax is collected at rates ranging from 0.5 percent to 14.5 percent of all compensation including bonuses, and is paid entirely by the employer.

D. Consumption Taxes

National value-added tax (VAT)

A national consumption tax (*shohi zei*) in the form of a value-added tax (VAT) was imposed in Japan in April of 1989. The tax is assessed generally at a flat rate of 3 percent of value added. The value-added tax was introduced as a replacement for the commodities tax, which had been viewed as a consumption tax on luxury goods.

The VAT was introduced for three principal reasons. First, taxing consumption was considered to be a desirable backstop to the loopholes in the individual income tax system. Second, the VAT was introduced to serve as an instrument for revenue increases in the next century, especially to pay for increased social security outlays. Third, the commodities tax was replaced by a VAT because the commodities tax, which applied to specific products, was unable to keep pace with advancing technology and the development of new consumer products.[88]

Under the Japanese VAT, the VAT liability for a taxable business generally equals (1) the amount determined by multiplying taxable sales by the 3-percent VAT rate, reduced by (2) a credit for the amount of VAT paid (or deemed paid) [89] to suppliers on purchases and the amount of VAT paid on imports. Like typical European value-added taxes, the Japanese VAT taxes international

[86] Approximately $5,680.
[87] Approximately $4,240.
[88] Ito, *Supra*, at 154.
[89] Under the Japanese VAT, a taxable business generally is allowed a credit for purchases made from an exempt small business even though no VAT was paid with respect to such purchases. A VAT credit generally is not allowed for purchases of exempt goods or services.

transactions on a destination basis. Consequently, the 3-percent VAT applies to all imports, while exports are zero rated.

Certain transactions are exempt under the Japanese VAT, which means that no VAT is due on the provision of the good or service and no credit is allowed for the amount of VAT paid on taxable purchases that are attributable to the good or service. Among the most significant transactions that are exempt under the Japanese VAT are: (1) sales and leases of land; (2) sales of most stocks, bonds, and partnership interests; (3) lending and insurance transactions; (4) government-sponsored lotteries; (5) certain government services such as the sale of postage stamps and the granting of passports; (6) medical services provided under certain health insurance laws; (7) tuition for most schools; and (8) certain social welfare services.

A complete exemption from the VAT is also provided for businesses with annual taxable sales of less than 30 million yen,[90] while a partial exemption from the VAT is provided for businesses with annual taxable sales of less than 50 million yen. A business that qualifies for the exemption may elect, however, to be subject to the VAT in which case a credit would be allowed for the amount of VAT paid on taxable purchases.

In addition, a business with annual taxable sales of less than 400 million yen [91] may elect to determine the credit for VAT paid (or deemed paid) on taxable purchases under a simplified method. Under the simplified method, the credit for wholesalers generally would equal 90 percent of total sales, the credit for retailers generally would equal 80 percent of total sales, and the credit for other taxable businesses generally would equal 60 or 70 percent of total sales.

Finally, under the Japanese VAT, taxable businesses are allowed a credit for supplies purchased from exempt businesses, even though no VAT was paid with respect to such purchases. By providing a credit for supplies purchased from exempt businesses, the Japanese VAT discriminates against imports. It is unclear whether this feature of the Japanese VAT violates the General Agreement on Tariffs and Trade ("GATT").

Local level

No separate consumption taxes are imposed at the local level in Japan.

E. Taxation of Wealth

Inheritance and gift taxation

Japan imposes a tax on inheritance either by an heir resident in Japan or of property situated in Japan. Heirs resident in Japan are taxable on their inherited property wherever situated, but heirs resident outside Japan are taxable only on Japan-situs property. The total inheritance tax is computed on the basis of separate application of the progressive rate schedule to the shares of each heir

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[90] Approximately two-thirds of all businesses in Japan have annual sales of less than 30 million yen (approximately $240,000). *The Nihon Keizai Shimbun Japan Economic Journal*, January 28, 1989, at 4.

[91] Approximately $3,200,000.

at law (at rates up to 70 percent on amounts over 500 million yen [92] allocated to a single heir), then the tax is imposed on the actual heirs and legatees in proportion to the shares that they receive.

A basic exemption is allowed in the amount of 40 million yen plus 8 million yen for each heir at law.[93] In addition, a marital tax credit is allowed in the amount of the tax due on the spouse's statutory share of the estate (e.g., half the estate if children also survive). A surtax in the amount of 20 percent is added to the tax due on an inheritance or bequest received by a person other than a spouse, parent, or child of the decedent.

Property generally is valued for inheritance tax purposes at fair market value on the date of death. Special valuations, however, apply to land [94] (including residential property) and certain other property that is difficult to value. For income tax purposes, heirs and legatees are assigned their shares of the decedent's cost basis ("carryover" rather than "stepped-up" basis).

Japan's gift tax operates under separate but similar rules, and applies to all property given to donees resident in Japan as well as to Japan-situs property given to nonresident donees. There is an annual exemption (per donee from all donors) of 600,000 yen.[95] Gift tax rates reach a maximum of 75 percent on gifts of over 70 million yen.[96]

Direct taxation of real and personal property

There are no taxes on real and personal property imposed at the national level in Japan. Local real and personal property taxes apply only to business property (including leased premises).

F. Other Taxes

Japan imposes a securities transfer excise tax on the gross sale proceeds of any transfer of stock or securities in Japan. Tax rates for transfers by ordinary sellers range from 0.3 percent for shares of stock to 0.03 percent for corporate and government bonds. Tax rates for transfers by licensed securities companies range from 0.12 percent for shares of stock to 0.01 percent for corporate and government bonds.

Japan also imposes a stamp tax on certain documents, a registration and license tax on businesses and business property, a liquor tax, a tobacco tax, and a tax on gasoline and certain other petroleum products.

[92] Approximately $4,000,000.

[93] Japan's 1992 tax amendments are reported to have modified the basic inheritance tax exemption, as well as the rates of inheritance and gift tax. See "Japan—1992 tax amendments," *Tax News Service*, International Bureau of Fiscal Documentation, April 8, 1992, at 105. Further information is unavailable at publication time.

[94] In addition to exclusions and other reduced valuations under law, land is further undervalued in practice by the use of a special valuation map (*rosen ka*) for inheritance tax purposes, rather than either the national government's land price survey or the local government's property tax assessments. Barthold and Ito, *Supra*, at Appendix p. 5.

[95] Approximately $4,800.

[96] Approximately $560,000.

VI. ECONOMIC PERFORMANCE, INVESTMENT, SAVING, AND THE COST OF CAPITAL

A. Measurement of Productivity and National Welfare

Per capita GDP

The most basic measure of the level of national welfare is per capita gross national product (GNP) or per capita gross domestic product (GDP).[97] By these measures, the United States is an economically successful country. Table 6 provides a comparison of 1988 per capita GDP of the United States with that of Germany, Japan, and the United Kingdom. The table uses two different measures. The first converts the per capita GDP for each country to U.S. dollars by using the average 1988 dollar exchange rate of that country's currency.[98] Because exchange rates do not always reflect the relative price levels of different countries, particularly in the 1980s when exchange rates were unusually volatile, some argue that intercountry comparisons of output should measure the purchasing power of different countries. The second comparison in Table 6 provides one measure of the 1988 per capita purchasing power of the various countries.

