# POLICY WATCH

Much of the interest in public economics and public finance comes from the interaction of theory and real world experience. Each needs the other: good theory when related in an understandable way to policy issues can be invaluable in helping policymakers and policy analysts better understand what they are doing, while thoughtfully explored experience can be the source of rich series of puzzles for theorists. Both theorists and those involved more directly in the formulation of public policy thus have much to gain by talking to each other in meaningful ways. The aim of Policy Watch is to provide a forum within which such discussion can take place.

The ambit of Policy Watch thus includes both papers discussing in a rigorous (but not technical) way interesting current policy issues and practices—matters which are important in the real world even if not yet reflected very clearly in the theoretical literature—and papers expositing recent theoretical and empirical results in a policy-relevant fashion. Papers are of course subject to the normal refereeing procedures of the journal, which may be expedited to preserve topicality. The editors on occasion may solicit survey or review articles, and welcome suggestions as to suitable topics.

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# Free Trade Taxation and Protectionist Taxation

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## *Abstract*

The goal of this paper is to seek new insight regarding international tax policy by recasting it in parallel with the theory of international trade. This is accomplished by defining a free trade taxation regime as one that is consistent with an efficient worldwide allocation of capital, and evaluating within this perspective various aspects of tax policy, such as value-added taxes, integration, income shifting, and the choice of worldwide or territorial system of taxes.

Compatibility with free trade is not the only standard against which to judge an international tax system. Nevertheless, as national economies become more integrated, the importance of international taxation for the efficient functioning of capital markets will become a central policy issue.

**Key words:** taxation, international trade

## 1. Introduction

Perhaps the only statement concerning international taxation about which all participants and observers agree is that it is extraordinarily complex. This is certainly true of the practice of international taxation, and the attempt to incorporate the complicated institutional realities makes the conceptual analysis difficult as well. Moreover, these realities are changing rapidly as global integration of national economies expands. Many have argued that the traditional objectives of international tax policy, such as capital export neutrality, are no longer relevant for today's economy and have proposed radical changes in the U.S. system of international taxation.

The goal of this paper is to seek new insight—indeed a new language—for international tax policy by recasting it in parallel with the theory of international trade. The potential gains from such an exercise are twofold. First, although international trade theory has been applied principally to policy instruments such as tariffs, quotas, and dumping, tax policy can have at least as large an effect on the flow of goods across countries, the location of productive activity, and the gains from trade as these trade policy instruments. Thus it is an important object of study in its own right. Second, there is a long history of reasoning pertaining to trade—the benefits of free trade, the costs of protectionism—that is fairly uncontroversial among economists. My hope is that by drawing on this reasoning the murky issues involved in international taxation can be clarified.

There is a potential downside to this strategy. It is that, although the preference toward free trade is well established among economists, is not well established elsewhere. On the contrary, the debate over trade policy continues, with the economist's view sometimes

prevailing and sometimes not prevailing. The downside risk is that the ensconced prejudices and misconceptions regarding trade policy will simply be attached to the issues of international tax policy, blurring issues rather than sharpening them. But this is not really a problem, since implicitly this is already happening. To make the linkage explicit could, in my opinion, only be a plus.

In the hope of maximizing the gains from a fresh perspective, in what follows I will purposely not refer to the standard catch phrases of international tax policy, such as capital export neutrality, capital import neutrality, and national neutrality. Nevertheless, many of the familiar arguments reappear here in somewhat different clothes. I begin in Section 2 by restating the classic case for free trade; the remainder of the paper draws out its implications for income tax policy in a global economy.

## 2. The case for free trade

The case for free trade is that the gains from trade, and therefore national income, are maximized when domestic consumers and producers face world prices that are undistorted by import tariffs, export subsidies, and the like. Consumers are made better off by the opportunity to exchange at world prices domestically produced goods for goods that can be obtained from abroad. The benefit from this exchange of goods will be maximized if domestic producers produce the goods and services that have the greatest possible value on world markets, which they will do in their own interest if they are free to trade at world prices.

This classic result does not imply that all members of a country will be better off from a move toward free trade. But since national income increases, all members could be made better off with a suitable redistributive policy.

According to this reasoning, free trade practiced by all countries will maximize world income. More important, a free trade policy adopted unilaterally will maximize the adopting country's national income, regardless of the trade policies of other countries. Even if a trading partner is subsidizing its exports, the importing country is better off not to respond by shielding its residents from world prices. As Krugman and Obstfeld (1991, p. 112) have put it, the appropriate response is to send the subsidizing country a "note of thanks" for offering its goods at bargain prices! As to countering a trading partner's tariffs with tariffs of one's own, Joan Robinson (1947, p. 192) remarked that "it would be just as sensible to drop rocks into our harbors because other nations have rocky coasts." Apparently economists' frustration with being unable to communicate these ideas to noneconomists has stimulated their invention of vivid metaphors.

The classic case for free trade depends on a number of assumptions about how the economy operates. In the absence of these assumptions, a case for trade policy intervention can be made. I do not have space in this paper to address each of these issues in detail; instead I will briefly summarize the key arguments that have been made:

1. If a country has monopoly or monopsony power with regard to a commodity, a tariff or subsidy can enable the country to profit from it. In the case of monopoly, the country ought to tax the export of the commodity to drive up its world price; in the case of

monopsony, it ought to impose a tariff on imports to drive down the price it pays for the good.

2. If the domestic economy is distorted, then trade intervention could offset the distortion and thereby increase national income. The distortion could be due to domestic tax policy, the lack of perfect capital markets for "infant" industries, or some other distortion. In such cases, it is generally better to eliminate the distortion than to counteract it with trade policy because trade intervention introduces new distortions even if it reduces others. Deardorff and Stern (1987, p. 39) compare trade policy to "acupuncture with a fork: no matter how carefully you insert one prong, the other is likely to do damage."
3. In the presence of oligopolistic markets, judicious policy can shift some of the pure profits from foreign firms to domestic firms; if domestic firms are owned by domestic residents, this can increase national income. Such a policy works only under rather restrictive conditions regarding the nature of the oligopolistic market, conditions that are difficult to identify empirically; for this reason designing a successful policy of selective intervention is impractical.
4. Countervailing duties may be strategically useful as a means of discouraging other countries from using opportunistic trade policies.

