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1 Taxing International Income: An Analysis of the U.S. System and Its Economic Premises

Hugh J. Ault and David F. Bradford

International tax policy has been something of a stepchild in the tax legislative process. The international aspects of domestic tax changes are often considered only late in the day and without full examination. As a result, the tax system has developed without much overall attention to international issues. This paper is an attempt to step back and look at the system that has evolved from this somewhat haphazard process.

We will describe in general terms the basic U.S. legal rules that govern the taxation of international transactions and explore the economic policies or principles they reflect. Particular attention will be paid to the changes made by the Tax Reform Act of 1986, but it is impossible to understand these changes without placing them in the context of the general taxing system applicable to international transactions.[1] The first part (secs. 1.1–1.4) contains a description of the legal rules, and the second part (secs. 1.5–1.9) undertakes an economic analysis of the system. We have tried to make both parts intelligible to readers with either legal or economic training.

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1.1 Basic Jurisdictional Principles

1.1.1 Domiciliary and Source Jurisdiction

U.S. persons are subject to tax on a worldwide basis, that is, regardless of the geographic "source" of their income. Traditionally, this principle has been referred to as "domiciliary"- or "residence"-based jurisdiction since it is based on the personal connection of the taxpayer to the taxing jurisdiction. In contrast, foreign persons are subject to tax only on income from "U.S. sources" and then only on certain categories of income. Individuals are considered U.S. persons if they are citizens of the United States (wherever resident) or if they reside there.[2] Corporations are considered U.S. persons if they are incorporated in the United States. The test is purely formal, and residence of the shareholders, place of management of the corporation, place of business, and so forth are all irrelevant. "Foreign persons" are all those not classified as U.S. persons.

As a result of the rules outlined above, a foreign-incorporated corporation is treated as a foreign person even if its shareholders are all U.S. persons. The foreign corporation is taxed by the United States only on its U.S.-source income, and the U.S. shareholder is taxed only when profits are distributed as a dividend. Thus, the U.S. tax on foreign income of a foreign subsidiary is "deferred" until distribution to the U.S. shareholder. A special set of provisions introduced in 1962 and modified in 1986, the so-called Subpart F rules, limits the ability to defer U.S. tax on the foreign income of a U.S.-controlled foreign corporation in certain circumstances.[3]

This pattern of taxing rules depends crucially on identifying the source of income. A complex series of somewhat arbitrary rules is used to establish source. For example, income from the sale of goods is sometimes sourced in the country in which the legal title to the goods formally passes from the seller to the buyer.

1.1.2 Overlapping Tax Jurisdiction and Double Taxation

Where several countries impose both domiciliary- and source-based taxation systems, the same item of income may be taxed more than once. For example, if a U.S. corporation has a branch in Germany, both the United States (as the domiciliary country) and Germany (as the country of source) will in principle assert the right to tax the branch income. It has been the long-standing policy of the United States to deal with double taxation by allowing U.S. taxpayers to credit foreign income taxes imposed on foreign-source income against the otherwise applicable U.S. tax liability. The United States as domiciliary jurisdiction cedes the primary taxing right to the country of source. Nevertheless, the United States retains the secondary right to tax the foreign income to the extent that the foreign rate is lower than the U.S. rate. Thus, if a U.S. taxpayer realizes $100 of foreign-source income subject to a 50 percent U.S. rate and a 30 percent

foreign rate, the entire foreign tax of $30 could be credited and a residual U.S. tax of $20 would be collected on the income. If the foreign rate were 60 percent, $50 of the $60 of foreign taxes would be creditable. Thus, subject to a number of qualifications discussed below,[4] the amount of foreign taxes currently creditable is limited to the U.S. tax on the foreign income. The credit cannot offset U.S. taxes on U.S.-source income. If the U.S. taxpayer pays "excess" foreign taxes—that is, foreign taxes in excess of the current U.S. tax on the foreign-source income—the excess taxes can be carried back two years and forward five years, but they can be used in those years only to the extent that there is "excess limitation" available, that is, to the extent that foreign taxes on foreign income in those years were less than the U.S. tax. In effect, the carryforward and carryback rules allow the U.S. taxpayer to average foreign taxes over time, subject to the overall limitation that the total of foreign taxes paid in the eight-year period does not exceed the U.S. tax on the foreign-source income.

The foreign tax credit is also available for foreign income taxes paid by foreign corporate subsidiaries when dividends are paid to U.S. corporate shareholders, the so-called deemed-paid credit.[5] Thus, if a foreign subsidiary earns $100 of foreign income, pays $30 of foreign taxes, and later distributes a dividend of $70 to its U.S. parent, the parent would include the $70 distribution in income, "gross up" its income by the $30 of foreign tax, and then be entitled to credit the foreign tax, subject to the general limitations discussed above, in the same way as if it had paid the foreign tax directly itself.

It should be emphasized that the credit is limited to foreign income taxes and is not available for other types of taxes. The determination of what constitutes an income tax is made under U.S. standards, and detailed regulations have been issued to provide the necessary definitions (Treasury Regulations, sec. 1.901-2). In general, the foreign tax must be imposed on net realized income and cannot be directly connected with any subsidy that the foreign government is providing the taxpayer. Special rules allow a credit for gross-basis withholding taxes.

1.1.3 Source of Income Rules

The source rules are central to the taxing jurisdiction asserted over both U.S. and foreign persons. For foreign persons (including U.S.-owned foreign subsidiaries), the source rules define the U.S. tax base. For U.S. persons, the source rules control the operation of the foreign tax credit since they define the situations in which the United States is willing to give double-tax relief.[6] In general, the same source rules apply in both situations, though there are some exceptions. The following are some of the most important of the source rules.

Sale of Property

As a general rule, the source of a gain from the purchase and sale of personal property is considered to be the residence of the seller. Gain on the

sale of inventory, however, is sourced where the legal title to the good passes. If the taxpayer manufactures and sells property, the income is allocated by a formula that in effect allocates half the income to the jurisdiction where the sale takes place and half to the place of manufacture.[7] Sales of financial assets are generally sourced at the residence of the seller, with an exception for the sale of stock in a foreign affiliate of a U.S. resident.

Interest

Interest received on an obligation issued by a U.S. resident (including the federal government) is U.S.-source income unless the payor has derived more than 80 percent of its income over the last three years from an active foreign trade or business. Interest paid by a foreign obligor in general has a foreign source, except that interest paid by a U.S. branch of a foreign corporation is U.S. source. In addition, in the case of a foreign corporation that has 50 percent or more U.S. shareholders,[8] a portion of the interest will be treated as U.S. source for foreign tax credit purposes if the foreign corporation itself has more than 10 percent of its income from U.S. sources.

Dividends

All dividends from U.S.-incorporated corporations are U.S.-source income regardless of the income composition of the corporation. Dividends paid by foreign corporations are in general foreign source unless the corporation has substantial U.S.-source business income, in which case the dividends are treated as partially from U.S. sources.[9] As in the case of interest, a special rule preserves the U.S. source (for foreign tax credit purposes) of dividends paid by a U.S.-owned foreign corporation that itself has U.S.-source income.

Rents and Royalties and Services

Rents and royalties from the leasing or licensing of tangible or intangible property have their source where the property is used.[10] If a transaction involving intangible property is treated as a sale for tax purposes, the royalty source rule applies to the extent that any payments are contingent on productivity. Services income has its source where the services are performed.

The source rules put a great deal of stress on the appropriate categorization of a particular item of income. For example, is the granting of a letter of credit the performance of a service, the extension of credit, or something else?[11]

1.1.4 Allocation of Deductions

The source rules apply only to establish the source of gross income. Gross income must be reduced by the appropriate deductions to arrive at net

foreign-source income and net U.S.-source income. In 1977, the Treasury Department issued a set of specific and quite detailed rules dealing with the allocation of deductions (Treasury Regulations, sec. 861-8). In general, the regulations look at the factual relation between particular costs and the appropriate income categories.

Special rules apply for interest and for research and development expenses. Interest is allocated on the theory that money is fungible and thus that interest expense should be allocated to all categories of gross income and apportioned on the basis of foreign and domestic assets.[12] Technical changes in the allocation rules made by the 1986 Act have required more interest expense of U.S. corporate groups to be allocated to foreign-source income, thus reducing the amount of net foreign-source income and hence the ability to use foreign tax credits.[13]

Research and development costs are allocated to broad product categories and then apportioned in part on the basis of where the research took place and in part on the basis of the relative amount of sales (i.e., U.S. or foreign) involved.[14]

1.1.5 Foreign-Exchange Rules

Before 1986, there were no specific statutory rules dealing with the calculation of foreign-exchange gain or loss or the appropriate method for translating into dollars the gain or loss realized in transactions denominated in foreign currency. As a result, taxpayers had considerable flexibility in the treatment of the foreign-currency aspects of international transactions. The 1986 Act established a fairly extensive set of rules governing these matters.

All U.S. taxpayers initially must establish a "functional currency" in which their income or loss must be calculated. The dollar is presumptively the functional currency, but the taxpayer can alternatively establish as its functional currency for its "qualified business units" the currency in which the unit's activities are conducted and in which its financial books and records are kept. Thus, for example, if a U.S. corporation has a branch in Switzerland and another branch in the United Kingdom, the dollar will be the functional currency of the U.S. head office, the Swiss franc the functional currency for the Swiss office, and the pound the functional currency for the British office. The Swiss and British offices will calculate their income initially in the appropriate functional currency, and this amount will then be translated into dollars at an appropriate exchange rate to determine the U.S. tax liability.[15] For foreign-tax-credit purposes, foreign taxes are translated at the rate in effect at the time the taxes are paid or accrued.[16]

The 1986 Act also provided rules for the treatment of gain or loss arising from certain transactions undertaken by the taxpayer in a "nonfunctional currency." Generally, direct dealings in nonfunctional currency, such as borrowing or lending, can result in foreign-currency gain or loss that is

treated as ordinary income and has its source in the taxpayer's country of residence. This means, for example, that, if a U.S. taxpayer with the dollar as its functional currency realizes a foreign-currency gain on the repayment of a foreign-currency loan, the gain will be taxable as ordinary income with a U.S. source. Regulations may be issued that will treat the gain as interest income in certain circumstances.[17] A special and complex set of rules applies to "hedging" transactions involving foreign currency whereby the taxpayer is seeking to reduce the risk of currency fluctuations.

1.2 Some Aspects of the Taxation of U.S. Business Operations Abroad

The following material discusses some more specific applications of the general principles outlined above. The focus is on the effect of the tax rules on patterns of U.S. foreign investment. Particular reference is made to the 1986 Act's changes and perceived responses to those changes.