Using the exchange rate method, the United States has the second highest per capita GDP of the countries listed. Under the purchasing power method, the United States has the highest per capita GDP.

Per capita GDP shows one measure of a country's standard of living in a single year. Growth rates of per capita GDP show the rate at which this measure of a country's standard of living has improved. To place the United States in an international context, data are presented below on the growth rates of real per capita GDP,[99] real wages, and labor productivity.

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[97] Gross Domestic Product (GDP) of a country is the value of all marketed goods and services produced in that country. Gross National Product (GNP) is GDP plus the net factor income received by residents of that country from abroad. Thus wages earned by a U.S. resident from temporary work abroad constitutes part of GNP but not GDP. Similarly, the returns from investment abroad constitute part of GNP but not GDP. Conceptual shortcomings of GNP or GDP as a measure of national welfare are discussed in Joint Committee on Taxation, *Factors Affecting the International Competitiveness of the United States* (JCS-6-91), May 30, 1991.

[98] This table, several other tables, and the text often use 1988 data rather than more recent data in order to utilize comparative data gathered by the Organization for Economic Cooperation and Development (OECD). In addition, several of the empirical studies cited later in this pamphlet are based on data prior to 1990.

[99] The growth rate of each country's real per capita GDP is the growth rate of its nominal per capita GDP (denominated in its own currency) minus its inflation rate.

Table 6.—1988 Per Capita Gross Domestic Product (GDP) of Selected Countries

[Amounts in dollars]

Country	Per capita GDP	
	Computer using OECD 1988 exchange rate[1]	Penn World Table V purchasing power[2]
United States	$19,715	$19,851
Japan	23,226	13,645
Germany	19,560	14,621
United Kingdom	14,616	13,060

[1] Exchange rate based on average daily rate for the year 1988. Source: OECD, *National Accounting, 1960–89,* Volume 1, 1989, and OECD, *Labor Force Statistics, 1968–1988,* 1990.

[2] National currency expenditures are converted to an international, dollar-denominated currency to make real quantity comparisons across countries. The international, dollar-denominated currency is a weighted average of the relative prices for the same goods in all countries. Source: Summers, Robert and Alan Heston, "The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950–1988," *Quarterly Journal of Economics,* Vol. 106, May 1991.

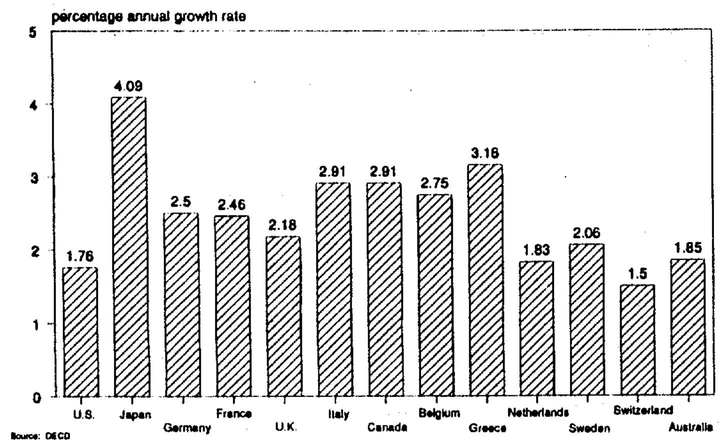
Growth of real per capita GDP

The growth rate of real per capita GDP may be the most direct measure of the rate of improvement in a country's standard of living. Figure 3 below compares the average annual growth rates of real per capita GDP for selected countries for the period 1969 to 1988.

As Figure 3 displays, the United States' growth rate of real per capita GDP is low in comparison to that of Germany, Japan and the United Kingdom. United States real per capita GDP growth averaged less than 1.8 percent per year from 1969 to 1988 compared to 2.2 percent for the United Kingdom, 2.5 percent for Germany, and 4.1 percent for Japan.

Figure 3

Average Annual Growth Rates of Per Capita GDP 1969-1988



Growth in labor force participation

The growth rate of GDP per capita is equal to the sum of the growth rate of labor force participation and the growth rate of output per worker (productivity growth). To the extent that GDP growth is due to increased labor force participation, the growth rate of per capita GDP may overstate the increase in economic well-being of a society. An increase in labor force participation implies a contemporaneous decline in leisure time and services produced in the home. While leisure time and home-produced services clearly have value, they are not measured as part of GDP. Consequently, gains in GDP may mask losses of home-produced services and overstate economic well-being.[100] By examining labor force participation directly one can distinguish between the role of growth in labor force participation and productivity growth in determining GDP growth. Table 7 examines the growth in labor force participation and shows that increases in labor force participation in the United States accounted for roughly one half of one percentage point of GDP growth over the 1980s. Furthermore, the increases in labor force participation in the United States were higher than that in most other countries over both the 1970s and 1980s. Thus, more of the GDP growth of the United States can be

[100] For example, if two individuals initially laundered their own clothing, the value of the activity would not be part of GDP, but if each paid the other to launder his or her clothing, the activity would be part of GDP.

attributed to increases in labor force growth than in other countries.

Table 7.—Growth Rates of Labor Force Participation, 1970–1988

[Average annual percentage rates of change]

Country	1970–79	1980–88	1970–88
United States	0.66	0.60	0.63
Japan	−0.04	0.14	0.05
Germany	−0.38	[1] −0.28	[1] −0.34
United Kingdom	0.25	0.17	0.21

[1] Through 1986.
NA—not available.
Source: OECD, *Labor Force Statistics*, 1968–88, 1990.

Productivity growth in manufacturing

Table 8 examines productivity growth in manufacturing. As the table indicates, manufacturing growth was higher than GDP growth in the United States over the last decade. Because of the large changes in the manufacturing sector during the 1980s (generally associated with the wide fluctuations in the value of the dollar), manufacturing productivity growth may not be representative of the U.S. economy in general over this period. According to the Department of Labor, productivity growth of the non-farm sector of the U.S. economy in general averaged 2.67 percent per year from 1960 to 1969, 1.24 percent per year from 1970 to 1979, 1.10 percent per year from 1980 to 1989, and 1.64 percent per year from 1960 to 1989. Over longer horizons, productivity growth should be similar across industries (as less productive industries contract and more productive industries expand) and manufacturing productivity growth should provide a useful measure of productivity growth in general. As the table indicates, productivity growth in manufacturing in the United States was lower than that of Germany, Japan, and the United Kingdom over the period 1960 to 1989.

Table 8.—Output Per Hour in Manufacturing in Selected Countries, Decadal Averages, 1960s–1980s

[Average annual percentage rates of change]

Country	1960s	1970s	1980s	Average 1960–89
United States	3.1	2.4	3.6	3.0
Japan	10.7	7.2	5.5	7.6
Germany	6.2	4.5	1.8	4.1
United Kingdom	3.9	2.7	4.7	3.7

Source: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, "Output per Hour, Hourly Compensation, and Unit Labor Costs in Manufacturing, Fourteen Countries or Areas, 1960–1989," April 1991.

Growth in real wages

Table 9 below reports annual real wage growth over the period 1960 to 1989 for selected countries. Over the long run, rising real wages are associated with increases in worker productivity, while stagnant real wages are associated with stagnant productivity growth.