There are also noneconomic arguments for trade intervention, such as foreign policy or national security concerns, and there are certainly domestic political reasons why trade intervention will look attractive to politicians, but I will not address these issues here.

Note, with the exception of distortion-offsetting arguments, the rationales for trade intervention are all beggar-thy-neighbor policies—that is, to the extent that they increase national income, they do so at the expense of income in the rest of the world. Moreover, the decline in income elsewhere will exceed the gain in domestic national income, so from a global perspective these policies are wasteful. For this reason, a multilateral agreement to eliminate such practices can potentially increase each participating country's national income, given the possibility of transfers across countries.

No one country, acting on its own, can ensure that there is free trade throughout the world. The classical case for free trade advises any country to adopt free trade unilaterally, regardless of what goes on elsewhere. Most free traders do not, however, advocate unilateral free trade with no qualification or amendment. Instead they support multilateral commercial policy agreements—the GATT and more recently, the EC treaties and NAFTA—and often support unilateral strategic use of commercial policies, such as countervailing duties and antidumping actions, designed to induce other countries to adopt free trade policies. Foreign countries' moving toward free trade will, in general although not in each specific instance, benefit one's own country, so it is worthwhile to encourage those policies. In addition, a unilateral free trade stance is less viable politically in the face of commercial policy interventions by foreign governments, unless it is accompanied by "concessions" made by other countries.

In summary, the trade policy prescriptions are (1) unilateral free trade as a rule of thumb, (2) toleration of strategic use of protectionist measures as a device to eliminate trade barriers elsewhere, and (3) support of multilateral agreements to lower trade barriers.

## 3. The meaning of free trade taxation

What international tax policies do these prescriptions suggest? To answer this question, I must first define the concept of free trade taxation, first in the global context and then in the unilateral context.

First, recall that the orthodox free trade position is that there should be no tariffs at all, and no nontariff trade restrictions at all. This simple policy stance is obviously not applicable directly when the subject shifts from tariffs to taxes, for the simple reason that the U.S. federal tax system must raise well over $1 trillion annually. There must be tax revenue, and lots of it, and all taxes (other than those economists call *lump-sum*, such as poll taxes) distort some margin of choice, such as the work-leisure choice, the consumption-saving choice, and the invest-or-not choice, and therefore are the source of inefficiency.

How to design the *minimally* distorting tax system, subject to the other goals of the tax system such as equity and simplicity, has preoccupied public finance economists for more than half a century. Unfortunately, no consensus has arisen on simple rules for achieving this goal. There is, though, one proposition (due to Diamond and Mirrlees, 1971) that has far-reaching implications. It states that, given certain strong conditions, a tax system should, whatever other distortions it introduces, preserve "production efficiency." The required conditions include that pure profits either do not exist or can be fully taxed away and that a broad set of fiscal instruments can be utilized. Production efficiency is achieved when all firms face the same input prices, including the same cost of capital, and all firms face the same price of output. When this is violated, it would be possible, by reallocating production among firms, to increase the value of output for the same amount of inputs. In other words, failure to achieve production efficiency implies that the economy is operating with avoidable waste.

In a completely closed economy, production efficiency is compatible with either consumption taxes or a pure income tax, where "pure" implies a Haig-Simons comprehensive definition of income, including integration of the corporate and personal income tax systems. Under a pure income tax the cost of capital to firms will exceed the rate of return received by savers but will be equal for all firms, thus preserving production efficiency. Under a consumption tax the cost of capital is equal for all firms and is equal to the rate of return for savers.

The conditions under which the Diamond-Mirrlees proposition—that production efficiency must obtain in an optimal tax system—holds are certainly not satisfied in the world economy of 1995. Thus in principle there are cases in which this desideratum ought to be abandoned, although it is exceedingly difficult to describe analytically what those cases look like. In what follows I make use of some aspects of production efficiency to establish a conceptual standard for free trade in capital and to assess under what conditions an income-tax-based system achieve this standard.

### *3.1. Global optimality*

From a global perspective, production efficiency is achieved and worldwide income is maximized only if, regardless of where the real investment is located, the nationality of the

investing firms' headquarters, or the citizenship of the capital owner, all investments face the same risk-adjusted "hurdle rate" or pretax required rate of return. This condition ensures that investments with lower pretax (that is, social) rates do not, for tax reasons, get made while investments with higher pretax returns stay on the shelf. This is the standard for free trade in capital, including both tangible and intangible capital, that I will use in what follows.

Consider a world economy in which each national economy is completely closed off from all others. In this case the hurdle rate in each country will be determined by the interaction among domestic residents' propensity to save, domestic investment opportunities, and tax and other government policies that affect the rate of return. There is no reason to expect the hurdle rate to be equal across countries and therefore no reason for global production efficiency to be satisfied. It is conceivable that investments that could earn 15 percent in one country will not go forward, while at the same time investments located in another country yielding 8 percent will be undertaken.

One potential benefit of opening up these closed economies is the amelioration of the production inefficiency. Some of this will be accomplished if borders are opened only to trade in goods and services, but not to financial or investment flows, via the "factor price equalization" mechanism familiar to international trade economists. Capital-intensive goods will be relatively costly to produce in countries with a relatively high cost of capital and will tend to be imported rather than produced domestically, while labor or land-intensive goods will tend to be produced domestically and exported. The sectoral shift of production will reduce the demand for capital in those countries, pushing down the cost of capital. The same mechanism in reverse will increase the cost of capital in those countries that, in the absence of trade, had a relatively low cost of capital and marginal return to investment.