1.2.1 Branch versus Foreign Subsidiary Operation

In General

If foreign operations are undertaken by a branch (i.e., without the interposition of a foreign subsidiary), any income generated will be subject to U.S. taxation currently (with a credit for any foreign income taxes paid), and any foreign losses will likewise be currently deductible.[18] If operations are carried out through a foreign subsidiary, the income will be subject to U.S. tax only when distributed[19] (with a deemed-paid credit for foreign taxes), and operating losses will not be currently deductible. Before the 1986 Act reduction in U.S. rates, these rules favored the organization of subsidiaries in those jurisdictions where the foreign effective rate was lower than the U.S. rate. The potential tax attributable to the difference between the U.S. rate and the foreign rate could be deferred until the income was distributed as a dividend. When U.S. rates were reduced, the advantages of deferral were obviously reduced. Since most of the tax preferences (e.g., investment tax credit, accelerated depreciation) that were eliminated by the 1986 reform had not in any case been available for foreign income, the effect of the associated reductions in statutory tax rates was also to reduce the effective rate of U.S. tax on foreign income. As a result, foreign effective rates in general are today in excess of U.S. rates, and many U.S. taxpayers are in "excess credit" positions.

Despite the reduction or elimination of the advantage of deferral of income recognition, there is still a tax incentive to use foreign subsidiaries. If operations are in the form of a branch, the "excess" foreign tax credits go into the carryforward and carryback mechanism immediately, and, if they cannot be used within the carryover period, they are lost completely. On the

other hand, foreign taxes paid by a foreign subsidiary and creditable under the deemed-paid rules begin to toll the carryover period only when the corresponding dividends are distributed. Thus, in the post-1986 world, use of a foreign subsidiary may allow the deferral of excess credits instead of the deferral of U.S. taxes.

Subpart F

The ability to defer current recognition of income of a U.S.-controlled foreign corporation (CFC) is limited by the Subpart F provisions.[20] Income subject to Subpart F is in effect treated as if it had been distributed as a dividend to the U.S. shareholder and then reinvested. A foreign tax credit is available for the income that is currently includible; it parallels the deemed-paid credit for dividend distributions. Later distributions of the previously taxed income can be made tax free and are "stacked" first.

The Subpart F rules apply to certain classes of income received by a CFC. In general terms, the rules affect dividends, interest, and other forms of passive or investment-type income, income from financial services, and income from certain dealings with related parties. The latter category covers situations where the foreign corporation is in effect used as a conduit to sell goods outside its country of incorporation. For example, if a U.S. parent corporation manufactures widgets with a cost of $100 and sells them to its Swiss sales subsidiary for $120 (an arm's length price) and the Swiss subsidiary sells the widgets to German customers for $150, the $30 of profit in the Swiss subsidiary will be taxed directly to the U.S. parent. On the other hand, income from sales in Switzerland would not be taxed currently. Neither would income derived by the Swiss corporation from the manufacture and sale of widgets using component parts purchased from the parent company.[21] Similar rules apply to the provision of services on behalf of related parties. The 1986 Act expanded the scope of Subpart F somewhat by extending the rules to financial services income and shipping income.

Subpart F also contains rules that in effect treat as a dividend distribution any transaction by a CFC that indirectly makes its earnings available to the U.S. shareholder. This is clearest in the case in which the CFC makes a loan to the U.S. shareholder or guarantees a loan by a third party, but the rule also applies to other investments in U.S. property by the CFC.

Note that, to the extent that the objective of Subpart F is to oblige companies to repatriate earnings not currently used in the active conduct of a business, it is not strictly sufficient to tax the passive income generated by earnings retained abroad. Thus, for example, where a foreign subsidiary defers U.S. tax by retaining active income earned abroad and investing instead in assets generating passive income (e.g., interest), subjecting the passive income to current U.S. tax is not enough to produce the equivalence of repatriation of the original active income because the passive income is itself partially earned on the initially deferred taxes.

The role of Subpart F after the 1986 Act rate reductions is somewhat unclear. The provisions were originally enacted to limit the ability to defer U.S. tax through the use of a foreign subsidiary where foreign rates were typically lower than U.S. rates. At present, however, deferral is an advantage in only a limited number of cases. In fact, in some cases CFCs are intentionally creating Subpart F income to use foreign tax credits without paying the additional foreign withholding tax that would be due on an actual dividend distribution of non–Subpart F income. Deferral is still significant in tax haven operations that slip through the Subpart F definitions and in situations where the foreign jurisdiction has a low rate of tax on certain operations (e.g., a tax holiday in a developing country).

1.2.2 Foreign Tax Credit Planning after the 1986 Act

Background

As discussed in general terms in section 1.1.2, the foreign tax credit is limited to the U.S. tax applicable to foreign-source income. But the credit does not attempt to "trace" foreign taxes to particular items of foreign income to determine if the foreign tax exceeds or is less than the corresponding U.S. tax. Rather, the credit is limited by the following fraction: ((foreign-source taxable income)/(worldwide taxable income)) × (U.S. tax liability). This approach in principle allows an averaging of foreign taxes where foreign effective rates are above and below U.S. rates. This means that a U.S. corporation with high-taxed foreign-source income (e.g., dividends from an operating subsidiary in Germany) would have an incentive to create low-taxed foreign-source income to use the excess credits it has with respect to the high-tax source income. On the other hand, a U.S. corporation with low-taxed foreign income is not deterred from investing in a high-tax country since it can absorb the high tax against the excess limitation created by the low-tax income and "average out" to the U.S. rate.

Limits on Averaging

The 1986 Act placed a number of restrictions on the ability to average high- and low-taxed foreign income. It was anticipated that the rate reductions would place many companies in an excess credit position and would encourage them to attempt to create additional low-tax foreign-source income. Accordingly, the Act adopted a sort of schedular system that requires that foreign income be classified into a number of separate "baskets" or categories and prohibits the averaging of foreign taxes across baskets. Averaging is still permitted for active business income but is otherwise substantially restricted. Thus, if a U.S. corporation has high-taxed foreign-source manufacturing income, it can average the taxes on that income with the taxes on low-taxed foreign sales income.[22] On the other

hand, it could not average high-tax manufacturing income with low-tax foreign-source portfolio interest or dividend income.

In applying the basket system, dividends, interest, and royalties from CFCs (and amounts subject to the deemed distributed requirements of Subpart F) are subject to a "look through" rule, which categorizes the payments according to the character of the underlying income out of which they are made. Thus, for example, interest normally falls in the passive basket and cannot be grouped with business income.[23] But interest from a CFC that has only active business income would go into the business income basket. A special rule places interest from export financing in the business basket. Income from banking is in a separate basket and cannot be combined with other business income. In addition, dividends from foreign corporations in which the U.S corporate shareholder owns less than 50 percent go in a separate basket "per corporation" and cannot be used to average at all.

Reducing Foreign Effective Rates

A U.S. parent corporation can affect the form in which it gets its returns from its foreign subsidiaries. These income flows can take the form of dividends on equity investment, interest on loans, royalties on licenses, or payments for management services. Payments in the form of interest, royalties, or service fees can in principle reduce the foreign tax base and hence the overall effective rate of foreign tax. This is true, of course, only if the foreign fiscal authorities accept the characterization of the payments and do not treat them as disguised dividend distributions. Within certain broad limits, however, a range of deductible payments is possible. The 1986 Act rate reductions and the corresponding excess credit position of many companies have encouraged greater use of nondividend forms of returns that have the effect of reducing taxable income (and therefore tax) from the point of view of the foreign jurisdiction, but not of reducing foreign-source income for purposes of calculating the creditable portion of the foreign tax. Under the "look through" rule discussed above, the nondividend payments from a CFC still fall in the business income basket (assuming that the foreign subsidiary has active business income) and allow the U.S. company to reduce the overall effective foreign rate to the U.S. rate so that the foreign taxes are more likely to be fully creditable.

Pooling of Foreign Earnings

Before the 1986 Act, the deemed-paid foreign tax credit was calculated on the basis of an annual calculation of the earnings and taxes of the foreign subsidiaries, with the most recently accumulated earnings (and associated taxes) deemed to be distributed first. This procedure gave an incentive to make dividend distributions in years in which foreign rates were high and to skip distributions in low-tax years (assuming that the higher credits could be

used currently). This was especially the case in foreign systems in which the effective tax rate could be substantially influenced by the taxpayer, for example, by taking or not taking optional depreciation deductions. The foreign subsidiary could have an artificially high tax rate in one year by taking no depreciation deductions and paying a dividend in that year and then reducing its foreign taxes in the next year through higher depreciation and paying no dividend. Through a judicious use of this so-called rhythm method of distributions, foreign tax credits could be accelerated when compared to those that would have resulted in a level distribution of the same total amount.

The 1986 Act responded to this problem by requiring a pooling of earnings for foreign-tax-credit purposes for years after 1986. In effect, foreign earnings and taxes are calculated on a cumulative rather than an annual basis for purposes of determining how much foreign tax credit a dividend distribution brings with it.

Allocation of Costs

The numerator of the foreign-tax-credit fraction is taxable foreign-source income. The more costs allocated to foreign-source income, the smaller the fraction, with a corresponding reduction in the available credit. The 1986 Act in general requires a greater allocation of expenses to foreign-source income. In the first place, expenses (in particular, interest expense) must be calculated on a consolidated basis, taking into account all the members of the U.S.-affiliated group. Previously, interest calculations were made company by company. Thus, borrowing for the group could be isolated in an affiliate corporation that had no foreign-source income, and as a result the consolidated taxable foreign-source income of the group would not be reduced by the interest expense. Similarly, other expenses could be "loaded" in affiliates that had no foreign-source income. Requiring consolidated calculations has eliminated these manipulations.

Summary and Evaluation

The present structure of the credit is extremely complex. In order to apply the credit, the following operations are necessary:

1. segregate items of gross income into U.S. and foreign sources;
2. segregate foreign-source income into the appropriate categories;
3. allocate and apportion expenses to each category;
4. determine the creditable foreign taxes attributable to each category;
5. "pass through" these attributes through the various tiers of foreign subsidiaries involved; and
6. compute a separate carryover mechanism for each category.

Even considering that the addressees of these rules are for the most part large multinational corporations with substantial resources and computer capacity,

one can question whether the welter of technical complexity does not try to fine tune the system to too great an extent.

1.2.3 Some Specific Subsidy Provisions

In addition to the general structural rules outlined above, the U.S. tax system has some explicit subsidy provisions in the international area. The most important are the rules for Foreign Sales Corporations (FSCs) and so-called possessions corporations operating in Puerto Rico.

Foreign Sales Corporations

Since 1971, the U.S. tax system has contained several tax regimes intended to promote U.S. exports. The original provisions involved the tax treatment of Domestic International Sales Corporations (DISCs). In essence, a DISC is a paper U.S. company through which export sales could be channeled. If the appropriate formalities were followed, a portion of the U.S. tax normally due on the export income could be deferred. In 1976, a GATT panel found that the DISC provisions violated the prohibition on export subsidies, and as a result the provisions were effectively repealed in 1984 and replaced by the FSC rules.[24]

The FSC provisions attempt to subsidize exports while at the same time technically complying with the GATT rules. As Congress interpreted the GATT rules, an exemption from tax on export income is not a prohibited subsidy if the economic processes that generate the income take place outside the country of export. The FSC rules try to meet that test by requiring that an FSC (unlike a DISC, a foreign company) have "foreign management" and engage in certain foreign activities.[25] Special provisions in effect waive the normally applicable arm's length pricing rules in determining the amount of income attributable to the FSC and hence qualifying for the exemption. Under various complex pricing formulae, the overall tax saving from the exemption is generally not more than 5 percentage points of tax on the export income. Whether the current FSC rules are compatible with GATT principles has not yet been determined.[26]

Possessions Corporations

In order to encourage economic development in Puerto Rico, a variety of tax subsidies have been offered over the years to U.S. corporations investing in Puerto Rico and other U.S. possessions. In its present form, the subsidy consists of a tax credit that in effect eliminates the U.S. tax on income arising in Puerto Rico. In order to qualify for the credit, the corporation must derive the bulk of its income from sources within Puerto Rico and be engaged in an active trade or business there.