Table 9.—Annual Growth Rates of Real Hourly Compensation in Manufacturing,[1] Decadal Averages, 1960s–1980s

Country	1960s	1970s	1980s	Average 1960–1989
United States	2.1	1.3	0.0	1.1
Japan	7.8	5.4	2.0	4.9
Germany	6.4	5.9	2.1	4.7
United Kingdom	2.9	4.4	2.0	3.1

[1] Compensation is in own country currency, deflated by own country consumer prices.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, "Output per Hour, Hourly Compensation, and Unit Labor Costs in Manufacturing, Fourteen Countries or Areas, 1960–1989," April 1991.

As with GDP and productivity growth, U.S. wage growth is below that of the other three countries, showing stagnant real manufacturing wages in the 1980s and very low growth in the 1970s. While the growth in real wages generally mirrors the growth of labor productivity, real wage growth can differ from productivity growth if the share of non-wage compensation increases (e.g., if employer-provided health or pension benefits increase), or in the short-run, if there is a shift in the distribution of income between labor and capital.

B. Trends in the United States' Balance of Payments

The evidence in the preceding sections indicates that, while still at a high level, the standard of living of the United States is growing more slowly than that of other countries.

This section shows that trends in the recent growth rate of U.S. income may not be indicative of future U.S. living standards, because much of the growth over the past decade was due to investment financed by foreign savings. Servicing this foreign debt will require a slowdown in the future rate of growth of consumption of U.S. residents.[101]

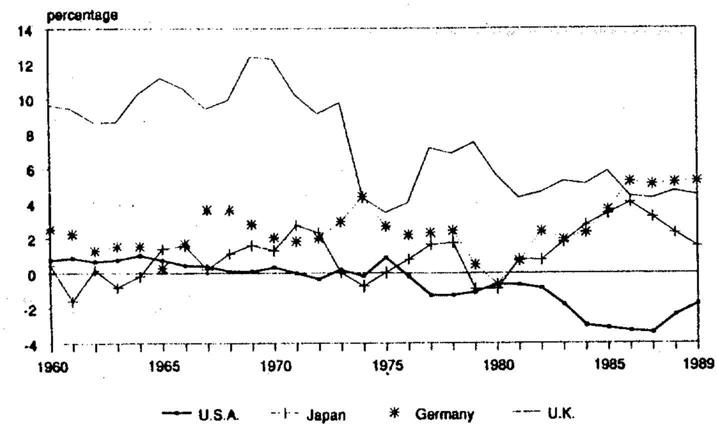
While the rapid growth of both foreign-held assets in the United States and U.S.-held assets abroad is symptomatic of the increasing integration of the global economy, the change in the net interna-

[101] For a detailed discussion of this point, see Joint Committee on Taxation, *Factors Affecting the International Competitiveness of the United States.*

tional position of the United States is directly related to the change in the U.S. trade balance in the 1980s. As has been widely reported, the merchandise (goods only) trade deficit has been over $100 billion per year since 1984. The current account as a whole, which compares exports of goods, services, and net interest income to imports (plus unilateral remittances), was positive as recently as 1981, but has been in deficit by over $100 billion per year from 1984 throughout the rest of the 1980s.

Figure 4 presents the net exports of goods and services as a percentage of GDP for the period 1960 to 1989 for the United States, Germany, Japan, and the United Kingdom. (Net exports are a positive entry, net imports a negative entry.) Scaling the trade surplus or deficit relative to GDP shows a country's trade deficit or surplus relative to the size of the country's economy. Since 1960, the United States has changed from a modest net exporter (net exports less than one percent of GDP) to a large net importer (net imports in excess of three percent of GDP in 1985 through 1987). Since 1965, with the exception of the years immediately following the two oil shocks of the 1970s, Germany and Japan have both been net exporters. The net export surpluses of Germany recently have exceeded five percent of GDP. The net export surpluses of Japan have declined from a peak of four percent of GDP in 1986 to 1.5 percent of GDP in 1989. The United Kingdom has consistently been a net exporter over the period, although in the 1980s its net exports were only about half as large a share of GDP as they were in the 1960s.

Figure 4
Net Exports as a Percentage of GDP 1960-1989



source: OECD

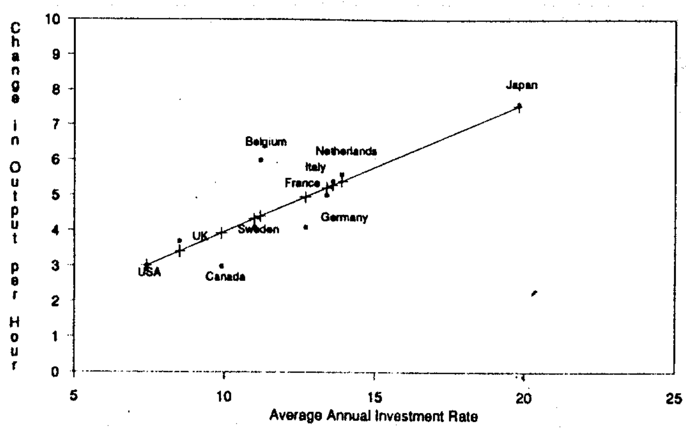
C. Role of Investment and Saving in Economic Performance

When an economy's rate of net investment (gross investment less depreciation) is positive, the economy's capital stock increases. A larger capital stock permits greater production of goods and services using a fixed amount of labor. The larger a country's capital stock, the more productive its workers and, generally, the higher its real wages and salaries. Thus positive net investment tends to cause future increases in a nation's standard of living.

As the capital stock increases, worker productivity increases and the economy will experience a higher rate of growth. Because a larger capital stock results in a larger amount of depreciation, in the long run any given rate of investment per worker will just offset the depreciation of the steady-state capital stock. Thus, in the long run an increase in the level of investment increases the level of a country's standard of living, but may not increase the rate at which a country's standard of living grows.

Figure 5 illustrates the relationship between investment rates and productivity growth in manufacturing. Countries that had high net investment rates during the period from 1960 to 1989 also experienced large increases in productivity (output per hour worked).

Figure 5
Investment & Manufacturing Productivity
Selected Countries, 1960-89



Source: Data in Appendix II

D. Trends in National Investment

The U.S. investment rate has long been lower than that of other countries. For instance, over the past 30 years, the Japanese investment rate has averaged over two and one-half times that of the United States, while that of Germany has been more than two-thirds greater. While the gap has narrowed in the past decade, the rate of investment in the United States remains significantly below that of other countries. Other countries have also experienced declining net investment rates in the 1980s. Figure 6 indicates that net investment as a percentage of GDP has been lower in the 1980s than in the 1970s or late 1960s for each of the United States, the United Kingdom, Japan, and Germany. Table 10 also documents this trend.