Trade in goods and services is unlikely, by itself, to eliminate differences in the return to investment for several reasons: different technologies of production, specialization of production, and because of natural barriers (such as transportation costs) and man-made barriers (tariffs, quotas, and so on) to trade flows. Thus, even with international trade in goods and services, cross-country differences in pretax required rates of return are likely to persist. The free international flow of capital can, depending on what its tax treatment is, alleviate this production inefficiency.

### *3.2. What tax structures are consistent with global production efficiency?*

What pattern of tax rates and systems, including the corporate, personal, and withholding tax rates and the system of double taxation relief, will ensure that free trade in capital is achieved? The answer to this question depends on, among other things, what presumptions are made about the extent of capital and labor mobility. Unless otherwise specified, in what follows I will presume perfect capital mobility (all investments available to all investors on equal terms, tax rules aside) and no labor mobility. These are stylized assumptions meant to capture the current reality that capital is much more mobile across national boundaries than is labor.

One pattern that works is a pure residence-based tax system. Under this system residents of each country are taxed on all their capital income, perhaps with a progressive rate structure,

regardless of where the physical investment is located or on what process of intermediation it passes through. This could be achieved either if source countries forego any taxation of nonresidents' earnings within the country, or if all countries tax the worldwide income of their residents on accrual, and offset source countries' taxes by offering an unlimited foreign tax credit. Under the first method, a country that levies a (presumably integrated) corporation income tax must rebate any taxes collected from foreign owners; for example, a wholly foreign-owned domestic corporation would owe to the host country no corporation tax and certainly no withholding taxes. No foreign tax credit system would be needed for any country, as no government collects taxes from foreigners in the first place.

Under the second method, all corporate income tax systems would have to be integrated, so that the corporate tax acts essentially as a withholding tax for the personal tax system. Integration benefits would have to be granted to foreign shareholders and coordinated by the investor's home country so that the total rate of tax is no different for foreign and domestic investments. Countries' corporate tax rates need not be identical for production efficiency to occur. For any given set of personal tax systems, a high corporate rate would be offset by higher imputation credits granted at the personal level to shareholders in the affected corporations.

It is important to note that the concept of residency used above refers to individuals and not to the legal or tax residence of corporations. A residence-based tax of this type would have to look through the corporate entity to the individual shareholders, so that the total tax burden on any given shareholder would not depend on the rate of source-based tax that is levied in any jurisdiction or on the legal residency of the corporations whose shares are owned. Under such a system higher taxes paid by a corporation, holding constant worldwide rates of personal tax, would be accompanied by lower taxes payable by the shareholders. The apparent corporate tax penalty is exactly offset by a lower cost of capital faced by the firm.

For production efficiency, it is not necessary that all countries levy the *same* rate of tax on their residents. Nor is it required that any country levy the same rate on all its citizens. In the presence of these differences, the pretax hurdle rate would be the same in all locations, but the after-tax rate of return earned by any individual saver would depend inversely on the rate of tax levied by his or her home government.

Current international tax arrangements are a long way from this pure residence-based system because of concerns over national sovereignty and also because of certain inescapable administrative and compliance concerns. First of all, no country has seen fit to refrain from taxing the excellent tax "handle" afforded by domestically located, but foreign-owned, capital. Furthermore, as long as some countries continue to tax on a worldwide basis, lowering source-based tax often merely transfers revenue from the host country to the home country treasury. Second, there is concern that if foreign-owned capital were exempt from taxation, domestic residents would be able to set up foreign corporations and thereby avoid taxation. Finally, and related to the foregoing concerns, is that it is much more difficult for a country to monitor and collect tax revenue from tax bases located outside the country. For this reason many countries do not even subject foreign-source income to taxation; many of those that do so according to law are not particularly successful in actually collecting tax on foreign-source income.

Taking account of the administrative and compliance costs of taxation implies that a pure residence-based tax is not optimal; it is certainly not close to what we observe today. What about the other extreme alternative, a pure source-based tax? Under this system, each country taxes all income generated within its borders, at the same rate, regardless of who owns the assets, and foregoes any taxation on the foreign-source income of its citizens. This would involve a flat-rate business tax, no additional personal income tax on corporate income, and no withholding taxes.

Several problems arise with this sort of system. First of all, progressive taxation of a comprehensive measure of income is impossible because foreign-source income cannot be included in the base. Second, as long as tax rates differ across countries it puts tremendous pressure on the definition of "where" income is generated; I will have more to say about this issue later. Finally, a source-based tax system ensures global production efficiency only if all countries choose exactly the same effective tax rate, where the tax rate is interpreted as net of any income-related benefits provided by the host government. In the absence of this condition, the pretax hurdle rate will be higher in those countries that feature higher tax rates. Recall that uniformity of tax rates across countries was not required for the production-efficient residence-based system described earlier. Absent some mechanism for harmonizing tax rates, the source-based tax system does not guarantee free trade in capital.

The pure residence-based tax and pure source-based systems are not practical tax regimes that support production efficiency. Are there other regimes that support free trade? Devereux (1993) discusses a model in which production efficiency obtains in a system featuring no withholding taxes, equal overall corporate tax rates for any company regardless of the location of investment, equal corporate tax rates faced by all companies investing in a given country, and a residence-based personal tax system under which any personal tax paid on capital income is independent of the location of the company. In this stylized model of the world economy individuals can freely purchase shares in companies headquartered in any country, and any company can make real investments in any country. Two further assumptions are noteworthy. The first is that, for any given location, one country's firms are considered to have access to a separate set of investments from any other country's firms. Second, the only way an individual investor in Country A can obtain an equity interest in an investment located in Country C of a firm from Country B is by buying shares in B; the option of directly buying shares in B's affiliate company in Country C is ruled out.