Special rules apply to the income from intangibles (patents, know-how, etc.) involved in the Puerto Rican activities. In the past, some of the most

important intercompany pricing issues have involved possessions corporations and the amount of intangible income appropriately allocated to them.[27] In 1982, Congress enacted provisions limiting the amount of intangible income that can qualify for the possessions tax credit.[28]

During the preliminary considerations of the 1986 Act, a proposal was made to repeal the possessions tax credit and replace it with a temporary (inexplicably, in view of the underlying policy justification for a subsidy) credit tied to the amount of wages paid in Puerto Rico, but the proposal was ultimately rejected.[29]

1.3 Taxation of Foreign Persons on U.S.-Source Income

The U.S. system of source-based taxation is substantially less developed technically than the system of domiciliary-based taxation, reflecting presumably the history of the United States as a capital exporting country. The system is essentially schedular; it distinguishes amoung three basic categories of U.S.-source income: investment returns ("fixed or determinable annual or periodic income"), business income (income "effectively connected with a U.S. trade or business"), and capital gains. The 1986 Act expanded source-based taxation in several ways. It retained the prior tax rate on investment income received by foreign persons (while reducing domestic rates), limited the role of tax treaties in reducing U.S.-source-based taxation, and imposed a new layer of tax on foreign branch operations in the United States.

1.3.1 Investment Income

Investment income is taxed at a statutory 30 percent gross rate and is collected through withholding by the U.S. payor. The rate is often reduced, sometimes to zero, through bilateral income tax treaties in which both contracting states agree to a reciprocal reduction in source-based taxation. Representative types of income subject to the 30 percent rate are dividends, interest from related parties, royalties, and rents.[30] The theory of this form of taxation is that it is impossible administratively to calculate the deductions of the recipient that net-based taxation would require. Accordingly, a lower gross rate of tax is applied as a surrogate for net-based taxation. The basic statutory rate of 30 percent, however, was not changed when rates on domestic taxpayers were reduced in 1986, and the arguable result is overtaxation of investment in situations in which the 30 percent rate is applicable.[31]

Several categories of investment income are exempt by statute. The most important is portfolio interest, essentially interest paid by U.S. borrowers (including the U.S. government) to unrelated foreign lenders other than banks lending in the normal course of business.[32] Interest on deposits by foreign persons with U.S. banks is also exempt.

1.3.2 Capital Gains

In general, capital gains are not subject to tax unless the foreign taxpayer is engaged in a U.S. trade or business and the gains are "effectively connected" with that trade or business. Statutory provisions make it comparatively easy for foreign investors to avoid trade or business status for their stock-trading activities in the United States unless they are dealers in securities with their principal office in the United States.

Special rules apply to gains from the sale of real estate or the shares of U.S. corporations that have substantial investments in real estate. Such gains are taxed regardless of whether or not the foreign investor is otherwise engaged in a U.S. trade or business. The tax is enforced through a withholding mechanism that requires the buyer of a U.S. real property interest to withhold tax on the sale proceeds if the seller is a foreign person.

1.3.3 Business Income

"Normal" business income of a U.S. trade or business operated by a foreign person is taxed at the usually applicable individual or corporate rates on a net basis in the same way as corresponding income earned by a U.S. taxpayer. In the case of corporations, the income is also subject to a second layer of tax, the so-called branch profits tax.[33] Income that would usually be classified as investment income or capital gain is treated as business income if it is deemed to be "effectively connected" with the foreign taxpayer's U.S. trade or business. For example, interest income on trade accounts receivable would be taxed as business income rather than as interest income subject to 30 percent gross withholding. Similarly, the capital gain on the sale of a business asset would be taxable, but an unrelated capital gain would be exempt from tax. Complex rules define the line between effectively connected and non–effectively connected income.

1.3.4 Forms of Business Investment

Different patterns of taxation apply, depending on whether a foreign person invests in the United States through a U.S. corporation or directly through a U.S. branch. If the investment is through a U.S. corporation, all the income realized by the corporation will be subject to the normal tax rules applicable to U.S. persons because, technically, the foreign-owned U.S. corporation is simply a U.S. taxpayer subject to tax on its worldwide income. Dividends paid by the U.S. corporation to the foreign shareholder are subject to the 30 percent gross withholding tax (reduced by treaty). Interest paid by the corporation on shareholder loans is subject to withholding tax as well. The shares of the corporation could be sold without U.S. tax as long as the corporate investment was not primarily in real estate. A sale of the assets followed by a liquidation of the corporation would result in tax at the corporate level but no tax at the shareholder level.[34]

If the foreign corporate investor forms a U.S. branch, the net business income of the branch (and any investment-type income that was effectively connected) would be taxed at normal U.S. rates. Deductions would be allocated to the U.S. operations under roughly the same rules that are used to make similar allocations for purposes of the foreign-tax-credit fraction. In addition, to the extent that the branch did not reinvest its net profit in the U.S. branch operation, a second level of tax would be imposed on the corporate profits. This "branch profits tax," enacted by the 1986 Act, is intended to replicate the shareholder-level dividend tax that would have been applicable if the investment had been made through a U.S. corporation that then distributed its net profit as a dividend. The branch analog to a dividend distribution is the failure to reinvest the branch profits in the U.S. business. Thus, if a foreign-owned U.S. subsidiary has $100 of pretax profit and pays $34 of corporate level tax, a distribution of the $66 after-tax profit would be subject to the dividend withholding tax. Similarly, if the U.S. branch of a foreign corporation has $100 of pretax profit and does not reinvest the $66 of after-tax profit in the U.S. business, the branch profits tax would be applicable. If the branch profits tax has been avoided in past years through reinvestment and in a subsequent year the U.S. business investment is reduced, the tax becomes due at the time of disinvestment.

The branch profits tax replaced a largely ineffective withholding tax on dividend distributions by foreign corporations with substantial U.S. business income. It represents a more serious attempt to establish the U.S. claim to two levels of source-based taxation on U.S.-generated corporate profits. The treaty aspects of the branch profits tax are discussed below.

1.4 Other International Aspects of the 1986 Act

1.4.1 Transfer Pricing for Intangibles

Under section 482, the income arising out of transactions between related parties must be determined on an "arm's length" basis, that is, as if the various parties were not related. Thus, if a U.S. parent sells manufactured products to a foreign subsidiary, the price charged (which will determine the amount of income that the United States will tax currently to the parent) must be that which would have been charged to an unrelated third party. The same principles apply to sales by a foreign parent to its U.S. subsidiary. In the absence of any comparable third-party sales, regulations provide for a number of different methods for constructing an appropriate intercompany price. In practice, these rules have been very hard to administer and have resulted in extensive administrative and judicial disputes. Problems have arisen, in particular, with the transfer and licensing of intangibles.

In response to these difficulties, Congress in 1986 amended section 482 as it applies to intangibles by specifically providing that, in the case of a

transfer or license of an intangible, "the income with respect to such transfer or license shall be commensurate with the income attributable to the intangible." This language was intended to mandate an approach that looks to the actual profit generated by the intangible and the relative economic contribution that each of the related parties involved has made to the income that has been generated. The "commensurate with income" standard applies to all intangible transactions, but it was particularly aimed at the transfer of intangibles with a high profit potential, so-called crown jewel intangibles.

A congressionally mandated Treasury Department study (1988)—the "White Paper"—has been issued in connection with the 1986 Act change in the treatment of intangibles. It contains an extensive analysis of the issues involved in developing the commensurate-with-income standard. The White Paper starts from the premise that, if an "exact comparable" in fact exists, an arm's length price should be based on that comparable. That comparison gives the best evidence of what unrelated parties would have done in the situation under examination. If, as generally will be the case, there is no exact comparable, several alternative approaches are suggested. One is to attempt to find an "inexact comparable," one that differs in significant respects from the intangible transaction in question, and then to make appropriate adjustments. The White Paper, although it in general accepts the principle of looking to inexact comparables, finds that in the past their use has led to "unpredictable outcomes" and downplays such comparisons. It stresses instead a method that looks to arm's length rates of return rather than arm's length prices.

The arm's length rate of return method begins by identifying the assets and other factors of production the related parties will be using in the line of business in which the intangible will be used. This determination involves a functional analysis of the business. Then a market rate of return is assigned to each of the identified functions, based on the rates of return in unrelated transactions. This analysis will give the appropriate amount of the income generated in the line of business that is attributable to all the quantifiable factors of production. All the remaining income is allocated to the intangible. For example, assume that P has developed a patent for the manufacture of a product that will be manufactured under a license by an affiliate. The transaction will generate $500 of income, and, at a market rate of return on the tangible assets involved, $300 of the income would be allocated to the tangible assets. The remaining $200 would be allocated to P's intangible as the commensurate amount of intangible income.

The example above assumes that the manufacturing intangible was the only intangible involved in the line of business and that the returns on the tangible assets could be determined. In more complex cases where both of the related parties have intangibles, for instance, where the foreign affiliate has marketing intangibles, the White Paper approach is to apply the arm's length rate of return analysis to the extent possible and then split the residual

income based on the relative values of the intangibles involved. Thus, in the example above, the residual $200 of income would be split in some fashion between the manufacturing intangible and the marketing intangible. The White Paper recognizes that "splitting of intangible income . . . will largely be a matter of judgment" (U.S. Treasury Department 1988, 101). Nevertheless, some guidance may be got from unrelated parties that use similar intangibles.

The legislative history of the 1986 changes in the treatment of intangibles indicates that the income from the intangible subject to allocation under section 482 should reflect the "actual profit experience realized as a consequence of the [license or transfer]."[35] The White Paper takes the position that this language justifies periodic adjustments to intangible returns to reflect changes in levels of profits that occur after the original transaction. Such periodic adjustments will be required only in situations in which third parties dealing at arm's length would have normally included provision for them. In practice, this may mean that licenses for "normal" intangibles will not be subject to periodic adjustment but that such adjustment would be required in situations involving intangibles with unusually high profit potential.

1.4.2 Tax Treaties

As indicated above, bilateral income tax treaties can affect the basic pattern of domestic taxing rules. In general, the treaties typically do not have any effect on the U.S. taxation of U.S. persons but may reduce the taxes imposed by the source country treaty partner. This will be especially significant in the future, when many U.S. taxpayers will be in excess credit positions. The treaty may also provide that a foreign tax that might not otherwise be creditable as an income tax will qualify for the credit.