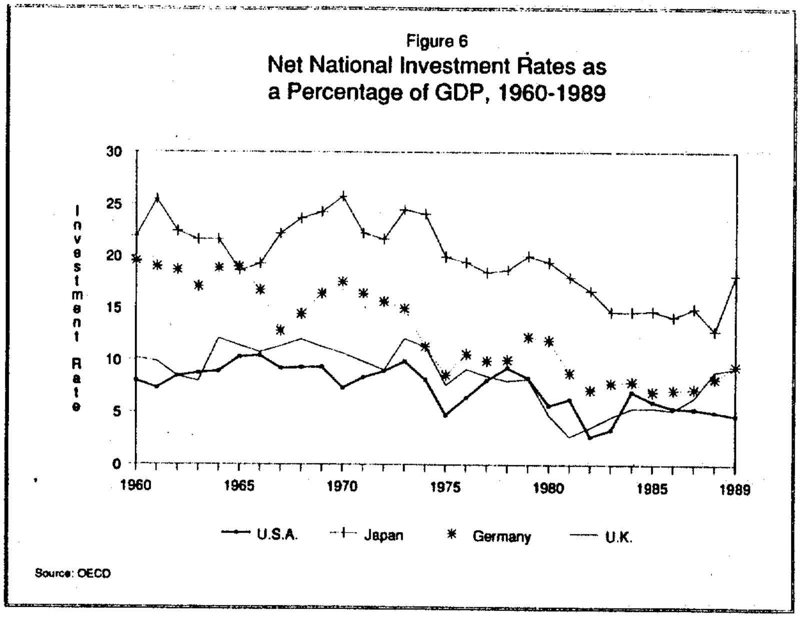
Table 10.—Net Investment as Percentage of GDP in Selected Countries, Decadal Averages, 1960s–1980s

Country	1960s	1970s	1980s	Average 1960–1989
United States	9.0	7.9	5.2	7.4
Japan	22.1	21.5	15.8	19.8
Germany	17.2	12.7	8.3	12.7

Table 10.—Net Investment as Percentage of GDP in Selected Countries, Decadal Averages, 1960s–1980s—Continued

Country	1960s	1970s	1980s	Average 1960–1989
United Kingdom.............	10.5	9.4	5.6	8.5

Source: OECD, *National Accounts, 1960–1989,* 1991.



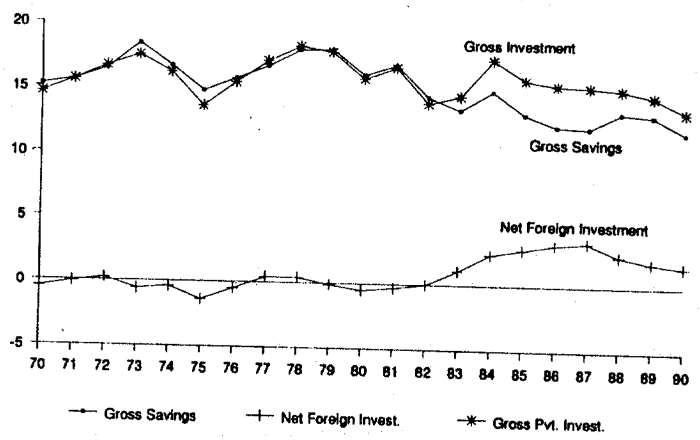
E. Trends in Saving and Foreign Investment

Sources of investment funds

Investment can either be financed by national saving or by foreign borrowing (saving by foreigners). Saving involves a tradeoff between consumption today and consumption tomorrow. A basic accounting identity of the national income and product accounts states that national investment must equal the sum of private saving, government saving, and net foreign borrowing.

The experience of the 1980s, when investment in the United States greatly exceeded national saving, demonstrates how important net foreign borrowing has become (see Figure 7). When demand for investment funds in the United States outstrips the supply of national savings, interest rates rise in response. Increases in interest rates attract foreign capital to the United States, and the excess of domestic investment over national saving is financed by foreigners' saving.

Figure 7
Saving and Investment as a % of GNP
1970-1990



If capital is not perfectly mobile between nations, then the level of national saving can affect the level of investment. When the domestic saving rate is low, so is the domestic investment rate. Historically, there has been a strong positive correlation between a country's rate of investment and its rate of saving.[102] This relationship is illustrated for a number of countries in Figure 8. Although this relationship has become weaker over time,[103] it is still true that countries with high saving rates also generally have high investment rates.

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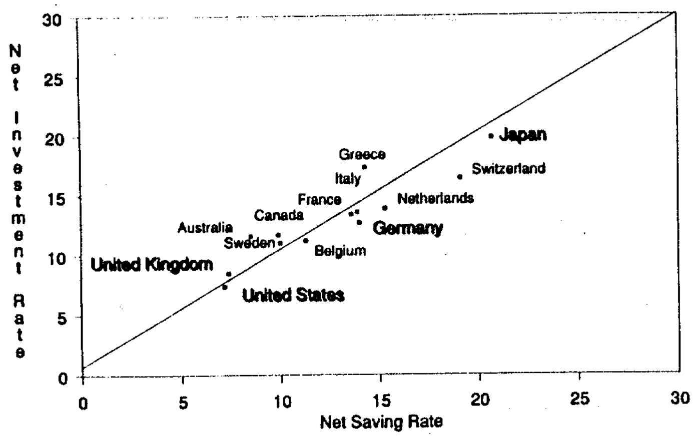
[102] See, for instance, Martin Feldstein and Charles Horioka, "Domestic Saving and International Capital Flows," *Economic Journal*, vol. 90 (June 1980) pp. 314-29.

[103] See Martin Feldstein and Phillippe Bacchetta, "National Saving and International Investment," in B. Douglas Bernheim and John B. Shoven (eds.), *National Saving and Economic Performance*, (Chicago: University of Chicago Press), 1991, and Jeffrey A. Frankel, "Quantifying International Capital Mobility in the 1980s," in B. Douglas Bernheim and John B. Shoven (eds.), *National Saving and Economic Performance*, (Chicago: University of Chicago Press), 1991.

Figure 8
Net Saving and Net Investment Rates
Selected Countries, Averages 1960-89



Source: OECD

If capital is mobile (that is, if foreigners can invest in the United States and U.S. persons can invest abroad at low cost and without much added risk), then investment in a given country will not decline as much when that country's saving rate falls. Instead, investment will be financed by foreigners, either by direct foreign investment in the United States or by foreign portfolio investment in the United States. When domestic saving rates are low, foreign financing of domestic investment results in a higher rate of investment than would have been possible if investment were financed by domestic saving alone.

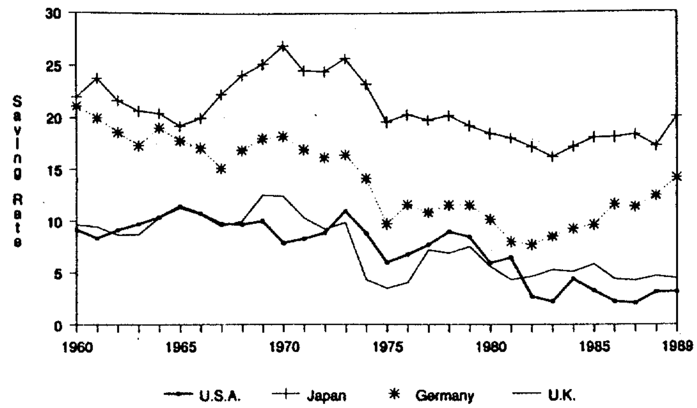
Trends in national saving

National saving is generally divided into private saving and public saving. Private saving is comprised of household or personal saving and business saving. Households save by not spending all of their disposable (i.e., after-tax) income. Businesses save by retaining some of their earnings. Public saving reflects the extent to which national, State, and local governments run budget surpluses.