This model is also a useful framework for addressing the claim made in Frisch (1990) and Hufbauer (1992) that production efficiency does not require equal corporate tax rates for any company regardless of the location of the investment. Their argument is that, given the openness of modern portfolio flows, multinational companies do not play a decisive role in the allocation of capital investment across countries. In essence, they characterize the parent companies of multinational enterprises as being predominantly providers of headquarter services and coordination. The affiliate operating companies raise much of their capital by borrowing and selling shares on international markets. If, at the margin, the affiliates raise funds from portfolio investors, be they debt or equity holders, rather than from parent-provided equity, then the issue of two potential layers of corporate taxation and double taxation relief is not important in assessing investment incentives. (If at the margin all funds come from borrowing, then no layer of corporate taxation is important for understanding the incentive to invest.)

This issue does not arise in the context of Devereux's model because it is assumed there that foreign affiliates are entirely equity financed by the parent. Introducing this consideration into a formal model raises the issues of optimal financing of foreign affiliates when portfolio and parent equity financing are both available but have different tax consequences, and the difficulty of modeling an equilibrium when otherwise equivalent financing arrangements have different tax consequences. No such models have been worked out. As Gordon and Jun (1993) point out, any such model would have to address the key nontax difference between the two—that corporate investments abroad allow joint control and operation in two countries, whereas portfolio investments just affect ownership of the firm's income; their empirical investigation finds only a small part of the mix between portfolio and direct equity firms to be tax-influenced. As long as marginal investments by foreign affiliates are substantially financed by parent equity transfers, the taxation of multinationals' foreign-source income remains an important factor in capital allocation.

Let me try to summarize the conclusions of this discussion of what international tax systems are consistent with free trade in capital, defined as equal hurdle rates for all investments. In stylized models of the world economy that restrict the range of available financial strategies, either a pure residence-based or pure source-based (with equal tax rates in all countries) are consistent with production efficiency; however, administative and compliance considerations suggest that the residence-based system is impractical, and there is no reason to expect harmonization of source-based tax rates. Hybrid systems with elements of both source-based and residence-based taxation can also be consistent with equal hurdle rates.

The current system certainly does not exactly replicate any of the structures that would be consistent with free trade, just as worldwide tariff and other commercial policies are not consistent with complete free trade in goods and services. This implies that alternate policies could increase world income.

### *3.3. Unilateral free trade taxation*

Let me now put aside the meaning of free trade taxation in a global context and return to appropriate unilateral tax policy. By analogy to trade policy, the first prescription is that, as a rule of thumb, unilateral free trade taxation be pursued. But what exactly does unilateral free trade mean in the context of capital income taxes? Although I want to focus my attention on outbound foreign invesment, I will first say a few words about efficient taxation of inbound investment. It is a well-known result in optimal taxation (see, e.g., Slemrod, 1990) that, under certain conditions, a small open economy should impose no investment-reducing tax on inbound investment; the conditions include abstracting from administrative and compliance concerns. Note also that certain taxes on inbound investment may not be investment-reducing if the capital-exporting country offers a foreign tax credit.

As discussed above, this theorem has not prevented source-based taxation of capital income from being the international norm, one that I expect to persist. This raises the question of the appropriate tax treatment of outbound foreign investment in a world where source-based taxation is the norm. Because the answer will be counterintuitive to some, let me pursue the analogy with trade policy regarding goods and services. If a foreign country

levies import duties, what is the appropriate response of the exporting country? The unilateral free trade response is to allow those goods to leave the country at the world price and let the importing country's domestic price be higher than the world price because of the import duty. It is not appropriate to levy an export subsidy high enough to offset the import tariff.

The analogy to the taxation of cross-border flows of income from investment is as follows. If the country where the investment is located levies a tax, the country where the investor is resident should offer no credit for these taxes. Furthermore, if it wishes to levy an income tax on its residents, the base for such a tax should be income net of taxes levied by the source country. (This argument was made in Richman, 1963). It is as if the source country is levying a tax on imports of capital; the capital-exporting country, in its own interest, ought not to offset it with an export subsidy.

In practice no country, and certainly not the United States, adopts this policy. Instead, all capital-exporting countries offer some form of offset to taxes imposed by the source country, either in the form of a limited tax credit for foreign taxes paid or by exempting foreign-source income from the taxation that is applied to domestic-source income. However, as discussed in Section 4.2, some counties with imputation systems of integration can effectively impose an additional level of taxes on foreign direct investment.

The U.S. policy of providing foreign tax credits has been characterized as "mercantilist" by Schmidt (1975) because it favors foreign investment at the expense of the national interest. This claim is correct from a unilateral perspective because it is in the interest of one country to ensure that, at the margin, the return to the country of all investments be equal, and the return to the country includes taxes paid to the country and not taxes paid to the host country. Thus, full taxation of foreign investment income with deductibility of foreign taxes paid is unilaterally appropriate but not consistent with global free trade in the presence of ubiquitous source-based taxes. Is it appropriate to characterize full taxation with deductibility as beggar-thy-neighbor behavior? In a sense it is because the loss from this policy to the host country due to lost investment would exceed the gain to the capital-exporting nation. This usage of the term is somewhat strained, though, as the trade analogy makes clear: if all importing countries impose a tariff on a particular good, then it is beggar-thy-neighbor for an exporting country *not* to impose an export subsidy.

In practice all nations forego the unilaterally optimal, but beggar-thy-neighbor, policy and in so doing avoid one route to double taxation of foreign investment that would be inimical to global free trade. It's as if, faced with tariffs imposed by all nations importing a certain good, all the exporting nations imposed exactly offsetting export subsidies. This would eliminate any trade distortions and thus be optimal from a global perspective but would not be in the exporting countries' interest because it would essentially be a transfer payment to the foreign government. Thus it is inevitable that the division of revenues becomes an important and contentious element of the current international tax regime. Bilateral tax treaties generally feature a reciprocity clause, requiring equal withholding levies for capital flows in both directions; this is designed to maintain an equitable distribution of tax revenues in the presence of two-way capital flows. Whether it in fact achieves this goal depends also on the corporate tax rates and the details of the integration systems in place; on this point see Ault (1992).