For foreign persons, the treaties can reduce the U.S. source-based tax that would normally be applicable. For example, many treaties eliminate the 30 percent tax on nonportfolio interest entirely and reduce the dividend tax to 15 or 5 percent in the case of parent-subsidiary dividends. Treaties may also prevent the imposition of the 1986 branch profits tax. Most treaties contain a so-called nondiscrimination clause, under which the United States agrees not to subject foreign persons to taxation "more burdensome" than the taxation imposed on similarly situated U.S. persons. As described above, the branch profits tax is imposed on foreign corporations doing business in the United States but not on U.S. corporations. This difference in treatment is viewed as violating nondiscrimination clauses and prevents the application of the branch tax in many treaty situations.[36]

A number of recent treaties contain provisions to prevent so-called treaty shopping, that is, the use of a treaty country corporation by third-country investors to obtain a reduction in U.S. source-based taxation that they could not have received directly because there was no treaty (or a less favorable

treaty) between their country and the United States. In addition, the 1986 Act specifically denied treaty benefits in some circumstances to foreign corporations that are treaty shopping.[37] In particular, treaty-shopping foreign corporations are prohibited from claiming relief from the branch profits tax under a treaty nondiscrimination clause.

1.5 Recapitulation of Present Policy

The tax treatment of international income flows reflects a variety of policy objectives, so it is difficult to discern the policy principles in the actual rules—to state the optimizing problem to which the rules are the solution.[38] Broadly speaking, though, the regime for taxing international transactions can be understood as springing from a fundamental principle that U.S. citizens and residents should be taxed on all their income. Coupled with this basic premise, in a multijurisdictional system, is the principle that people should not be taxed twice on the same income. Both principles reflect notions of equity. The first reflects the conception of income as a measure of ability to pay—since the source of income has no bearing on its validity as a measure of ability to pay, the tax burden should be based on "worldwide income." But the tax burden is not simply imposed by the home government; if two people with the same income are to pay the same tax, the amount extracted by a foreign jurisdiction must be counted equally with that taken by the home government.

These simple and superficially plausible normative conclusions are buttressed by a similarly plausible efficiency criterion, that of capital export neutrality. A nation's tax rules satisfy capital export neutrality if the choice of a domestic taxpayer between foreign and domestic investment is unaffected by tax considerations and depends only on the relative level of before-tax rates of return. Of course, an efficiency criterion is itself at heart an expression of an equity objective, that of maximizing the size of the economic pie. If all the tax authorities in the international system adhere to export tax neutrality, a perfectly competitive international capital market will leave no gain from reallocation of (any *given* stock of) world capital unexploited.

In the context of real-world politics and practical tax administration, the two foundation stones of U.S. international income tax policy, taxation on the basis of worldwide income and capital export neutrality, give rise to a continually evolving set of rules. The most recent version has been described in secs. 1.1–1.4. Much as we can think of the domestic personal income tax as an accretion income tax with certain exceptions and the basic corporate tax as a "classical" second-level tax on corporations, we can broadly describe the current treatment of international business as follows:

1. U.S. corporations are taxed on their income wherever earned. The "income" of a U.S. corporation attributable to its holdings of shares in a

foreign company (even a controlled subsidiary) is basically interpreted as the dividends received, when received. Hence, there is "deferral" of U.S. tax until repatriation.
2. Sovereign governments have the first claim to tax income created within their borders. This principle applies to the taxation of U.S. corporations operating abroad and to foreign corporations operating in the United States.
3. To alleviate the "double taxation" of income arising from activities abroad, the United States allows U.S. taxpayers to credit foreign *income* taxes paid against their U.S. tax liabilities. The foreign tax credit should not be seen to reduce the tax on income created by a company in the United States; hence, the credit is limited to the amount of U.S. tax that would have been collected on the foreign income. U.S. companies should not be inhibited by tax considerations from using foreign subsidiary corporations to do business abroad. Therefore, a credit against U.S. income tax is allowed to U.S. corporate shareholders for foreign taxes actually paid by foreign corporations.
4. Certain payments to foreigners (mainly dividends and interest) are subjected to a withholding tax that mimics the tax that would be paid by a U.S. individual recipient. The withholding tax is eliminated or reduced mutually by bilateral treaty agreement with other governments.
5. Certain tax rules are intended to encourage investment in the United States (now, mainly, accelerated depreciation). Generally, these rules do not apply to investment abroad.

As the discussion of the legal rules in secs. 1.1–1.4 makes clear, implementing these general principles is far from straightforward. The present system is the result of a long process of successive "loophole closing" efforts, as the tax policy makers have discovered one way after another in which taxpayers (or foreign governments) can organize their affairs to take advantage of the U.S. rules. The 1986 changes are the latest in the series, with particular attention to the implications of the substantial lowering of U.S. tax rates incorporated in the reform.

The thrust of the 1986 changes with respect to U.S. firms operating abroad was to scale back deferral through expansion of the Subpart F provisions that require immediate taxation of "tainted" forms of income, to limit further the creditability of foreign taxes through wider use of "baskets" of income by type, and to reduce the relative attractiveness of domestic investment through elimination of the investment tax credit and slowdown of depreciation allowances.

With respect to foreign firms operating in the United States, the 1986 Act introduced a branch profits tax, whose objective was to put branches of foreign corporations and U.S. subsidiary corporations of foreign corporations on a more similar footing. The branch profits tax corresponds to the withholding tax on the dividends paid by U.S. corporations to foreign

shareholders. For foreign firms, the second main thrust of the 1986 changes was the consequence of *not* changing the rate of withholding tax at the same time domestic rates were being cut; the effect was to the disadvantage of foreign relative to domestic ownership.[39]

1.6 Do the Bricks Lack Straw?

Before we turn to some of the more specific policy issues raised by these rules, it may be useful to devote a bit of critical attention to the two basic building blocks of worldwide taxation and the foreign tax credit.

1.6.1 Worldwide Taxation

The argument underlying the principle of worldwide taxation—taxation of income from whatever source—appears to be motivated by a conception of income as a given attribute of an individual or a firm. If A and B have the same income, they should pay the same tax. But income for tax purposes is not an abstract flow. Rather, it is an accounting construct built up by adding and subtracting amounts paid and received (or accrued, to make matters worse). The banal fact that an income tax is based on *transactions* (admittedly, the transactions are sometimes subjected to very complicated transformations) has destructive implications for the equity case often made for tax rules. It also has profound implications for tax design, implications that have as yet been only partially digested in academic economic thinking and that are only beginning to be felt in the making of tax policy.

The equity proposition that it is unfair for two people with equal incomes to pay different amounts in tax would perhaps be persuasive if income were an attribute with which an individual is endowed. But it is generally fallacious when income is an aggregation of transactions entered into by the taxpayer. To take an obvious example, if two people have the same amount of money to invest, it is of no equity consequence that one chooses tax-exempt bonds and pays no tax and the other chooses taxable bonds and pays tax. Since either could make the same choice as the other, no inequity can be said to result from the fact that they send different amounts of money to the tax collector.[40]

Equity arguments based on the view of income as an exogenous attribute are particularly misleading in the context of capital markets. In part, this is because the opportunities of participants are to a considerable degree unrelated to a meaningful measure of their ability to pay: people differ in their wages but not in the rate of interest that they can earn on savings. More important, as the tax-exempt interest example illustrates, is the fact that determining the actual tax burdens (in economists' jargon, the *incidence* of taxes) requires a difficult analysis of the effect of the rules in the context of strong forces tending to equate the rate of return on investment for a given

taxpayer at all margins of choice. In capital markets, those margins are extraordinarily varied and simultaneously available to many participants.

The more profound consequence of the view of income as an aggregation of transactions is to place income tax policy in the framework of taxes on transactions more generally. The more complex uses of transaction data in the income tax context concern purchases and sales of claims on goods at different times or under different contingencies. In mundane terms, the hard part of income taxation is to use transactions to measure "income from capital." But, when these transactions are viewed like other purchases and sales of goods, the case for employing the peculiarly complex procedures of income accounting (rather than much more simple rules) in order to achieve various equity objectives becomes much less clear than it appears when income is viewed as an abstract attribute. A striking instance of how little it is recognized that an income tax consists of a collection of taxes on transactions is the almost total lack of connection between the making of international income tax policy and the making of international trade policy.[41]

1.6.2 Credit for Foreign Income Taxes

Recognizing that an income tax is levied on the basis of voluntary transactions, not exogenously determined attributes of individuals and firms, upsets the equity argument for crediting foreign income taxes as well. At first glance, if A and B have the same income but B is subjected to a foreign income tax, it seems fair to allow B's foreign tax to count against an overall burden. But, if B's wealth can alternatively be allocated between a foreign asset and a domestic one, it is clear that allowing or not allowing a credit for the foreign tax will affect the location of B's wealth, not B's tax burden.

1.7 International and Foreign Transactions in a System of Accretion Income Accounting

The traditional literature on income taxation begins with a discussion of the accretion income concept, generally known in the jargon of the trade as Haig-Simons or Schanz-Haig-Simons (SHS) income.[42] SHS income is defined to be the sum of consumption and the change in net worth (at market value) of a person over some specified period. A natural question is how the rules relating to international income relate to this fundamental income notion.

1.7.1 Source of Income and Allocation of Deductions

Accounting for Personal Income

The idea that income has a locatable source seems to be taken for granted, but the source of income is not a well-defined economic idea. The SHS

definition describes a quantity that is, in principle, measurable, whatever the practical problems may be (and they are substantial). The emphasis placed by tax reform advocates on the objective of taxing income "from whatever source" has obscured the fact that the SHS income concept is not susceptible to characterization as to source at all. Income in this definition attaches to someone or something that consumes and that owns assets. Income does not come from some place, even though we may construct accounts to approximate it by keeping track of payments that have identifiable and perhaps locatable sources and destinations. To the extent that income describes an activity, it is not that of production but that of consumption and wealth accumulation, and its location is presumably the place of residence of the person doing the consuming and accumulating.

Naturally, calling a tax an income tax does not imply that it will or should embody the SHS norm. The fact is, however, that something like the SHS income norm does appear to motivate much of the U.S. system. More important, the objective of increasing wealth is rather persuasively the motivator of investment decisions. Large changes in wealth occur continually by virtue of changes that have no natural locational aspect. Examples are the discovery of a new drug formula or new consumer good. Even more significant are simple changes in expectations and beliefs about the future, which can result in large changes in asset values. Attaching locations to these phenomena inevitably involves arbitrary line drawing, with its attendant controversy. (See the discussion in secs. 1.1–1.4 of transfer pricing of intangibles.)

The view of income as a payment for factor services (rather than as the sum of saving and consumption) may appear to offer a firmer basis for attribution of source. The reasoning that leads to an SHS concept, however, emphasizes that the payment actually received by a person has to be interpreted in terms of some notion of accruing benefit. In crude terms, the normative notion of income must be net of the "costs of earning" any payments. That is why is seems correct to deduct employee business expenses from wages; the same line of argument may justify a deduction for medical expenses as well (they do not buy consumption in a normative sense).