The United States' national saving rate is low when compared to that of other nations. This comparison is shown in Table 11 for total national saving. Figure 9 also highlights the saving rate of the United States, the United Kingdom, Germany, and Japan from 1960-1989. As Table 11 indicates, the net saving rate of the United States during the 1980s was comparable to that in the United

Kingdom and much below the saving rates of Germany and Japan.[104]

Figure 9
Net National Saving Rates as a Percentage of GDP, 1960-1989



Source: OECD

Table 11.—Savings as a Percentage of GDP in Selected Countries, Decadal Averages, 1960s–1980s

Country	1960s	1970s	1980s	Average 1960–1989
United States	9.8	8.2	3.6	7.2
Japan	21.9	22.3	17.8	20.7
Germany	18.0	13.6	10.2	14.0
United Kingdom	10.0	7.5	4.8	7.4

Source: OECD, *National Accounts, 1960–1989,* 1991.

Generally, saving rates of all nations have declined from the rates of the late 1960s. In percentage terms, the decline in the na-

[104] The data on international saving rates in Table 11 are not directly comparable, because such data are not always compiled consistently across nations. While the source of the international comparisons draws on data from the OECD, which attempts to provide data on an internationally comparable basis, the data are not fully comparable. For example, in computing household saving rates, the definition of the household sector is not identical across all countries. For the United States, the United Kingdom, and Germany, but not Japan, private nonprofit institutions are included in the household sector. See, Andrew Dean, Martine Durand, John Fallon, and Peter Hoeller, "Saving Trends and Behavior in OECD Countries," OECD, Economics and Statistics Department Working Paper, No. 67, June 1989.

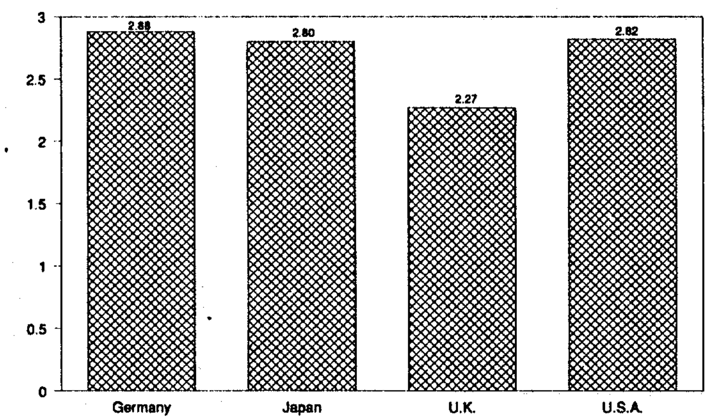
tional saving rate of the United States between 1960 and 1989 is greater than the decline in the saving rates of Japan and Germany.

F. Trends in Research and Development Expenditures

If they result in technological innovations, research and development (R&D) expenditures can contribute to economic growth by increasing productivity. Concern has been expressed that the United States spends too little on R&D relative to other countries.

Figure 10 charts R&D expenditures as a percentage of GDP in 1989.[105] As the figure reveals, the share of GDP devoted to R&D is actually quite similar across the United States (2.82 percent), the United Kingdom (2.27 percent), Germany (2.88 percent) and Japan (2.8 percent). This evidence does not support the assertion that the United States is disadvantaged, relative to these countries, by low R&D spending.

Figure 10
R&D Expenditure as a
Percentage of GDP (1989)



Source: OECD Main Science and Technology Indicators

[105] The OECD data in this figure have a number of limitations, implying that the comparison between the countries is suggestive rather than conclusive. For example, the data for Germany refer only to West Germany and the data for Japan (which are taken from the OECD's adjusted series) overstate research labor costs for research not performed in the higher education sector. Furthermore, the data for the United States exclude the expenditures of state and local governments, use depreciation in place of gross capital expenditure for business enterprises, include only current (not capital) expenditures for the private nonprofit sector and include only capital (not current) expenditures from universities' general funds.

G. Tax Policy and Investment

1. Investment and the cost of capital

The cost of capital is the pretax real return that a firm must earn, gross of depreciation, to satisfy the demands of its shareholders and bondholders and to pay corporate taxes. The cost of capital measures the opportunity cost of funds, and therefore is the rate at which firms discount the future returns of an investment in order to determine whether the investment is worthwhile. If new projects do not earn a return at least as great as the cost of capital, the capital markets will penalize managers for wasting capital resources. When the cost of capital is low, more investments will be determined to be profitable. Thus, the lower the cost of capital, the higher the level of investment. Since, in theory, firms invest in all projects that yield a rate of return equal to or greater than the cost of capital, the cost of capital also measures the return on the marginal investment.

2. Comparisons of the cost of capital across countries

One common explanation for the higher levels of investment in other countries relative to that in the United States is that the United States has a higher cost of capital. However, comparing the cost of capital in different countries can be quite difficult. Because firms finance investments with both equity and debt, the cost of capital cannot be measured simply by the interest rate. Similarly, a simple comparison of two or more countries' tax systems is insufficient to determine the cost of capital applicable to the countries in question.

Several analysts have attempted to measure properly the cost of capital in a number of countries, although most of the recent effort has focused on comparisons between the United States and Japan. The conclusions have been mixed. A recent study compares the cost of capital in the United States with that of Germany, Japan, and the United Kingdom.[106]

This study found that the cost of capital in the United States and the United Kingdom is substantially higher than the cost of capital in Japan and Germany. However, another study [107] suggested that, when properly measured, the cost of capital in Japan in the 1980s may have been similar to that in the United States. Finally, a third study [108] concluded that although the cost of capital in the 1980s was cheaper in Japan than in the United States, currently the cost of capital in Japan is approximately as high as in the United States.

[106] Robert McCauley and Steven Zimmer, "Explanations for International Differences in the Cost of Capital," *Federal Reserve Bank of New York Quarterly Review*, Summer 1989.
[107] Albert Ando and Alan J. Auerbach, "The Cost of Capital in Japan: Recent Evidence and Further Results," *Journal of the Japanese and International Economies*, 3, December 1990.
[108] Jeffrey A. Frankel, "The Japanese Cost of Finance," *Financial Management*, 20 spring, 1991, p. 123.

3. Problems in measuring and comparing the cost of capital across countries [109]

The measurement problems encountered in calculating comparative costs of capital or effective tax rates are large. This section briefly summarizes some of the empirical and conceptual difficulties that can lead one to question the results of such studies.

Because investment is financed by a combination of equity and debt, the cost of capital must measure the required return to each. Measuring the cost of debt requires making assumptions about the underlying riskiness of the assets and about investors' expectations of inflation. Many studies assume that the riskiness of corporate bonds is identical across countries. This need not be the case. For example, to the extent corporate leverage differs across countries, perceived risk of corporate debt may differ. Similarly, some studies assume that the inflation rate that acctually prevailed is what investors anticipated at the time they purchased the bonds. To the extent that this assumption is incorrect, the expected return on securities is mismeasured. It also may not be appropriate to assume identical term structures of debt across countries.

Measuring equity returns is even more difficult than measuring returns to debt. A common measure of the required return to equity uses the ratio of stock price to earnings. However, there are theoretical reasons to doubt that price-earnings ratios correspond to investors' current required rates of return. This concern may be particularly acute in the case of measuring the required return on equity in Japan, given the unusual performance of the Japanese stock market in the 1980s.

