Evaluating International Tax Reform

Abstract *- This paper introduces "capital ownership neutrality" (CON) and "national ownership neutrality" (NON) as benchmarks for evaluating the desirability of international tax reforms, and applies them to analyze recent U.S. tax reform proposals. Tax systems satisfy CON if they do not distort the ownership of capital assets, which promotes global efficiency whenever the productivity of an investment differs based on its ownership. A regime in which all countries exempt foreign income from taxation satisfies CON, as does a regime in which all countries tax foreign income while providing foreign tax credits. Tax systems satisfy NON if they promote the profitability of domestic firms, and therefore home country welfare, by exempting foreign income from taxation. Standard normative benchmarks of capital export neutrality, national neutrality, and capital import neutrality carry very different implications, since they fail to account for the productivity effects of tax–induced changes in capital ownership. Proposed U.S. tax reforms that reduce the taxation of foreign income, thereby bringing the U.S. tax system more in line with the systems of other countries, have the potential to advance both American interests and global welfare.*

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National Tax Journal
Vol. LVI, No. 3
September 2003

INTRODUCTION

Much of the current structure of U.S. taxation of foreign income dates to the early 1960s, and, remarkably, so too does much of current thinking on the desirability of taxing foreign income. The U.S. regime of taxing foreign subsidiaries of American multinational corporations was put in place in 1962, and despite numerous modifications in subsequent years, the system used by the United States to tax foreign income has been broadly unchanged since the early 1960s. American individuals and American corporations owe tax to the U.S. government on their worldwide incomes, but are entitled to claim credits for income taxes paid to foreign governments. Taxpayers are permitted to defer U.S. taxation of unrepatriated foreign income earned by separately–incorporated foreign subsidiaries, though this deferral is limited.

Every political season in the United States brings new issues and controversies, typically including tax legislation that has foreign provisions. Proposed U.S. legislation in 2003 illustrates this trend, with three major legislative initiatives directed at those inclined to change the taxation of foreign income. This flurry of interest reflects not only the importance of international taxation to modern economies and the unsettled nature of the U.S. tax treatment of foreign income,

but also fundamental uncertainty over what constitute desirable attributes of systems of taxing foreign income. Economic theory offers three benchmarks for assessing the desirability of tax systems and reforms. The concepts of "capital export neutrality" (CEN) and "capital import neutrality" (CIN), introduced by Richman (1963), and which she refined in Musgrave (1969), are mainstays of the welfare analysis of international tax reform. These principles characterize tax systems directed at maximizing global welfare, while "national neutrality" (NN) is characteristic of home–country tax systems directed at maximizing home–country welfare.

The purpose of this paper is to describe new methods of evaluating the desirability of taxing foreign income, and to use these methods to consider current U.S. international tax reform proposals. The analysis introduces capital ownership neutrality (CON), the principle that world welfare is maximized if the identities of capital owners are unaffected by tax rate differences, and national ownership neutrality (NON), the principle that national welfare is maximized by exempting foreign income from taxation. The second section of the paper motivates the emphasis on ownership that is central to CON and NON and that is missing from standard welfare frameworks. The third section describes CON and NON, drawing attention to the very small change in assumptions that distinguishes them from standard welfare benchmarks. The fourth section evaluates current international tax reform proposals according to these alternative welfare frameworks. The fifth section is the conclusion.

THE IMPORTANCE OF OWNERSHIP TO THE WELFARE ANALYSIS OF FDI

It is common practice in analyzing the desirability of international tax rules to posit that foreign investments by multinational firms from different countries are equally productive. In contrast, CON and NON put differences between owners at the center of the welfare analysis of international tax rules. In order to consider the appropriate role of ownership in evaluating international tax rules, this section considers evidence on the role of ownership in determining patterns of foreign direct investment (FDI) and on the effects of tax rules on ownership.