As we have emphasized, an income tax in practice is built up from transactions. It would be very difficult to construct a system of accounts that would give a close approximation to SHS income. Actual income accounts do not even attempt it. When one then adds the necessity of attaching a locational label to the transactions, an operation that is not itself based on a well-defined economic question, complexity and arbitrariness are hard to avoid.

In many cases, amounts paid and received can be rather readily given a location by association with a process of production or similar activity. A practical consequence is that the transaction becomes susceptible to

monitoring by a particular local jurisdiction and thereby becomes a potential basis for taxation. The association is so obvious that it is apparently taken for granted that a government has the "right" to levy a tax based on a measure of the profits earned by a production activity physically carried on within its jurisdiction. One may speculate that force majeure has been as important as any ethical conception of sovereignty in producing a general acceptance of the priority of the "source" jurisdiction to tax particular transactions.

Income of a Corporation

For a corporation, the analog of personal consumption is distributions to shareholders. The corporation tax treatment of particular transactions, such as receipt of a dividend or of the proceeds of the sale of an asset, has to be understood as a piece of a system of accounts designed to capture the sum of distributions to shareholders and increase in net worth. A dividend, itself, is not SHS income; it may be used to measure income, but, if the change in value of the stockholder's remaining claim on the corporation is ignored, the accounts will produce a bad approximation to SHS income (Bradford 1986, chap. 3). The defective accounts will either over- or understate the taxpayer's SHS income; typically, such mismeasurement sets up opportunities for tax-motivated arbitrage with balancing transactions that involve different mismeasurement.

The economist is struck by the frequency with which one encounters in the law legal and institutional distinctions without an economic difference. As a result, the rules frequently prescribe different tax consequences for economically equivalent (or nearly equivalent) transactions. Where this is the case, there is an opportunity for arbitrage profit. The efforts of the policymakers to limit arbitrage profit (without actually instituting consistency) have much to do with the evolution of the rules.

As a simple example, consider the distinction between distributed and undistributed earnings of a wholly owned foreign subsidiary. In one case, the sub sends the parent a dividend. In the second case, the sub simply retains the earnings but lends the parent money. The bundle of real claims owned by the parent is the same after the transactions are completed in both cases. Yet before 1962 the tax results were very different. It then might have made sense for the sub never to pay the parent a dividend since the exactly equivalent cash flow could have been effected with a lower tax penalty by the lending route. The policy response: a rule treating loans to the parent as dividends and a series of subrules dealing with transactions similar to loans, for example, the sub's guarantee of a loan to the parent.

This is an example of the problems created by inconsistency of the tax treatment of transactions with similar economic effects. Such inconsistency is ubiquitous in the implementation of the income tax. Although the point is a simple one and even well known, it is still insufficiently appreciated by policymakers. The difficulty of designing rules to implement equal tax

treatment for economically equivalent results is severe in the case of an income tax, basically because of the difficulty of measuring accruing changes in value. These difficulties are compounded when the ill-defined criterion of location of income is added.[43]

1.7.2 Deduction or Credit for Foreign Taxes?

Discussions of the foreign tax credit are often cast in a framework in which the tax at issue is on the capital income of domestic residents. Viewed as an element of a set of accounting rules to approximate the sum of a person's consumption and increase in net worth during the period, the foreign tax credit makes little sense. True, the payment of taxes might be regarded as a use of buying power that is not consumption (although the point is arguable; see Bradford et al. 1984), and it certainly is not evidence of an increase in net worth. But SHS income tax principles would seem to imply, at most, deductibility of taxes paid to other jurisdictions by persons otherwise regarded as within the income tax net.

1.8 Economic Analytical Problems Posed by Actual Policies

In the discussion of the economics of the international tax rules so far, we have attempted to relate them to philosophical objectives. We turn now to economic issues more directly related to the actual system as it has evolved.

1.8.1 International Tax Rules as Taxes on Capital Flows

Most economic modeling related to international tax policy assumes that the implementation problems have been solved. Specifically, analysts take for granted the existence of a measurable quantity called capital (K) that can be located in a particular country and whose ownership can be observed. Also assumed observable is the measurable return (rK) accruing to capital in each country. As we have emphasized, actual tax rules depend on a variety of observable transactions, none of which corresponds neatly to the accruing return on capital.[44] Before we turn to a closer look at problems associated with particular aspects of the rules, however, we may note a troublesome problem of consistency that is likely to present itself quite apart from matters of definition and measurement. This problem, which has been emphasized by Slemrod (1988), can be described as one of tax harmonization. It arises when the tax rules applied by different countries to investors in different countries are not appropriately coordinated.

We can best express this problem in a setting in which risk is assumed away and investors are indifferent between returns arising in different countries (no bias toward returns in one's own country). Then investors will move their capital around to achieve the highest return after all taxes. A condition of equilibrium is that the rate of return after all taxes be simultaneously equal in all countries for residents of each country. In a

two-country case, let r_d be the domestic rate of return before taxes and r_f the return in the foreign country. Let t_{ijk} be the tax levied by country i on investors resident in country j on returns to capital they own in country k, where i, j, and k can be either d (domestic) or f (foreign). Then there are eight possible tax rates. If we rule out the taxation by one country of the income of residents of the other country earned on capital in that country (t_{dff} and t_{fdd} are zero), there are six tax rates. If domestic investors are to be indifferent between investing at home and abroad, it must be true that

$$r_d(1 - t_{ddd}) = r_f(1 - t_{ddf} - t_{fdf}).$$

Similarly, in order for foreigners to be indifferent between investing in their own country and abroad, it must be true that

$$r_d(1 - t_{dfd} - t_{ffd}) = r_f(1 - t_{fff}).$$

Taking the ratio of the two conditions, we see that together they imply

$$\frac{(1 - t_{ddd})}{(1 - t_{dfd} - t_{ffd})} = \frac{(1 - t_{ddf} - t_{fdf})}{(1 - t_{fff})}.$$

This is one condition on six tax rates. The difficulty is that there is very little assurance that it will be satisfied by the rules chosen by any given pair of countries (much less that the corresponding generalization will be satisfied for various pairwise linkings of several countries). If the condition is not satisfied, one or the other after-tax equalization condition must fail. The difficulty that this failure creates for economic modeling is clear (we would say that the markets have no equilibrium), but the world was not created to satisfy the modelers. Actually, some process will balance the demands and supplies—probably some combination of transactions cost, nonlinearity of the tax rates (e.g., the nonlinearity that results from the fact that taxes are nonrefundable), and special ''patches'' in the tax rules designed to limit the arbitrage between more and less favorable jurisdictions.[45]

1.8.2 Incentives for Business Location: Form and Substance

Place of residence and even citizenship are choices. Since the U.S. tax laws make distinctions on the basis of place of residence and citizenship, we may expect the laws to influence the choices. Clearly, in exceptional cases (movie stars, for instance), taxes influence people's domicile and citizenship. But for most people, in the range of tax regimes that is typically encountered, we expect little elasticity of domicile or citizenship to changes in tax policy, and therefore distinctions based on residence of people will be of a lump-sum character.

One might expect the choice of place of incorporation to be much more responsive to variations in tax rules. The U.S. policy of distinguishing

between U.S. and foreign corporations must have effects, either on the choices or on the rules enacted (having in mind their effect on place of incorporation). If the people choosing the location of incorporation are U.S. taxpayers and they want to be able to control the management of the operation located abroad, they have two basic options: to incorporate (or even not incorporate but operate in noncorporate form) in the United States and run the foreign activity as a branch or to incorporate abroad while maintaining significant ownership interest. These two forms of organization are economically virtually equivalent. In addition, there are such less perfectly substitutable alternatives as a noncontrolling interest in a foreign corporation ("portfolio investment") and royalty and similar contingent claims. Note that a capital market "imperfection" is implicit in the observation that one cannot create a perfect substitute for a controlling interest through an appropriate combination of available securities. A controlling interest in a corporation could presumably in principle be reproduced by a sufficiently complicated contract that could be marketed as a portfolio security. The cost of writing and monitoring such contracts is required for a distinction between controlling and portfolio investment.

The basic policy toward residence of corporations is an extension of the legal doctrine that the corporation is a separate person. A corollary of the distinction between U.S. and foreign persons is the deferral of tax on the earnings of foreign subsidiaries of U.S. corporations. For U.S. corporations that own other U.S. corporations, the tax accounts are consolidated. Dividends passing from the sub to the parent have no tax consequences. By the same logic, dividends paid from one company to another ought not to be taxed when both corporations are separately U.S. taxpayers but not in a relation of parent and sub. (In fact, a fraction of dividends received by a U.S. corporation from another U.S. corporation, other than a controlled sub, is included in the recipient's tax base. The fraction was increased by the 1986 Act.)

In the case of a subsidiary that is not a U.S. taxpayer, the policy that springs from the treatment of a corporation as a person is to tax the parent only on "income" as measured by dividends, that is, in the cash flow sense of income often encountered in the U.S. income tax. No one suggests "integrating" corporate and shareholder income accounts in the case of portfolio investment, so deferral, which is a much debated policy, might seem a sensible way of avoiding a sharp break in tax treatment at the point at which the shareholder's interest is regarded as crossing the boundary to "control." The main effect, however, of this extension of the metaphor of corporation as person and of the use of dividends as a measure of income arises precisely with control because the policy puts a great deal of tax weight on a decision that is under the U.S. taxpayer's control. In this connection, the critical choice is probably not between retention of funds and their distribution as dividends. More important is the choice between

dividends and distribution in other forms, such as share repurchase, royalties, favorable loan terms, or manipulation of other intercompany prices (''transfer prices'').

1.8.3 The Foreign Tax Credit as an Implicit International Agreement

As has been mentioned, the creditability of foreign income taxes is usually justified on the equity grounds of avoiding double taxation and on the efficiency grounds of capital-export neutrality, which requires that taxes should not influence the country of location of capital. The credit is supposed to make U.S. tax burdens independent of the location of investment, thereby assuring that a U.S. firm will not be influenced in its investment decisions by differences between U.S. and foreign taxes.

It is difficult to construct an optimizing model from a national perspective that implies capital-export neutrality, even if it could be achieved without sacrificing revenue to foreign governments. Optimal tariff considerations (whereby a large country seeks to exploit its monopoly advantage by, in effect, raising the prices of its exports and forcing down the prices of its imports through the use of tariffs) would generally imply that foreign investment should be discouraged relative to the level implied by unobstructed competitive capital markets.[46] It is even more difficult to justify crediting taxes paid to foreign governments as a method of achieving capital-export neutrality, as long as the policies of foreign governments are taken as given. The reason is simple. The foreign government collects the taxes on the investment. The yield to the domestic economy is net of foreign tax, whereas the yield of domestic investment is gross of domestic tax. National self-interest would seem to imply something like deduction of foreign taxes.

It is a serious error, though, to view the choice of policy as made in an international vacuum.[47] Since the tax policy of foreign governments cannot be taken as a given, an analysis of the national interest that neglects their reactions is fundamentally flawed. Like free trade, capital-export neutrality has to be understood as an international discipline or standard that may leave all participants better off than they would be under likely noncooperative alternatives.[48] That is, a policy of capital-export neutrality by all countries may lead to an outcome that is better for all than would obtain if policy were made separately on the assumption of no foreign interactions.