Thus, in contrast to trade policy, a basic feature of U.S. taxation of foreign-source income—the alleviation of double taxation—cannot be defended on the ground of unilateral free trade but must be viewed as part of a system that could be consistent with global free

trade. However, other aspects of international tax policy can be made consistent with unilateral free trade, in the sense of avoiding beggar-thy-neighbor policies. For example, because the United States' domestic saving and investment is large relative to world markets, it likely has some monopoly power—that is, the ability to affect world interest rates. If it is a net capital exporter, it can take advantage of its power by taxing capital exports, thus driving up the rate of return on its net exports; if it is a net capital importer, it should tax capital imports, thus driving down the rate of return it must pay on those imports. The spirit of unilateral free trade dictates that these opportunities not be exploited.

The prescriptions for free trade included the possible strategic use of policies directed at countries who do not themselves play by the rules of global free trade. Are there any useful analogies of this idea to international tax policy? Can one identify tax actions taken by other countries that are protectionist in nature and that could arguably require "countervailing" tax action?

Discrimination against foreign-owned firms would probably qualify. However, most developed countries pledge nondiscrimination of company taxation through the existing network of bilateral tax treaties. A standard feature of these treaties is a clause that stipulates that tax treatment of a domestic company will not depend on whether the company is domestic owned or foreign owned.

Thus, two of the fundamental features of the international tax structure—relief of double taxation and nondiscrimination—are broadly consistent with, but by no means ensure, global free trade. Continued adherence to these principles is clearly desirable. But that leaves many of the aspects of a country's international tax regime unspecified. It also leaves unclear what criterion ought to be used to evaluate these aspects. Should the criterion be unilateral national income maximization, with the presumption that adherence to double taxation relief and nondiscrimination fulfills the country's obligations to free trade? Alternatively, should the United States seek to extend the range of policies that, if adopted multilaterally, can, by enhancing free trade in capital, potentially lead to increased national income in the United States and abroad? This is a critical question that underlies all policy analysis of international tax policy but that is usually left implicit. I believe that policy debates would be clarified if this issue is dealt with explicitly.

In what follows I address five topics in international tax policy with the dual objectives of assessing how consistent they are with free trade principles and, in light of these findings, evaluating the appropriate policy stance in each area. The first two topics—the value-added tax and integration—are not currently features of the U.S. tax system but may be in the future and certainly are important features of the tax sytems of many of our major trading and investing partners. The final three topics are of current and future relevance to the U.S. tax system.

## 4. Aspects of tax policy: free trade or protectionist?

### *4.1. The value added tax*

The United States stands alone among the G-7 countries in not having a value-added tax (VAT) as part of its revenue structure. Many of those who advocate adopting one in the United States point to its apparent export-enhancing features.

In fact a uniform, flat-rate VAT is in no way protectionist or mercantilist. It is completely consistent with free trade in capital and ideas. This is true even though a VAT, as usually implemented, taxes imports and rebates all tax that has been paid on the value added of exports. This treatment of imports and exports merely ensures that a flat-rate VAT is, administrative issues aside, equivalent to a uniform retail sales tax. As such it imposes no tax on capital investment, regardless of ownership, and causes no distortion in the location or magnitude of investment.

The essence of this argument is often misunderstood. The essence is that a VAT, as usually implemented, allows the immediate deduction of capital expenses and for this reason is not a deterrent to investment. The treatment of imports and exports is *not* essential. Not taxing imports and not rebating tax on exports would convert the VAT from a retail sales tax to an output tax but would still in the long run not impose a tax on capital as opposed to any other productive input. For this reason, advocates of the VAT who stress its export-promoting qualities are misguided. Of course, substituting a VAT for a tax that is not neutral with respect to exports of capital or goods can have a trade-enhancing effect. It is also true that an origin-based VAT that exempts nontraded goods such as services can have trade effects. On these points see Feldstein and Krugman (1990).

### *4.2. Integration*

Having a separate tax on corporation income, with interest paid deductible, and on the capital income of individuals leaves open the possibility that the income earned on behalf of corporate equity owners will be taxed twice—once at the corporate level and again when either dividends are paid to the shareholders or capital gains are taxed at the personal level. Most economists believe that this double taxation causes an inefficiently low allocation of capital to the corporate sector, is biased toward corporate debt financing, and distorts corporate distribution policy.

In order to alleviate the double taxation many countries have enacted some form of corporate tax integration, either in the form of a preferential corporate-level tax on distributed earnings or, more commonly, by offering tax relief at the shareholder level via a full or partial imputation credit or by simply reducing or eliminating the normally applicable rate of tax on dividend income. I will focus my attention on shareholder level relief, the more common of the two kinds of integration.

Shareholder-level tax relief offered to domestic residents, regardless of whether the shares owned were of domestic or foreign corporations and regardless of whether the income of the corporations was domestic or foreign-source, is perfectly consistent with free trade. Under free trade each country has the right to determine the level of taxation on capital income of its residents. Granting such tax relief would increase the after-tax rate of return for residents on equity investments and reduce the cost of capital to any firm receiving funds from these residents.

Note that it is not required that the shareholder relief be available to foreign shareholders, nor is it in most situations. One noteworthy exception is the United States—United Kingdom tax treaty, entered into in 1978, under which a U.S. direct investor is entitled to one-half of the normally available imputation credit; the United Kingdom offers this treatment to

other countries as well. In many cases, though, the imputation credit has been extended by treaty to foreign portfolio investors.