Furthermore, accounting earnings do not always properly measure true earnings. First, accounting earnings do not include accrued but unrealized capital gains. This is a significant issue in measuring the Japanese cost of capital, because Japanese firms hold a significant amount of land, which experienced rapid increases in value during the 1980s. Ando and Auerbach [110] found that when the Japanese cost of capital is calculated for only the non-land component of firms (subtracting the value of a firm's land holdings from the firm's value, and then recomputing the price-earnings ratio), there is very little observed difference between the United States' and the Japanese cost of capital, especially in recent years.

Second, countries have different accounting practices. Comparing Japan and the United States, for instance, requires adjusting for the prevalence in Japan of reporting unconsolidated earnings for related firms (which understates earnings), the presence of reserve accounts for future severance pay to workers, and differences in accounting for depreciation. All three of the above differences would tend to understate true earnings in Japan. Corrections for these differences reduce the price-earnings differential by about half.

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[109] For detailed criticisms of the methodology employed in cost of capital studies see, James M. Poterba, "Comparing the Cost of Capital in the United States and Japan: A Survey of Methods," *Federal Reserve Bank of New York Quarterly Review*, Winter 1991. Also, see Frankel, "The Japanese Cost of Finance."

[110] Ando and Auerbach, "The Cost of Capital in Japan: Recent Evidence and Further Results."

Finally, analysts of financial markets stress that risk premia are likely to vary through time, making it difficult to use historical data to assess risk-adjusted equity returns, yet many studies of the opportunity cost of equity rely on historical data.

4. Possible explanations for differences in the cost of capital across countries

Even after accounting for these measurement issues, some analysts find that the costs of capital do vary across countries. Several explanations for the difference between the cost of capital in the United States and that in other countries have been explored. In particular, analysts have focused on the reasons for the differences between measurements of Japanese and U.S. capital costs.

Tax-related reasons for differences in international costs of capital

Taxation affects the cost of capital because it creates a wedge between the returns investors receive and the actual returns on investments. The larger is the tax wedge, the higher is the required return on investments. Taxation of capital income in the United States and abroad could differ because of differences in debt-equity ratios, depreciation allowances, and other investment incentives, corporate tax rates, or personal tax rates.

Because corporations can deduct their interest payments, both the Japanese and the United States' tax systems provide a corporate tax advantage to debt financing over equity financing. Since Japanese investments generally have a higher share of debt financing than United States investments, it is possible that this difference in financing could explain the difference between the costs of capital in the two countries. However, empirically, the value of the interest deduction can explain at most a small fraction of the differences in the costs of capital.

Effective tax rate studies

One method used to evaluate the effects of corporate and personal taxes on the cost of capital is the calculation of an effective tax rate. This approach was pioneered by King and Fullerton.[111] They attempted to consistently measure the wedge imposed by the tax system between the pre-tax rate of return on a corporate investment and the after-tax rate of return that can be paid to the investors who financed the project. This approach does not measure the cost of capital per se, but rather provides the analyst with a measure of that portion of the cost of capital that must be paid over to the government.

The King-Fullerton approach analyzes the tax system of each country to determine the marginal effective tax rates applicable to a variety of investment projects. The calculation of the tax wedge depends upon the system of corporate taxation, the personal tax code, and the existence of wealth taxes. Of course, as discussed above, the burden of a tax system depends in part on other eco-

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[111] Mervyn A. King and Don Fullerton, *The Taxation of Income from Capital: A Comparative Study of the United States, the United Kingdom, Sweden, and West Germany* (Chicago: The University of Chicago Press), 1984.

nomic variables. For example, deductions for interest expense are more valuable when inflation is high than when inflation is low. Consequently, the King-Fullerton approach requires assumptions about inflation rates and interest rates.[112]

Several analysts subsequently have used the King-Fullerton methodology. Bernheim and Shoven [113] used the King-Fullerton approach to calculate the cost of capital and the tax wedge on capital in the United States, Japan, Germany and the United Kingdom. The study sought to determine whether differences among countries' cost of capital are the result of differences in taxation or credit conditions within the countries. For the 1970s, Germany is calculated to have had the highest cost of capital and the highest tax wedge for equity capital. The United States' tax wedge was about 80 percent of Germany's and was the second largest of the four countries. Both Japan and the United Kingdom had a negative cost of capital (capital investment effectively was subsidized). For the 1980s (through 1983), the United States has the highest cost of capital and the second largest tax wedge (about 94 percent of Germany's). Bernheim and Shoven conclude that while "under prevailing tax systems the differences in the cost of capital between countries are largely attributable to differences in domestic credit market conditions, rather than to taxes",[114] structural changes in the United States' tax system could have an effect on the cost of capital relative to other countries.

Shoven and Tachibanaki [115] use the King-Fullerton methodology to calculate the effective tax rate on capital in Japan. The effective marginal tax rate on capital is low in comparison to the United States and Germany because of two factors. First, low tax rates on dividend and interest income offset high statutory corporate rates. Second, the heavy use of debt finance reduces the weighted-average cost of capital. (To the extent that debt-equity ratios have converged to those in the United States since the period covered by this paper, financing is less of a reason for differences in cost of capital.) The paper concludes that the low rate of effective tax for capital income in Japan is the result of the presence of savings vehicles with tax-free treatment, source withholding of tax on dividends and interest (and the option to forego taxation at personal tax rates) and the lack of capital gains taxation on securities.

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[112] Generally, the King-Fullerton approach is restricted to domestic savings and investment. International capital flows may be important in a number of industries, but the King-Fullerton approach does not try to tackle the complexities of multiple bilateral tax treaties and the accounting behavior of multinational enterprises. See, John Norregaard and Jeffrey Owens, "Taxing Profits in a Global Economy," *Tax Notes International*, March 9, 1992. Norregaard and Owens extend the King-Fullerton approach to calculate effective tax rates on foreign investments, both in-bound and out-bound. The Norregaard and Owens study does not account for personal taxes however. See also, A. Lans Bovenberg et al., "Tax Incentives and International Capital Flows: The Case of the United States and Japan," in Assaf Razin and Joel Slemrod (eds), *Taxation in the Global Economy* (Chicago: University of Chicago Press), 1990.

[113] B. Douglas Bernheim and John Shoven, "Taxation and the Cost of Capital: An International Comparison," in Charls E. Walker and Mark A. Bloomfield (eds.), *The Consumption Tax: A Better Alternative?*, 1987.

[114] Bernheim and Shoven, "Taxation and the Cost of Capital: An International Comparison," p. 62

[115] John B. Shoven and Toshiaki Tachibanaki, "The Taxation of Income from Capital in Japan," in John B. Shoven (ed.) *Government Policy Towards Industry in the United States and Japan*, 1988.

Although analysts have found differences in the effective tax rates across countries, in general they have found that, given a country's required return on saving, the tax wedges do not differ enough to explain the difference in the cost of capital, although this does not imply that changing taxes could not affect the cost of capital.[116] Rather, most analysts find that the differences in international costs of capital can be attributed largely to differences in credit market conditions—i.e., in the return required by investors.