Unfortunately, this hypothetical possibility is merely that. The suggested policy that makes the economic pie as big as possible (and note that, since the taxes affect the level as well as the allocation of capital, there is no assurance that universal capital-export neutrality would be better than, for example, no taxation of capital) also affects who gets what part of the pie. Characteristically of efficiency rules in general, capital-export neutrality as a desideratum of policy makes no reference to who gets what share of the world economic pie (or even of the world's tax revenues).

We have described above the equity principle that it is unfair to tax income that has already been subjected to tax. This may be called the "intranational" equity principle in that it concerns fair treatment of two apparently similarly situated U.S. taxpayers. As has been emphasized, if we put to one side issues of transitional incidence (thereby probably putting aside the bulk of tax politics), the argument for the foreign tax credit based on the individual equity principle is surely fallacious. It is a condition of equilibrium that investors obtain the same rate of return after all taxes at all margins of investment. It therefore cannot be inequitable to subject certain forms of investment to higher or lower rates of tax, although it may be wasteful.

One encounters in this context, though, another notion of equity that is focused less on the U.S. taxpayer per se and more on the obligations of a tax jurisdiction toward the other members of the community of jurisdictions. This "international" equity principle is that each jurisdiction has an obligation to provide relief from double taxation up to the level of tax that would be levied on a taxpayer with purely domestic-source income. If we think of equity in terms of outcomes for individuals, the international equity principle seems a rather odd precept. But it is different from the intranational equity principle. For example, the international equity principle would be satisfied by exempting foreign-source income from domestic tax, provided the basic premise holds—that income is an exogenous attribute of taxpayers. Even more than the intranational equity principle, the international equity principle suffers in implementation from its definition in terms that are purely institutional rather than more fundamentally in terms of outcomes or even alternatives for individuals. For the latter purposes, it is not important whether something is taxed more than once or whether the burden is imposed by an income or by a sales tax. All the same, it is significant that the international principle carries with it a notion of obligations of good jurisdictional citizenship that is missing altogether from the intranational equity principle.

There is a further justification for the foreign tax credit suggested by the view of the corporate tax as a substitute for accrual accounting for income at the individual shareholder level. If the basic function of the "double taxation" of corporate income is to impose single taxation on the income of shareholders, something like the foreign tax credit is clearly necessary to dilute the strong incentive that would otherwise arise for individuals to hold shares directly rather than indirectly via U.S. corporations. If the nationality of the controlling corporation is a matter of indifference, such a policy as substituting a deduction for the credit would presumably result in significant shifts in portfolio form, little extra revenue, and the economic value loss that would result from inhibiting direct control.

Rather little attention has been paid to the implications of confining creditable foreign taxes to "income" taxes. The basis for the limitation is

legal and institutional rather than economic. That is, the allowable credit is not determined by asking whether the incidence or other economic effect of the foreign tax or other policy is like that of the U.S. income tax. Instead, implementation depends on the foreign tax having various institutional features that make it look like the U.S. income tax (a VAT of the income type, for example, would not be creditable). As a result, it would be quite possible for a foreign government that desired to do so to implement simultaneously a capital subsidy and a formal income tax in such a way that the tax is "paid" by the U.S. government (through the credit) while the effective tax burden on investment is zero. U.S. law disallows the credit in cases where there is a direct connection between a subsidy received by a company and its tax obligations. It would not be difficult, however, to circumvent this rule (Gersovitz 1987).

So far we have not commented in detail on another important feature of U.S. law with respect to the crediting of foreign taxes, namely, the limitation of the credit, in effect, to the amount that would have been collected on the same income under U.S. law. The logic of the foreign tax credit as an intranational equity-based adjustment in a corporation's U.S. liability would imply no such limitation. Nor would the efficiency-oriented principle of capital-export neutrality. A more obvious justification has to do not with the behavior or burdens of taxpayers but with the behavior of governments. A country that is host to a large amount of activity owned by a U.S. corporation could obviously impose a tax at a virtually unlimited rate if the difference between its tax and the U.S. tax on the same income would be paid by the U.S. Treasury. Naturally, this reasoning is not confined to the issue of crediting foreign taxes in excess of U.S. rates. It applies as well to crediting taxes up to U.S. rates. Canadian tax policy analysts, for example, regard the Canadian corporate tax primarily as an instrument for absorbing the U.S. tax credit.

It is difficult to exaggerate the complexity that has been introduced to the U.S. rules by the need to limit the foreign tax credit. The present international tax rate constellation, in which a large number of U.S. taxpayer corporations find themselves with excess credits, sets up strong pressures on governments. Those with tax rates in excess of that in the United States, still an extremely important source of direct investment, will find themselves under pressure to reduce rates to the U.S. level. The stock of excess credits, though, will imply additional pressure for some countries to reduce rates below the U.S. level. Ironically, the foreign tax credit will become increasingly a source of capital-export nonneutrality, as firms find opportunities in low-tax jurisdictions artificially enhanced by the option that they provide to use up excess credits on the U.S. tax books.

1.8.4 International Taxation as Conditioned on Control

In the literature on international income taxation, most attention has been paid to the way in which the taxes influence the decision of an investing

individual or firm to locate capital. Here, too, though, there has perhaps been too little focus on the actual transactions taxed, which are not flows of income in the abstract but dividend, royality, interest, and other "payments" (perhaps just on the books), and on the distinctions that influence the amount of tax (e.g., the distinction between a portfolio and a controlling investor).

One of the more elusive aspects of the rules for taxing international business is their reliance on discrimination among degrees of *control* of activities carried on abroad. Thus, the deemed-paid credit for foreign corporate income taxes is entirely denied to corporate portfolio investors, that is, corporate shareholders owning an insignificant fraction of the stock of the foreign company. To qualify, the U.S. corporation must own at least 10 percent of the voting stock. Even at this level of control, the foreign tax credit is limited according to the various "baskets" of income types, foreign company by foreign company. When the level of control rises to the level of a CFC, the foreign tax limits are determined by aggregates of foreign income by type. (Reminder: a CFC is a foreign corporation in which U.S. shareholders owning at least 10 percent of the voting stock together own at least 50 percent of the voting stock.)

The most obvious manifestation of the importance placed by the tax law on control of a foreign business activity is the distinction between active and passive income (in its various forms). The distinction (which is found in the purely domestic tax sphere as well) has no place in the SHS income conception, nor is it readily modeled in the usual capital flow model (of the sort outlined earlier in connection with the problem of international tax harmonization). Yet control and taxes are the two most obvious bases for the existence of multinational corporations.

We have discussed at length the traditional concept of capital-export neutrality, which (among other things) can at least be understood in the context of conventional capital flow models. Introducing the notion of control as an economic phenomenon provides a context for mentioning another traditional neutrality concept. "Capital-import neutrality" refers to the nationality of ownership of firms.[49] It obtains when there is no tax-based difference in circumstances of firms operating within a given country associated with the nationality of the firm's owners. The U.S. policy of deferring income tax on the earnings of foreign subsidiaries (thereby subjecting those earnings to the local tax system alone, until repatriation) can be thought of as applying the standard of capital-import neutrality to retained foreign earnings. (Arguably, the U.S. tax that will be due on repatriation is an unavoidable toll charge that has no influence on the foreign investment decision [Hartman 1984].) The usual models of international capital flows do not allow one to address the justification for capital-import neutrality effectively. The nationality of the owners of capital is not generally associated with economically significant consequences (apart, perhaps, from portfolio diversification).

The study of control promises to be an interesting one. In particular, it appears to be the obvious place to bring the notion of international competitiveness into the analysis in a meaningful way, one different from a mere identification with capital importation. (See, e.g., Summers 1986.) Control is, however, not easily given a rigorous economic interpretation—note, for example, that the extent of control of the corporate sector of an economy can range from 0 to 100 percent according to the degree of portfolio diversification by shareholders.

1.9 Concluding Comments

The conventional analysis of the broad economic principles traditionally said to underlie the basic structure of the U.S. system for taxing foreign income is fairly straightforward. A system of worldwide taxation combined with a foreign tax credit for taxes paid to other governments is asserted to achieve capital-export neutrality and the most efficient international allocation of investment. From the perspective of the domestic investor, the choice at the margin between foreign and domestic investment should be unaffected by tax considerations and should respond to the international levels of before-tax rates of return. This system will create an efficient worldwide allocation of resources and maximize world welfare. At the same time, some assert that national welfare will also be maximized when the overall effects of foreign investment are taken into account.

Although this theoretical analysis is relatively straightforward, as the preceding sections have shown, the implementation of these general principles in the real world of tax rules is enormously complex and the results often inconsistent. Some of the sources of this complexity can be identified relatively easily. In the first place, capital-export neutrality under the current system is present only when the U.S. tax rate exceeds the foreign rate. When the foreign rate of tax exceeds the U.S. rate, the theory of capital-export neutrality in principle would require the United States to credit the taxes against the U.S. taxes paid on U.S.-source income and, if necessary, refund the excess. If this step is not taken, then investment is discouraged in countries with rates of tax higher than that of the United States. In view of the revenue cost of such a policy, however, particularly when the possible reactions of foreign governments are taken into account, the credit has historically been limited to the U.S. taxes attributable to foreign-source income, though the form of the limitation has varied over the years. The failure to refund excess foreign taxes was less significant before 1986 since most companies then could fully use their foreign tax credits. Now, however, the majority of firms are in an excess credit position, and the limitations on the availability of the credit have led to much of the complexity of the legal rules.

More important, perhaps, the present form of the limitation has led to significant "second-best" issues. For example, under the current rules,

averaging of foreign taxes is allowed for active business income. This means that a U.S. company that is currently paying high foreign taxes with respect to one active business investment is encouraged at the margin to undertake a new business investment in a low-tax foreign country rather than in the United States. The excess credits on the high-tax investment can in effect shelter all (or at least some) of the U.S. tax burden on the low-tax investment. In the extreme case where the foreign country does not tax the investment at all—for example, under a tax holiday—the U.S. firm is comparing the before-tax rate of return in the foreign country with the after-tax rate of return on a domestic investment. Thus, an imperfectly pursued policy of capital-export neutrality can lead to results exactly the opposite of those the policy was intended to achieve.

Similar issues arise with respect to the taxation of income earned though U.S.-controlled foreign subsidiaries. A fully implemented policy of capital-export neutrality would tax the subsidiary income to the U.S. shareholder as it accrues. On the other hand, a fully implemented policy of capital-import or competitive neutrality would lead to the complete exemption of foreign income. Historically, Congress has accepted business arguments that current U.S. taxation adversely affects the competitive position of U.S. companies in foreign markets. It has allowed the deferral of U.S. tax on subsidiary income until repatriation, but only as long as that income fell into certain categories. On repatriation, capital-export considerations reassert themselves, and the income is then taxed, with the allowance of the "deemed" foreign tax credit for the foreign taxes paid by the subsidiary. This "hybrid" mixture of capital-import and capital-export considerations again has led to the complex dividing lines required by Subpart F to sort out income into deferral and accrual categories as well as the convoluted "pass through" of baskets for foreign-tax-credit purposes.