Ownership and FDI

Since Hymer (1976), the literature on foreign direct investment starts from the observation that FDI is driven by the needs of firms in markets, and therefore represents something much more than the transfer of net savings between countries. Caves (1996), who offers an excellent survey of this literature, notes that the intuition that multinational firms are merely conduits for capital to arbitrage differences in rates of return between countries has been found to be "neither satisfying theoretically nor confirmed empirically" (p. 26). In its place, economic models of multinational behavior have emphasized a transaction–cost approach whereby multinational firms emerge because of the advantages conferred by joint ownership of assets across locations. These advantages are understood to stem from proprietary assets that are best exploited under common ownership.

The most common manifestation of this framework for explaining foreign direct investment in the international business literature—Dunning's eclectic paradigm—emphasizes how ownership, localization, and internalization (OLI) are the fundamental determinants of foreign direct investment.[1] Specifically, multinational firms are thought to engage in foreign direct investment when ownership

[1] See Dunning (1981). While the OLI framework is usually considered relevant for horizontal FDI, vertical FDI similarly emphasizes the transaction–cost approach.

confers specific advantages relative to arms–length relationships, so activities are most profitably undertaken within the firm. An obvious implication of this approach is that multinational firms differ in the proprietary assets (e.g., brands, production processes, patents) they can exploit and that these differences are critical to understanding the patterns of FDI and the productivity of these firms.[2] In addition to differences in business practices contributing to the possible importance of ownership, scholars are paying increasing attention to differences in institutions (e.g., legal regimes) and the ways in which these variables can influence firm outcomes. These country–level differences would provide another reason to expect ownership to be associated with different patterns of FDI and the productivity of that investment.[3]

The modern property rights approach to the theory of the firm, as developed in Grossman and Hart (1986) and Hart and Moore (1990), suggests that the prevalence of incomplete contracts provides a rationale for particular configurations of ownership arrangements. The ability to exercise power through residual rights when contracts are unable to prespecify outcomes provides an economic rationale for when ownership is important. Such settings are particularly likely to characterize multinational firms investing abroad. Desai, Foley, and Hines (forthcoming) analyze the changing ownership decisions of multinational firms, finding that globalization has made firms more reluctant to share ownership of foreign affiliates, given the higher returns to coordinated transactions inside firms. The costs and benefits of ownership appear to be central, and increasingly so, to the choice between investing in a country and serving the same market with arm's–length transactions.

It is useful to consider the importance of ownership with reference to a specific example. Consider the establishment of an automotive manufacturing plant in a large emerging market. Why might the productivity of this plant differ depending on whether a local or multinational firm owns it? One can easily imagine that the multinational firm may be more productive given the ability to extend a global brand or to transplant proven production processes to the emerging market. Similarly, the ability to integrate this plant within a worldwide production process or to use expatriates with related experience in similar markets could also have important productivity consequences. Finally, the ability to use incentive contracts tied to equity where minority shareholders have protections could similarly lead to productivity differences. While this example emphasizes a productivity advantage for the multinational firm, the more general point is that ownership is likely to be associated with significant productivity differences.

Recent evidence illustrates the degree to which foreign direct investment represents transfers of ownership rights rather than reallocations of property, plant, and equipment between countries. Table 1 categorizes foreign direct investment into the United States, as reported by Anderson (2002), as either the establishment of new entities or the acquisition of preexisting entities. These figures suggest that the vast majority of FDI in the United States over the last decade represents transfers of ownership rights rather than greenfield

[2] Morck and Yeung (1991, 1992) test the internalization hypothesis and find that multinationality is only valued in the presence of intangible assets and overseas acquisitions are met with positive stock market reactions that are a function of the level of intangible assets of the acquiring firm.

[3] See Djankov et al. (2003) for a discussion of this "new comparative economics." Rossi and Volpin (2002) apply this logic to the cross–border market for corporate control and demonstrate that cross–border transactions typically involve targets from countries with poorer investor protections than those of the countries from which their acquirers come.