A more problematic aspect of most integration schemes is that resident portfolio investors are granted no credit for dividends received from foreign corporations. Furthermore, domestic corporations cannot take into account foreign-source income in the calculation of the amount of credit associated with their dividends paid to domestic shareholders; however, there is generally a "stacking" rule such that dividends paid to domestic shareholders are presumed to come first from domestic-source income and only from foreign source income after all domestic income has been distributed.

In those cases where foreign-source income is deemed to be distributed to domestic shareholders, the implicit multilateral, understanding to avoid an extra layer of taxation on foreign-source income is broken. Under a full imputation system, foreign-source income is essentially taxed twice, with foreign taxes deductible, while domestic-source income is taxed once. Recall from Section 3.3 that this system is consistent with unilateral national income maximization but is not consistent with global free trade because the hurdle rate of foreign direct investments from companies resident in integration countries will be higher than that of other investments.

Note that if a country with a classical (nonintegrated) corporate tax system were to grant no double tax relief for foreign-source income and subject it to full tax with deductible foreign income taxes, this would also be incompatible with global free trade, but with one extra layer of tax for both domestic-source and foreign-source income. In this case there would be three levels of tax on foreign-source direct investment income (foreign corporate, domestic corporate, and domestic personal) and two levels of tax on domestic-source corporate income. The fully integrated tax system described above would subject foreign-source income to two levels of tax and domestic-source income to one level. Either case is inconsistent with global free trade because it penalizes foreign investment.

### *4.3. Border protectionism and ownership protectionism*

One important difference between trade policy and tax policy is that while trade policy operates at the border and is blind to corporate residency, tax policy can operate at the margin of corporate residency. For example, U.S. tariffs are imposed on all imported products, regardless of whether the good is produced abroad by a foreign-owned company or an affiliate of a U.S.-owned company. Domestically produced goods are not subject to tariffs and benefit (or suffer, if the imported goods are inputs) from the higher domestic prices caused by tariffs, regardless of whether the producer is U.S.-owned or foreign-owned. Thus, trade policy raises the issue of what might be called *border protectionism.*

Income taxation, because it can impose differential taxation depending on corporate residence, may also involve another kind of protectionism, which I will refer to as *ownership protectionism* although this is somewhat of a misnomer to the extent of international diversification of share ownership. Whether it does or not depends on the structure of the income tax in place. If, for example, all countries scrupulously practiced nondiscrimination of business enterprises, levied no withholding taxes, and operated territorial systems of taxation, any two corporations with the same real operations and results spread over

the world would pay the same total tax, regardless of the residency of the parent corporations and even in the face of varying tax rates across countries. A French company and U.S. company would pay the same total tax if both companies operated exclusively in the United States, exclusively in France, exclusively in Singapore, or in some combination of these and other countries.

Differences can arise, though, because the U.S. taxes its resident multinationals on a worldwide basis and France taxes on a territorial basis. In this case there is a potential tax penalty placed on a U.S. multinational versus a French multinational that depends on the locational pattern of activity. There would be no substantial difference if the two multinationals operated exclusively in countries of similar tax rates such as France and the United States. The difference arises only to the extent of operations in a low-tax country. The U.S. parent company, but not the French parent, could be subject to a residual tax on repatriation of income from its affiliate in the low-tax country. The apparent difference is also mitigated if the U.S. multinational operates not only in low-tax countries but also in foreign countries with average tax rates that exceed the U.S. average rate. In this case the U.S. system allows repatriated income from a low-tax country such as Ireland to be "mixed" with repatriated income from a high-tax country such as Germany, with the result that no net tax need be paid to the United States government.

From the standpoint of global efficiency, there is no reason that the total (corporate plus individual) tax burden on the income of a multinational enterprise should depend on the parent company's country of incorporation. It is no more efficient than, in a domestic context, taxing corporations with names beginning with the letters A through K at one rate, while taxing at a higher rate those with names beginning with L through Z (and not allowing name changes!) If enacted, Lollapollooza Corporation could not compete with Kennebunkport Corporation if they produced exactly the same products. If they produced slightly different products, Lollapollooza might survive but at a diminished scale and diminished variety of output. As Frisch (1990) has argued, one efficiency cost of this discrimination could be a reduced variety of products available to the world market.

Whether higher corporate taxes translate into higher total taxes depends on the tax system in place. As discussed in Section 3.2, this would not occur if all countries adopted a pure residence-based tax, where residence refers to the residence of individuals and not corporations. Corporations subject to more tax would necessarily have shareholders who had a lower personal tax burden, and so their cost of capital would be low enough to offset the higher corporation tax payments. Under the current international system of taxation, which is not a pure residence-based system and not perfectly integrated, this offset will not occur.

Some have claimed that a tax penalty on U.S. resident multinational enterprises would be especially harmful to the U.S. national interest. One argument is that legal residence generally is associated with "headquarters" activities, such as research and development, that are especially beneficial to U.S. economic performance. If these benefits to the country cannot be captured by the firms themselves, there is an economic argument for subsidizing, and certainly not penalizing, such "externality" producing activities. A relatively high tax rate on the worldwide activities of U.S.-based multinationals would, over the long run, divert economic activity to other multinationals, reducing the amount of headquarters activities carried out in this country.

This argument ignores the availability of alternative policies that are better targeted to address the externalities issue. Any specific activities, associated with the headquarters of multinational enterprises or not, that produce positive externalities should be subsidized and, for the most part, already are. I have in mind research and development expenditures, which can be expensed rather than amortized for tax purposes and which are eligible for an incremental tax credit. It may be that the current effective rate of subsidy is too low, but that argues for raising it; the rate of tax on all U.S. headquartered multinational enterprises, regardless of their externality producing activities, is too blunt an instrument for this purpose.