Differences in saving rates

One explanation for the relatively high cost of capital in the United States is that the U.S. saving rate has been below that of other countries. This explanation requires the existence of barriers to international capital mobility (for example, if foreigners investing in the United States incur more risk or costs than they would investing in their own country). If capital were perfectly mobile internationally, then differences in saving rates could not explain differences in capital costs. Because the cost of capital measures the rate of return on the marginal investment, a higher cost of capital in the United States than elsewhere would indicate that the marginal investment in the United States yields a higher return than investments elsewhere. If capital were perfectly mobile, then foreign savings would flow into the United States to take advantage of the relatively high-yielding investments, and international costs of capital would be equalized.

However, capital may not be perfectly mobile. As was discussed above, empirically there is a strong positive relationship between countries' investment and saving rates. This has been interpreted by some as evidence of imperfect capital mobility, although other explanations are also possible.[117] If capital is not perfectly mobile, then countries with higher saving rates will have lower capital costs, and countries with lower saving rates will have higher capital costs.

It is widely believed that international capital mobility increased substantially in the 1980s, and there is evidence that the relationship between domestic saving and investment rates has become less strong. If the differences in the cost of capital between the United States and other countries are indeed due to differences in saving rates, then the increased capital mobility of the 1980s should have resulted in a convergence of international costs of capital. As noted above, once measurement problems have been accounted for, several analysts do find convergence between at least the United States' and the Japanese cost of capital during the 1980s.

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[116] See Robert McCauley and Steven Zimmer, "Explanations for International Differences in the Cost of Capital."

[117] For instance, Lawrence Summers argues that government policies are often aimed at minimizing current account deficits. This has the effect of minimizing international capital flows, thereby creating a correlation between national saving and investment. Other possible explanations for this correlation focus on underlying factors, such as population growth or changes in wealth, which may affect both saving and investment. See Lawrence Summers, "Tax Policy and International Competitiveness," in *International Aspects of Fiscal Policies*, University of Chicago Press, 1988.

Institutional differences

Other analysts suggest that financial intermediation practices may explain some of the differences in the cost of capital. For instance, the Japanese industrial structure based on the *keiretsu*, or industrial group, may help foster a lower cost of capital. The *keiretsu*, through interlocking ownership, coordinates the activities of member firms which include large banks and other financial intermediaries.[118] This structure may more easily facilitate the flow of information about investment projects, resulting in less perceived risk, greater liquidity, and a lower cost of capital for member firms.[119] The interlocking ownership with banks also may reduce the cost of capital by reducing the costs involved when a member firm faces financial distress.[120] Similarly, the more interventionist government policies in Germany and Japan toward firms in financial distress may be important in lowering the required rate of return on debt and equity.[121]

H. Tax Policy and Saving

Tax policy and private saving

Tax policy would be expected to affect private saving by affecting the after-tax return to saving. Taxing the return to saving reduces the after-tax return. By reducing taxes on the returns to saving, the after-tax return is increased. This means the price of future consumption decreases in terms of present consumption, because the taxpayer has to forego fewer dollars today to consume a dollar in the future.

This price decrease can affect saving in two ways. If future consumption is cheaper compared to current consumption, taxpayers may choose to substitute future consumption for current consumption. This effect increases saving. When the price of future consumption falls, though, the amount of saving necessary to achieve any particular level of income in the future decreases. For example, a taxpayer in the 28-percent marginal tax bracket may set aside $1,300 today to help defray tuition expenses of a child 15 years from now. If the taxpayer's investment earns eight percent annually and those earnings are taxed annually at a 28-percent tax rate, in 15 years the investment will be worth $3,000. If the taxpayer could invest tax-free, an investment of only $946 today would be worth $3,000 in 15 years (assuming the same eight-percent return). The tax benefit may decrease saving because it permits the taxpay-

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[118] There are six primary *keiretsu*, Mitsui, Mitsubishi, Sumitomo, Fuyo, Sanwa, and Ikkan, as well as smaller groups generally not based upon interlocking ownership with a large bank or "independent" firms. For example, the Sony group has 87 subsidiaries, and Sony owns a large portion of the shares of these affiliates. The six primary *keiretsu* account for one-seventh of the sales in the Japanese economy, approximately one-seventh of the assets, more than a tenth of the profits, and more than four percent of employment. For more information on Japanese industrial structure see, Ito, *The Japanese Economy*.

[119] Takeo Hoshi, Anil Kashyup, and David Scharfstein, "Corporate Structure, Liquidity, and Investment: Evidence from Japanese Industrial Groups," *Quarterly Journal of Economics*, 106, February 1991.

[120] For a specific example, see James Abegglen and O. Stalk, *Kaisha, the Japanese Corporation* (New York: Basic Books), 1985. For a more general analysis, see Takeo Hoshi, Anil Kashyup, and David Scharfstein, "The Role of Banks in Reducing the Costs of Financial Distress in Japan," *Journal of Financial Economics*, 1991.

[121] See McCauley and Zimmer "Explanations for International Differences in the Cost of Capital".

er to save less in order to accumulate the same amount of money in the future.

Substantial disagreement exists among economists as to the effect on saving of increases in the net return to saving. Some theoretical studies have argued that one should expect substantial increases in saving from increases in the net return.[122] Other studies have argued that large behavioral responses to changes in the after-tax return need not occur.[123] Empirical investigation of the responsiveness of personal saving to after-tax returns provides no conclusive evidence. Some find personal saving responds strongly to increases in the net return,[124] while others find little or a negative response.[125]

Deficit reduction and national saving

National saving is equal to the sum of private and public saving. When the government borrows, public saving falls. If this decline in public saving is not met by an increase in private saving of the same magnitude, national saving also falls. Thus, one way to increase national saving would be to decrease public dissaving by reducing the deficit. If taxes were increased to reduce the deficit, it is likely that part of the tax increase would come from funds that individuals would otherwise have saved, but part would come from funds that individuals would have otherwise consumed. The net increase in saving would be equal to the decrease in government dissaving less the decrease in private saving.

The disadvantage of increasing national saving by increasing taxes is that most taxes distort behavior and thereby introduce inefficiency (in terms of the allocations of resources) into the economy. The inefficiency increases as tax rates increase. Thus, any policies that could increase national saving without increasing marginal tax rates would be more efficient than policies that increase saving while increasing marginal tax rates.

VATs and saving

As discussed above, a low saving rate can contribute to a high cost of capital. Some analysts have noted that most of the United States' major trading partners have a value-added tax, or other consumption tax, and have suggested that this fact may help explain differences in national saving rates. In fact, the United States has long had other types on consumption taxes (see Table 1 for historical trends in VATs and other taxes on goods and services in the United States, the United Kingdom, Germany, and Japan).

Consumption taxes and saving

The most frequently cited benefit of a consumption tax is that, unlike an income tax, it does not distort saving behavior. It is often

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[122] See, Lawrence H. Summers, "Capital Taxation and Accumulation in a Life Cycle Growth Model," *American Economic Review*, 71 (September 1981).

[123] See, David A. Starrett, "Effects of Taxes on Saving," in Henry J. Aaron, Harvey Galper, and Joseph A. Pechman (eds.), *Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax* (Washington: Brookings Institution), 1988.

[124] See, Michael Boskin, "Taxation, Saving, and the Rate of Interest," *Journal of Political Economy*, April 1978, 86.