Another perspective from which to view the international rules is taxpayer equity. How should traditional notions of horizontal equity be applied in connection with foreign income? The exemption of foreign-source income would clearly seem inconsistent with any equity criterion based on ability to pay or well-being, assuming that income is taken to be an exogenous characteristic of taxpayers. An SHS approach to income definition would seem to imply inclusion of foreign income and a deduction for foreign taxes as a cost of producing income.

On the other hand, many have argued that a credit for foreign taxes is required by what we have called international equity considerations. The U.S. taxpayer who is subject to tax both here, because of a domiciliary connection, and in the foreign jurisdiction where the income arises is, some assert, not similarly situated when compared with a U.S. taxpayer who has income only from U.S. sources. The United States as the country of domicile has an internationally recognized responsibility to relieve the burden of international double taxation arising because of the overlapping assertions of taxing jurisdiction by the United States and the source country.

Having chosen initially to tax foreign-source income, the United States has an accompanying responsibility based on equity considerations to relieve double taxation through the credit.

On the other hand, if the responsibility of the domiciliary country to relieve international double taxation is recognized, a foreign tax credit is not the only means available. An alternative would be a "territorial" system that left out of account both foreign income and foreign taxes. Such an approach, in turn, would lead back to the question of the relative merits of capital-export and capital-import neutrality and reintroduce the appropriateness from an equity perspective of eliminating from the tax base a receipt that clearly would be included under traditional income notions.

In short, as in so many other tax policy issues, the possible theoretical starting points for analysis in the international area lead to quite different results, and the real-world phenomena are often "noisy" and inconsistent with any single overarching approach. The most important task for policy analysis at this point is to try to determine with more accuracy exactly what effect the complex system of rules has on the form and extent of international activity.

Notes

1. For a fuller exposition of the applicable U.S. tax law, see McDaniel and Ault (1981). For the details of the Tax Reform Act of 1986, see U.S. Congress (1987) and U.S. Congress, Joint Committee on Taxation (1987).

2. The Internal Revenue Code provides a series of mechanical rules for determining residence of aliens; see sec. 7701(b). Special rules exempt certain amounts of earned income received by citizens residing abroad; see sec. 911.

3. The Subpart F rules are described in more detail in sec. 1.2.1 below.

4. The foreign tax credit mechanism is discussed in more detail in sec. 1.2.2 below.

5. The U.S. shareholder must be a corporation and must own at least 10 percent of the voting stock of the foreign corporation. The deemed-paid credit is also available for taxes paid by lower-tier foreign subsidiaries under certain conditions as income is distributed up a chain of foreign corporations to the U.S. shareholder.

6. That is, the credit is limited to foreign taxes on income that is determined by the United States to be from a foreign source. If a foreign country imposed a tax on an item of income that under the U.S. source rules is determined to be U.S. source, the credit is in effect not available (unless there are other items of income from foreign sources that create excess limitation; see the discussion in sec. 1.2.2).

7. More technically, if there is no independently determined factory price, half the income is allocated to the location of the assets used in the production and sale and half to the place of sale. In practice, this means that, if property is manufactured in the United States and sold abroad with no sales assets located abroad, half the income is foreign source even though it is unlikely that any foreign jurisdiction will tax it (Treasury Regulations, sec 1.836-3(b)).

8. Treasury Regulations, sec. 904(g).

9. Such dividends are not subject to tax when received by nonresident aliens or foreign corporations if the dividend-paying corporation is subject to the branch profits tax discussed in sec. 1.3.4 below.

10. The determination of where an intangible is used is obviously not always easy.

11. See Bank of America v. U.S., 680 F.2d 142 (Ct. Cls. 1982).

12. Treasury Regulations, secs. 864(e), 1.861-9T. Special rules apply for the allocation of the interest expense of a foreign corporation with a U.S. branch that in effect try to take into account the relation between interest rates and exchange rate gain or loss (Treasury Regulations, sec. 1.882-5).

13. See the discussion in sec. 1.2.2.

14. The regulations originally provided that 30 percent of research and development costs would be allocated to the place in which more than 50 percent of the research costs were incurred. Congress enacted a moratorium on the application of the regulation and allocated all research and development expenses incurred in the United States to U.S.-source income. For 1987, 50 percent (rather than 30 percent) allocation was established by the 1986 Act and subsequently modified. Additional legislative action is anticipated.

15. For the branch operations described above, the translation rate is the average exchange rate for the year. Calculation of income under this so-called profit and loss method means that unrealized foreign-exchange gains or losses in the taxpayer's invested capital are not taken into account currently. Special rules apply to taxpayers who do business in "hyperinflationary economies," which in effect allow changes in the dollar value of invested capital to be accounted for currently.

In the case of a distribution of income from a foreign subsidiary that has a foreign currency as its functional currency, the translation rate is the spot rate in effect at the time of the distribution.

16. Appropriate adjustments are made if there is a difference between the amount accrued and the amount actually paid.

17. The legislative history of the 1986 Act recognizes the economic connection between exchange gain and interest income.

18. If the losses reduce U.S. income, i.e., if there is an overall foreign loss, adjustments are later required in the foreign-tax-credit fraction to limit the creditability of foreign taxes on an operation that, from the U.S. perspective, has not generated any net income.

19. Subject to the limitations of Subpart F discussed in sec. 1.3.2.

20. The rules apply to any foreign corporation in which "U.S. persons" own more than 50 percent of the voting power or value of the outstanding stock of the corporation. A "U.S. person" is defined as a U.S. individual or corporation that owns 10 percent or more of the voting stock of the foreign corporation.

21. The regulations have extensive rules defining the types of activities that constitute manufacturing as contrasted with mere assembly and packaging. In addition, the income would not be taxed currently if it bore a rate of foreign tax that approximated the U.S. rate.

22. This makes the source rule discussed in sec. 1.1.3 extremely important. This rule sources income from sales of inventory in the jurisdiction in which title is passed. That rule makes it possible to create income that is technically foreign source but is unlikely to attract any foreign taxes. As a result, the foreign taxes on high-tax foreign-source income can become currently creditable.

23. A special rule applies to interest that is subject to a high withholding tax. Such interest is segregated in its own basket to prevent averaging with other normally low-taxed passive income.

24. Technically, the DISC provisions were retained in a limited form, and an interest charge was imposed on the deferred tax liability. Thus, the taxpayer may still benefit from an indirect loan from the government at a potentially favorable rate of interest.

25. Treasury Regulations, sec. 924(d)-(e). In fact, since the FSC can "contract out" the foreign activities to related parties, its actual foreign presence can be minimal.

26. See U.S. Congress, Joint Committee on Taxation (1984, 1042). The European Community has "raised questions" about the FSC provisions under GATT.

27. See, e.g., Eli Lilly v. Commissioner, 84 T.C. 996 (1984).

28. See Treasury Regulations, sec. 936(h).

29. See U.S. Treasury Department (1984, 2:327–30). The Treasury analysis of the possessions tax credit estimated that the average tax benefit for corporations taking advantage of the possessions tax credit was $22,000 per employee while the average employee wage was only $14,210.

30. Rental income from real property is in principle taxed at the 30 percent gross rate, but the foreign taxpayer can elect to have the income treated as business income so that deductions such as depreciation, taxes, and interest are available. The resulting net income is taxed at normal U.S. rates.

31. As indicated below, very often the 30 percent rate is eliminated or reduced by treaty, and several important categories of income are exempt. Nonetheless, the existence of the high withholding rate can be significant in some circumstances.

32. The exemption for portfolio interest was added in 1984. Certain formalities must be complied with to ensure that the portfolio debt will not be acquired by U.S. taxpayers. Before the exemption in 1984, U.S. corporations could in effect issue tax-exempt bonds to foreign lenders through a convoluted technique involving the use of wholly owned finance subsidiaries organized in the Netherlands Antilles. The transactions took advantage of a tax treaty between the United States and the Antilles. These structures originated in the 1970s with the blessing of the Treasury Department to encourage U.S. corporations to borrow abroad during a period of balance-of-payments difficulties. The direct exemption for portfolio interest has made them obsolete, and the treaty on which they were originally based has been terminated.

33. See the discussion in sec. 1.3.4 below.

34. Although a sale of the shares would result in no current U.S. tax, presumably a purchaser would discount the purchase price for the shares to reflect the fact that it could get a stepped-up basis in the underlying assets of the corporation only by paying the corporate-level tax. Thus, the two methods of disposition would have roughly the same after-tax consequences to the seller.

35. H. Rep. 99-426, 99th Cong., 1st sess. (1985), 425.

36. The branch profits tax is only a surrogate for the tax on a dividend distribution to the foreign shareholder, but it technically falls on the foreign corporation, and thus the nondiscrimination clause is applicable.

37. A foreign corporation is deemed to be treaty shopping if more than 50 percent of its stock is owned by non–treaty country residents, with an exception for publicly traded corporations.

38. For an overview of the economics of international income taxation, see Adams and Whalley (1977), Sato and Bird (1975).

39. Grubert and Mutti (1987) present an analysis of the economic effects of the 1986 changes.

40. For a clear development of this point, see Bittker (1980).

41. In his elegantly clear exposition of tax policy in open economies, Dixit (1985) makes no mention at all of income taxes. For promising beginnings at integration of the two subjects, see the papers by Frenkel, Razin, and Symansky and by Gordon and Levinsohn in this volume.

42. For an extended discussion of income concepts and references to the literature, see Bradford (1986) or Institute for Fiscal Studies (1978).

43. Within the United States, income is typically allocated to different jurisdictions by formula. Formula apportionment solves some problems but introduces others. See Gordon and Wilson (1986).

44. Newlon's (1987) analysis of the taxation of multinationals provides a nice illustration of the importance of looking closely at the rules relating to specific transactions (such as payment of interest).

45. For a model that takes into account the imperfect substitutability of assets in different countries in investor portfolios, see Mutti and Grubert (1985).

46. This conclusion has long been recognized. See, e.g., Richman (1963) and Musgrave (1969). Feldstein and Hartman (1979) present a formal analysis.

47. For a forceful statement of this viewpoint, see Ross (1985).

48. For an analysis of tax policy determination as an international noncooperative game, see Gordon and Varian (1986).

49. Hufbauer and Foster summed up the law in 1976 as follows: "Both in legislation and in bilateral tax treaties, the United States has attempted to ensure the type of neutrality appropriate to different situations, while at the same time protecting U.S. tax revenue. Thus, United States taxation of the foreign income of U.S. owned firms embodies a mixture of capital-export neutrality, capital-import neutrality, and revenue protection clauses" (1976, 15).

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Comment Daniel J. Frisch

Tax policy debates generally take place on two levels. One concerns the broad outlines of tax structure; an example is the debate over full versus partial taxation of capital gains. This level considers the equity and efficiency effects of taxation and, at its best, is based on solid economic analysis. The second level takes the basic structure as given and debates how it should be applied to the myriad real-world situations in which taxpayers find or put themselves. For example, special treatment for capital gains spawned a vast and complex set of tax code provisions that defined capital

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gains and limited the types of income eligible for the preferential treatment. This type of debate does not typically involve economists; indeed, they are often completely unaware of it. Instead, it is usually left to lawyers.