Another line of argument is based on the empirical fact that U.S. companies tend to be primarily owned by U.S. citizens, while foreign companies tend to be owned by foreigners. For this reason it would be in the national interest to develop policies that shift profits from foreign to U.S. companies. In oligopolistic markets, tax breaks can work just as well as export subsidies (that is, only in very selective circumstances that are more easily conceptualized than made operational) in shifting profits toward domestic firms. However, as Levinsohn and Slemrod (1993) show, in the simplest case this profit shifting is best achieved by subsidizing the output of domestic firms, not distinguishing between domestically located and foreign-located production and allowing foreign taxes as a deduction. There may, though, be a case for favoring foreign operations if some sectors are perfectly competitive and some are oligopolistic, and if trade policy, but not tax policy, can be sector-specific. In this case a tariff may have to be used, and location nonneutrality tolerated, so as to target the subsidy to the oligopolistic industries. In this case the targeting advantage of trade policy over tax policy overrides the production inefficiency caused by the tariff.

### *4.4. Income shifting and tax havens*

Another important difference between tariff policy and tax policy is that the basis for duties is the value of transaction, while for income tax policy the basis is a measure of income. Income is a considerably more slippery concept to define, and the *location* of the income of an integrated global enterprise is a conceptual nightmare; Ault and Bradford (1990) have gone so far as to argue that it is not meaningful.

Given differences in tax rates across countries, and the fact that no country has a pure residence-based system of taxing corporations, there are incentives to take advantage of the difficulty of locating income to reduce an enterprise's worldwide tax burden. A multinational operating in two countries in which the marginal tax rate on a dollar of income is different would, *ceteris paribus*, prefer to shift income from the high-tax country to the low-tax country. Such shifting can be accomplished by the judicious setting of prices of transactions between corporate affiliates or by judicious international financial policy (for example, by doing borrowing in high-tax countries).

Holding the location of real activity constant a country gains when a dollar of taxable income is shifted into it, while the country from which it is shifted loses. The world is currently populated by a set of countries, known loosely as tax havens, that set low marginal tax rates and look the other way, or even encourage, the inward shifting of taxable income. To stanch the outward flow of taxable income, countries that have relatively high tax rates

must establish an enforcement structure to monitor transfer pricing, earnings stripping, and other methods of income shifting.

Tax havens can be classified into two types. In one type, the country levies a very low tax rate on the income from manufacturing operations located in its jurisdiction. In the second type, the country offers a low tax on the income of corporations whose legal domicile is that country. One motivation behind becoming the first type of tax haven is to attract real investment and economic activity into the country. This is not a primary motivation behind the second kind of tax haven; in this case the country is essentially offering its services, for a fee, to individuals and corporations pursing tax avoidance and evasion.

Even the first type of tax haven opportunistically gains from income shifting. Consider the example of Ireland, which offers a preferential tax rate of 10 percent on the income reported due to manufacturing operations in that country. Having established an affiliate in Ireland, a multinational enterprise has the incentive to shift taxable profits to that country from higher tax countries. Thus it is no coincidence that such countries implement a low marginal effective tax rate (METR) on investment via a low statutory tax rate strategy as opposed to a strategy of a high statutory rate combined with generous investment tax credits and depreciation allowances. Although any particular low METR can be obtained with the latter strategy, it would not make the country a magnet for income shifting, only for real activity.

Local content rules are a useful analogy to tax havens in the domain of international trade. Imagine that the United States imposes quantity restrictions on the import of steel from Japan and Korea. In order to enforce such restrictions, there must be a way to identify imports from an unrestricted country, such as Mexico, as having originated in Mexico rather than in Japan or Korea. This is usually accomplished by attempting to measure the "local content" of the imports from Mexico and requiring it to be above a prespecified level in order to be imported without restriction. These rules are similar to the antitreaty shopping provisions of income tax treaties, which seek to limit the rerouting of income through tax havens to minimize tax payments. A country that, for some compensation, collaborates with the restricted countries to evade the United States' local content rules is acting similarly to a tax haven. In what follows I will refer to the behavior of tax havens with a concocted term—*predatory tax protectionism*. It is predatory because it is clearly a zero-sum or, as I argue below, a negative-sum game, in which the tax haven's gains are offset by losses to the rest of the world.

From a global perspective, the presence of tax havens is costly for at least two reasons. First, there are substantial resource costs expended by the tax collection agencies of the rest of the world to minimize inappropriate income shifting and substantial resources costs expended by the multinationals themselves to accomplish such shifting. Second, there are distortions in the kind of real activity that the (first type of) tax haven attracts—that is, high margin production such as pharmaceuticals and electronics which facilitate income shifting. Absent income shifting considerations, there is no economic reason why such activities should be located in Ireland or Puerto Rico, which can offer income shifting advantages to U.S. corporations.

I have argued elsewhere (Slemrod, 1988) that the costs due to tax havens and income shifting are appropriately dealt with via a multilateral agreement that would restrict statutory corporate tax rates to lie within a small band and impose sanctions on those countries that

choose not to comply; countries would be permitted to be magnets for real investment but would have to do so by offering investment tax credits rather than low statutory tax rates. This (a minimum statutory corporate tax rate) is the approach suggested as a first step toward more corporate tax harmonization by the Ruding Committee, the experts' committee of the European Commission charged with recommending what, if any, tax harmonization should be adopted in concert with the 1992 curtailment of barriers to free trade in goods and services; this suggestion was not, however, embraced by the European Community.

On a unilateral basis, it is imperative that the U.S. international tax system be designed to counteract predatory tax protectionism. It is clear that the U.S. rules in this regard impose large costs on multinationals operating here (see Blumenthal and Slemrod, 1994), but it is also evident that the potential stakes involved in income shifting are large as well (Harris et al. 1993). In a purely domestic context it does not generally make economic sense to push tax enforcement until the point where, at the margin, revenue gained equals cost because the revenue gained does not represent a benefit to the country but instead is a transfer of resources. In the context of international income shifting, revenue gained does represent a benefit to the country (although not to the world as a whole), as it comes at the expense of a foreign treasury. Thus it does make sense, from a unilateral perspective, to push enforcement much harder in an income shifting context than in a domestic context. From a global perspective, as suggested above, there will be an inefficiently large expenditure on this kind of enforcement.