[125] See, George von Furstenberg, "Saving," in Henry J. Aaron and Joseph A. Pechman (eds.), *How Taxes Affect Economic Behavior* (Washington Brookings Institution), 1981.

argued that current U.S. saving rates are relatively low compared to earlier years and compared to other countries, and the current low rate of saving is related to income taxation.[126] Imposition of a broad-based consumption tax alone is not perceived as increasing saving; it is the replacement (or reduction in the rate of growth) of income taxation by consumption taxation that could promote savings.[127] In general, replacement of an income tax by a consumption tax should increase saving since there is only a substitution effect—the income effects of eliminating the income tax and imposing the consumption tax offset each other.

VAT border tax adjustments and international trade

It is sometimes argued that a VAT (based on the destination principle that imposes taxes on imports and provides rebates on exports) would help the U.S. balance of trade.[128] However, economists have long known that there is no direct effect of a VAT on the volume of exports or imports.[129] In fact, the imposition of a tax on imports—equal to that imposed on goods produced domestically—and a similar tax rebate on exports is intended to maintain a level playing field between domestic and foreign producers in their competition for business in both domestic and foreign markets.

To help understand why border tax adjustments do not distort or subsidize international trade, consider the following example. Suppose a certain good produced both overseas and domestically, such as wheat, sells at $4.00 per bushel. With the enactment of a broad-based U.S. VAT at a rate of 10 percent, the price of wheat in the U.S. would increase by 10 percent to $4.40 (under the assumption that the tax is passed forward to consumers) for wheat produced domestically as well as overseas since both are subject to the tax—the domestically produced wheat being subject to the normal value-added tax and the wheat produced overseas subject to the import tax at the same rate as the VAT. Thus, even though imports are subject to tax, United States buyers' choice between imported and domestically produced wheat is not altered.

Similarly, foreign consumers' choice between goods produced in the U.S. and goods produced in their own country is not altered even though U.S.-produced goods are provided VAT rebates when

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[126] For a discussion of the determinants of rate of saving, see Joint Committee on Taxation, *Present Law, Proposals, and Issues Relating to Individual Retirement Arrangements and Other Savings Incentives* (JCS-11-90), March 26, 1990; and Joint Committee on Taxation, *Description and Analysis of S. 612 (Savings and Investment Incentive Act of 1991)* (JCS-5-91), May 14, 1991.

[127] To the extent that revenues are dedicated to deficit reduction, and not to new government spending, *any* tax increase reduces the Federal deficit and thereby directly increases net U.S. saving.

[128] Some also argue that the competitiveness of United States owned firms would be enhanced by the imposition of a value-added tax, if the VAT replaced part or all of the corporate income tax. This issue is discussed in detail in Joint Committee on Taxation, *Factors Affecting the International Competitiveness of the United States.*

[129] See, for example, Martin Feldstein and Paul Krugman, "International Trade Effects of Value-Added Taxation," in Assaf Razin and Joel Slemrod (eds.) *Taxation in the Global Economy*, Chicago: University of Chicago Press, 1990 ("A VAT is not, contrary to popular belief, a tariff-cum-export subsidy. In fact, a VAT is no more inherently procompetitive trade policy than a universal sales tax. . . . The point that VATs do not inherently affect international trade flows has been well recognized in the international tax literature." (p. 263)); and Charles E. McLure, *The Value-Added Tax: Key to Deficit Reduction?*, Washington, D.C.: American Enterprise Institute, 1987 ("Although this patently absurd argument is heard less frequently now than in earlier episodes of the continuing debate of the pros and cons of the VAT, it is encountered often enough that it deserves brief discussion." (p. 56)).

exported. Wheat produced outside of the U.S. and sold to foreign consumers remains at its world price of $4.00 and wheat produced inside the U.S. remains at $4.00 since no U.S. VAT is imposed on the exported wheat.

From the preceding discussion it might seem that a value-added tax without border tax adjustments (an origin principle VAT) could disadvantage domestic producers relative to foreign producers in overseas markets. However, border tax adjustments may not be the only mechanism operating to maintain neutrality. Other self-executing adjustments by the markets, such as reductions in wage rates or in the value of the domestic currency, could wholly offset any potentially detrimental trade effects of origin-based taxation on exported goods.

Continuing the above example, if the world price of wheat is $4.00, the burden of the tax cannot be shifted forward to consumers in the form of higher prices. If the markets are competitive, the seller cannot both reduce price and remain in business. However, labor may bear the burden of the tax through reduced wages. This allows the seller to remain in business with a price of $4.00. Therefore, there is no effect on foreign trade. Alternatively, the domestic currency may depreciate so that although the *nominal* price has increased to $4.40, the price paid for domestic wheat by foreign consumers in their currency is unchanged from its before-tax level.[130]

[130] See Martin Feldstein and Paul Krugman, "International Trade Effects of Value-Added Taxation," in Assaf Razin and Joel Slemrod, eds. *Taxation in the Global Economy* Chicago: University of Chicago Press, p. 270.

APPENDIX:

Top Marginal Corporate and Individual Income Tax Rates Imposed by U.S. States

States	Corporate tax rate (Percent)	Individual tax rate (Percent)
Alabama	5.0	5.0
Alaska	9.4	N/A
Arizona	9.3	7.0
Arkansas	6.5	7.0
California	9.3	11.0
Colorado	5.2	5.0
Connecticut	11.5	1.5
Delaware	8.7	7.7
District of Columbia	10.0	9.5
Florida	5.5	N/A
Georgia	6.0	6.0
Hawaii	6.4	10.0
Idaho	8.0	8.2
Illinois	4.8	3.0
Indiana	3.4	3.4
Iowa	12.0	9.98
Kansas	4.5	5.15
Kentucky	8.25	6.0
Louisiana	8.0	6.0
Maine	8.93	9.89
Maryland	7.0	5.0
Massachusetts	9.5	6.25
Michigan	2.35	4.6
Minnesota	9.8	8.5
Mississippi	5.0	5.0
Missouri	6.5	6.0
Montana	6.75	11.0
Nebraska	7.81	6.92
Nevada	N/A	N/A
New Hampshire	8.0	5.0
New Jersey	9.375	7.0
New Mexico	7.6	8.5
New York	9.0	7.875
North Carolina	7.75	7.75
North Dakota	10.5	12.0
Ohio	8.9	6.9
Oklahoma	6.0	7.0
Oregon	6.6	9.0

Top Marginal Corporate and Individual Income Tax Rates Imposed by U.S. States—Continued

States	Corporate tax rate (Percent)	Individual tax rate (Percent)
Pennsylvania	12.25	2.8
Rhode Island	9.0	8.525
South Carolina	5.0	7.0
South Dakota	N/A	N/A
Tennessee	6.0	6.0
Texas	N/A	N/A
Utah	5.0	7.2
Vermont	8.25	8.68
Virginia	6.0	5.75
Washington	N/A	N/A
West Virginia	9.15	6.5
Wisconsin	7.9	6.93
Wyoming	N/A	N/A

Source: Prentice Hall, *All States Tax Guide*, 1992. Corporate tax rates are from para. 222 (as of 10/29/91) and generally ignore surtax rates; individual tax rates from para. 228 (as of 10/29/91). "N/A" signifies that the State does not impose a corporate or individual income tax.

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