This dichotomy is a healthy one. If economists, especially academic economists, wished to influence the second type of debate, they would have to incur a substantial investment to learn about all the line drawing and rule making that has gone on in the past. Economists and lawyers are nearly unanimous in agreeing that it would not be worthwhile for the former to do so. Further, it seems clear that those good at the detailed type of tax policy often have difficulty recalling fundamental objectives and developing fresh approaches for achieving them. In short, it is efficient for some analysts to specialize in the broad policy concerns and others to specialize in the detailed aspects of implementation.

A major problem for international tax policy is that this kind of specialization has withered away during the last decade or so. The current generation of tax policy economists, with a few exceptions, seems to have decided that, because learning all the detailed rules would be so costly, it should refrain from commenting on the field at all. This conclusion is incorrect and has led to a situation in which no one examines the basic principles. This conference will represent a major contribution, therefore, if it inspires a greater number of economists to address the basic issues in international tax policy.

The paper by Hugh J. Ault and David F. Bradford is a perfect one to start off a conference designed to achieve this goal. It surveys the current tax rules in an admirably clear and concise fashion and speculates on the economic principles on which they are and should be based. I will comment on each of these sections in turn.

Current U.S. Tax Rules

The survey of current rules that constitutes the first half of the paper (secs. 1.1–1.4) is a significant achievement. In a remarkably short span, it outlines all important aspects of current U.S. rules for taxing international activities. It starts from first principles, outlining who is subject to U.S. tax, what part of their income is taxed, and how double taxation is avoided. Despite this starting point, it encompasses all the rules, at least all U.S. rules, that any policy analyst needs to know. As is mentioned above, economists may have shied away from the field partly out of fear that they may inadvertently neglect some crucial tax detail that would undercut their analysis. This survey can cure this fear; after reading it carefully, economists will not have this reason, or excuse, for avoiding international tax policy questions any longer.

The survey would have been even more valuable, however, had it given some indication as to the relative importance of the tax issues described. This information would guide analysts in choosing the rules on which to

concentrate and in identifying the ones most likely to have large effects on economic activities. One way of providing this information would have been to discuss the available empirical evidence, including IRS statistics, revenue estimates that accompany tax legislation, the tax expenditure budget, and certain other Treasury Department publications.

For example, IRS statistics show that U.S. withholding taxes on interest, dividends, and royalties paid to foreign investors raise remarkably little revenue. This fact may cast some doubt on the importance of an issue mentioned several times in the paper, that the general withholding tax rate was not lowered from 30 percent when the Tax Reform Act reduced all other rates. (The reason why this issue is unimportant empirically is that the general rate applies only when a treaty is not present, and the vast majority of investment comes from or through treaty countries.) Revenue estimates could have been used in a similar fashion to reflect on the importance of the "branch tax" instituted in 1986. The revenue estimates accompanying the Tax Reform Act of 1986 indicate that this change is an exceedingly minor one empirically; it was estimated to raise only about $25 million a year. (See U.S. Congress, Joint Committee on Taxation [1987, 1047]. Reasons include that very little foreign investment in the United States occurs through branches and that treaties reduce or eliminate the tax for investors from most important countries.)

Another example concerns the subsidies for exports provided through the tax code. The survey mentions the special source rule for sales of "inventory property" and even (in n. 22) stresses its importance. Later, in a section describing subsidy provisions, the paper outlines the FSC (formerly DISC) provision that partially exempts income from exports. However, the survey neglects to point out that the former is a much more powerful incentive for exports than the latter. The tax expenditure numbers included in Special Analysis G of each year's Budget of the U.S. Government show that the sales source rule is the largest tax expenditure in the international area by far and is estimated to cost $2.9 billion for fiscal year 1989; the FSC provison is estimated to cost only $425 million. Finally, one should note that the paper does not completely neglect empirical evidence; note 29 uses a Treasury Department report to present an intriguing statistic on the efficiency of the other subsidy provision described, the "section 936" incentive for operating in Puerto Rico.

Economic Principles

The second half of the paper (secs. 1.5–1.9) sets an ambitious goal for itself, to describe and criticize the economic principles that underlie the current system of tax rules. Perhaps because the goal is so ambitious, this section is more than a little discursive; it presents aspects of each of its arguments in several different places. Therefore, it may be worthwhile to summarize the main points in a slightly different way than they are presented

in the paper. It seems to me that the section seeks to point out four types of problems with current analyses of international tax policy issues.

First, equity considerations have dominated international tax policy decision making, according to the paper. For example, the main argument for taxing worldwide income is that not doing so would violate horizontal equity. The decision to provide a foreign tax credit is more complicated, but "intranational equity" and "international equity" considerations are stressed. The problem is that, because international tax policy questions involve taxation of corporations or, more generally, return to capital, it makes very little sense to consider equity in this field. If the tax system is "unfair" to one particular channel for earning a return to capital, the amount invested in it will fall, but the properly measured net rate of return generally will not change. Thus, the relative position of individual investors, in equilibrium, will not be affected by "inequitable" taxation of corporations or other investment opportunities.

The second problem is that income, specifically the "Schanz-Haig-Simon" (SHS) concept, is a bad basis for tax policy. Actual taxation must be based on observable transactions, and it is exceedingly difficult to coax a measure of SHS income from them. Further, the SHS concept does not seem to answer several important international tax policy questions, including the fundamental one of whether specific items of income should be treated as foreign or domestic source.

The third problem has been described by Slemrod and others (as the paper acknowledges). Because tax systems vary, investors in various countries may face different after-tax rates of return on similar investments, yet we do not observe the specialization that should occur. It is very hard to construct a satisfactory economic foundation for a set of rules that, in their current form, should be causing serious arbitrage problems. There is a danger that economists' policy recommendations will end up sounding like, "The rules must be changed right away so that they are in a form that we can analyze."

The fourth problem is that we have been too narrow in our view of the ways in which income is earned abroad. Traditional models consider only the allocation of a homogenous K, capital, amoung countries. However, investors have lots of choices when deciding where and how to locate their capital. For example, U.S. investors who want to own capital abroad can buy shares in a U.S. corporation that has a foreign branch, a U.S. corporation with a foreign subsidiary corporation, or directly in a foreign corporation. A key distinction is that, in the first two alternatives, a U.S. corporation controls the foreign activities, but no U.S. investor has control in the third. Further, the U.S. tax system treats these investments very differently in several respects. The authors wonder whether control is important and, if so, how it should affect tax policy decisions. For example, it may be that repeal of "deferral" would cause U.S. investors to substitute their own foreign portfolio investment for their U.S. companies' foreign

direct investment. If so, the revenue and other effects of this response should be considered.

Each of these four themes has a great deal of truth in it; however, I am not sure that they lead to the formulation of a better set of economic principles. For example, I agree with the first conclusion, that equity is basically irrelevant to international tax policy. However, I did not find the premise convincing. Although they may mention equity considerations, most traditional analyses do not spend much time on them. Instead, they depend much more heavily on concepts such as *capital-export neutrality, national neutrality,* and *capital-import neutrality.* These terms all claim to address efficiency issues; indeed, even the more modern (though hardly more satisfactory) concept of *international competitiveness* claims to address the problem of maximizing the United States' economic effectiveness and thus falls within the efficiency concern. In fact, a brief (i.e., introspective) literature search turned up only one analysis of international tax policy that turns on equity questions (Vogel 1988). Note that the authors do not cite even this many analyses of international taxation in which equity considerations are crucial.

The second theme, that income is a faulty basis for taxation, also seems to miss the point to some degree. Many participants in the conference and readers of these words would have no trouble agreeing that, as one of the authors has persuasively argued on many occasions, a consumption-based tax may be preferable. However, I do not see how this conclusion forces one to decide that an income tax can never treat international income in a rational or consistent fashion. For example, just because neither Schanz, Haig, nor Simon considered the issue of the source of income does not imply that it cannot be studied. A well-specified model should be able to analyze the incentive effects of current source rules and indicate their effects on efficiency and welfare. If so, it may yield a consistent and valuable foundation for source rules; at least, the paper did not convince me that such an analysis is not worth a try.

The third theme is the existence of arbitrage opportunities and lack of equilibrium that should exist under current tax rules. This problem is not unique to international taxation. As Stiglitz (e.g., 1983) has pointed out, the voluntary nature of realizations causes a similar problem in capital gains taxation. His conclusions may apply here, too. If arbitrage opportunities continue to exist, there must be imperfections in international capital markets or tax rules that prevent their exploitation. Further, these imperfections and rules must be key aspects of the markets, and analyses of the effects of taxation should incorporate them.

The final theme is the need to differentiate between types of investments that confer control and those that do not. A U.S. multinational corporation's decision to locate activity abroad seems fundamentally different from a U.S.

investor's decision to add foreign securities to his or her portfolio. These decisions will involve different considerations and tradeoffs, and taxation will probably affect them in different ways. Therefore, it may be important to differentiate between foreign direct investment income and foreign portfolio income in tax policy analysis.

I am not sure, however, how useful it is to analyze these activities as if they were close substitutes. It is not obvious to me that a tax change that disadvantaged foreign direct investment would cause it to disappear rapidly, along with an equal rise in foreign portfolio investment. The size of the cross-elasticity is an empirical question, of course; however, until it is measured, there are strong reasons why it may be better to assume it is much closer to zero than infinity. Internationl trade economists have long known that the existence of multinational corporations has very little to do with access to capital or other factor-based comparative advantages (see, e.g., Caves 1982, chap. 2). Instead, they exist for "industrial organization" reasons; for example, large corporations have advantages in certain activities, such as R&D-intensive industries, where large fixed costs must be incurred. Evidence to support this view includes the fact that many multinationals raise capital, along with other factors of production, in the local market. This implies that U.S. multinationals may not be affected one way or the other if the U.S. taxed international capital flows more heavily. This view also seems to predict that U.S. participation in "pure" international capital markets may be relatively unaffected by a system that taxed U.S. multinationals more heavily, such as one that contained a repeal of deferral.

Despite this conclusion, I feel that the authors' observation that foreign direct investment income and foreign portfolio income are fundamentally different is the most important point in the second half of the paper. This observation indicates to me that tax policy analyses should examine them as distinct activities. Principles that apply to one probably do not apply to the other. Specifically, traditional analyses that concentrate on net rates of return and allocation of capital may be relevant for tax policy toward international portfolio investment, but they may have little to do with multinationals' activities. Instead, a new type of analysis may be necessary to identify the proper economic principles for taxation of multinationals' overseas income.

Summary

Ault and Bradford have provided us with a perfectly suited and extremely valuable first paper for this conference. It contains a survey of current U.S. rules that is remarkably clear, complete, and concise. Tax policy economists need no longer fear that analysis of international issues must be preceded by a lengthy and painful initiation into tax law. The paper also make a number of provocative comments on the economic weaknesses of current rules and

analyses but does not resolve these issues completely. Thus, the paper not only reduces the cost of studying international tax issues but also increases the benefits by indicating some important questions in need of answers.

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