### *4.5. Worldwide or territorial system?*

Because it involves most of the issues discussed above, it is fitting to close by addressing the choice between taxing worldwide income, with a limited foreign tax credit, and taxing only income earned within the United States. To be precise, the territorial alternative I consider would tax passive or portfolio income on a worldwide basis but tax active business income on a territorial basis.

Because either system affords relief from double taxation, either is generally consistent with free trade. However, a territorial system allows and, compared to a worldwide system, encourages host countries to attract capital investment by offering a low marginal effective tax rate. This is inimical to free trade because it implies that the hurdle rate will be lower in those countries than elsewhere. It allows lower rates because there is no residual tax imposed by the U.S. government. It encourages low rates because high rates are less likely to be offset by credits from the home country government once the United States gets out of the business of offering foreign tax credits; only Japan and the United Kingdom will remain, and these countries have tax sparing treaties with many developing countries that essentially exempts foreign-source income earned in the treaty partners' countries from residual taxation by the home country.

How does the choice look from a unilateral perspective? First of all, the territorial system is simpler to administer and comply with than the worldwide system, so a switch will in the long run save on collection costs. However, as Tillinghast (1991) has noted, an exemption system would still be complex both because passive and active income would have to be distinguished and because a territorial system would increase the potential gains from

income shifting and therefore put pressure on the transfer pricing rules and other enforcement tools.

Another important criterion is whether a worldwide system of taxation offers a better defense against predatory tax protectionism in the form of tax havens. Does the potential residual tax imposed either on accrual or repatriation provide an important backstop to our attempt to tax domestic-source income, in the same way that the corporation tax can be justified as a backstop to the objective of taxing capital and labor income in general? This is an important question that I view as open. It would be worthwhile to compare the success in this regard of those countries, such as France and the Netherlands, which operate territorial systems.

How do the two systems stack up with regard to ownership protectionism? I argued above that there is no compelling reason for the U.S. government to either penalize or subsidize U.S. parented multinational enterprises versus those of other countries. Under the current system there is a relative tax penalty to U.S. multinationals whose foreign operations are predominantly in low-tax countries; the United States will impose a residual tax on repatriated earnings, a tax not owed by non-U.S. multinationals.

Note, though, that a careful recent study (Grubert and Mutti, 1993) concludes that the tax shortfall from switching to an exemption system would be small, $0.2 billion compared to $97.9 billion of foreign-source income. This is because many of the U.S. multinationals that operate in low-tax countries also operate in high-tax countries and thereby can set their repatriation strategy to avoid any residual tax to the U.S. government. It is also because some U.S. multinationals now repatriate a mix of high-taxed dividends with low-taxed royalty and interest income to avoid substantial residual tax; under an exemption system, the dividend income would be exempt, but the royalty income would still be subject to worldwide taxation subject to a foreign tax credit.

These revenue estimates suggest that, taking all U.S. multinationals as a group, whatever ownership tax penalty currently exists is small and would not be significantly altered by the change to a territorial system. A cautionary note about the revenue estimates is in order, though, because they depend critically on an assumption of minimal behavioral response to the change in tax regime. This is unlikely to be true; for example, repatriations now labeled as royalties could be reclassified as dividends, thus avoiding U.S. tax. The extent of this kind of *relabeling elasticity* is difficult to forecast accurately.

## 5. Conclusions

Compatibility with free trade is not the only standard against which to judge an international tax system. Its implications for equity, within and across countries, and its consistency with domestic tax regimes come to mind as two other potentially important factors. Nevertheless, as national economies become more integrated, and as barriers to trade in goods and services fall, the importance of international taxation for the efficient functioning of capital markets will become a central concern.

Free trade in capital is achieved only if the hurdle rate for investment is equal regardless of the location of the real activity, of the nationality of the corporation doing the investment, and the nationality of the ultimate owner of the equity income. The existing international

tax regime could be consistent with, although certainly does not achieve, this result because countries of residence adopt some form of relief from double taxation. As in the case of a set of export subsidies offsetting import tariffs, this system reduces trade distortions, although it creates nettlesome issues of transfers between the importing and exporting countries.

The fact that a central feature of U.S. international tax policy—double tax relief—is best viewed as part of a multilateral understanding that supports free trade makes it problematic to evaluate the ancillary characteristics of that policy. In cases where they conflict, what criterion should be used to evaluate tax policy? Should it be unilateral national income maximization, with the presumption that adherence to double taxation relief and nondiscrimination fulfills the country's obligations to free trade? Or should the United States seek to extend the range of policies which, if adopted multilaterally, can, by enhancing free trade in capital, potentially lead to increased prosperity in the United States and abroad?

Income shifting and tax havens are critical problems for an international tax system that relies on source-based taxation. I conclude that it is important that the U.S. tax system defend its revenues with policy and enforcement measures that are more stringent than those applied to domestic compliance; the United States should also pursue multilateral means to harmonize corporate tax rates so as to reduce the incentives for income shifting and the reward to tax havens that practice "predatory tax protectionism." There is no reason, from either a global or national perspective, that U.S. parented multinational enterprises should pay more tax than a foreign-parented group with similar operations, but neither is there a compelling argument for tax breaks on the grounds of "ownership protectionism." Finally, although both a territorial and worldwide system of taxation could be consistent with global free trade, there are important differences between the two systems. The territorial system is simpler and more likely to avoid a penalty for U.S. ownership but is more likely to encourage divergent worldwide tax rates and therefore deviations from free trade. Perhaps the most critical question is whether a territorial system can be as effective as a worldwide system in defending against predatory tax protectionism in the form of income shifting.

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