TABLE 1
FOREIGN DIRECT INVESTMENT INTO THE U.S. BY MODE OF INVESTMENT, 1992–2001

	U.S. Businesses Acquired ($)	U.S. Businesses Established	Total Investment Outlays ($)	Share thru Acquisitions (%)
1992	10,616	4,718	15,334	69.23
1993	21,761	4,468	26,229	82.97
1994	38,753	6,873	45,626	84.94
1995	47,179	10,016	57,195	82.49
1996	68,733	11,196	79,929	85.99
1997	60,733	8,974	69,707	87.13
1998	182,357	32,899	215,256	84.72
1999	265,127	9,829	274,956	96.43
2000	322,703	12,926	335,629	96.15
2001	127,946	4,996	132,942	96.24

Source: Anderson, Thomas W. "Foreign Direct Investment in the United States: New Investment in 2001," *Survey of Current Business*, June 2002, pp. 28–35. Dollar amounts in millions.

investment. The fact that most FDI in the United States represents the acquisition of assets from existing owners, typically at a premium, implies that much of what drives FDI is that certain assets have greater value to foreign firms than they do to domestic firms.[4]

The distribution of U.S. multinational activity abroad likewise suggests that FDI is driven by something other than transfers of net saving between countries. Table 2 profiles the distribution of gross product (sales minus purchases from other firms) for U.S. multinationals in 1999. American multinationals produced almost two–thirds of their total gross product in eight high–income economies that year. Moreover, capital outflows from the United States between 1997 and 2000 are similarly concentrated in rich economies. If it were the case that the function of foreign direct investment by multinational firms is to move capital from where it is abundant to where it is scarce, then FDI would not be so highly concentrated in high–income destinations. Instead, it appears that American firms invest abroad in response to productivity differences as-

TABLE 2
THE DISTRIBUTION OF GROSS PRODUCT AND CAPITAL OUTFLOWS OF U.S. MULTINATIONAL FIRMS

	1999 Gross Product ($)	1999 Share of Worldwide Gross Product (%)	1997–2000 Capital Outflows ($)	1997–2000 Share of Worldwide Capital Outflows (%)
United Kingdom	103,048	18.19	135,657	23.95
Canada	65,780	11.61	52,546	9.28
Germany	61,913	10.93	12,882	2.27
France	37,485	6.62	9,817	1.73
Japan	30,269	5.34	21,817	3.85
Italy	22,408	3.96	12,591	2.22
Australia	19,625	3.46	13,158	2.32
Netherlands	19,018	3.36	45,869	8.10
Mexico	17,556	3.10	21,469	3.79
Brazil	16,593	2.93	18,095	3.20
All others	172,701	30.49	222,417	39.27
Total	566,396	100.00	566,318	100.00

Source: Lowe, Jeffrey H. "U.S. Direct Investment Abroad: Detail for Historical Cost Position and Related Capital and Income Flows, 2001,"*Survey of Current Business*, September 2002, pp. 68–97. Gross product data are drawn from the most recent benchmark survey in 1999. Dollar amounts in millions.

[4] Harris and Ravenscraft (1991) and Marr, Mohta, and Spivey (1993) find larger wealth effects for U.S. targets of foreign acquirers relative to domestic acquirers and find that these greater gains are associated with the likelihood that the target and acquirer are in related businesses.

sociated with ownership. In sum, the literature on FDI and the available data indicate that ownership, and its attendant costs and benefits, are likely to be central to explaining the determinants of multinational investment.

Taxation and Ownership of FDI

Do taxes influence the level and ownership of FDI? Home–country taxation has the potential to affect the ownership of foreign assets by changing after–tax returns and thereby inducing the substitution of one investment for another. As a general matter, investors from countries that exempt foreign income from taxation have the most to gain from locating their foreign investments in low–tax countries, since such investors benefit in full from any foreign tax savings. Investors from countries (such as the United States) that tax foreign profits while providing foreign tax credits may benefit very little (in some cases not at all) from lower foreign tax rates, since foreign tax savings are offset by higher home–country taxation. These relative tax incentives therefore create incentives for investors from countries that exempt foreign income from taxation to concentrate their investments in low–tax countries, while investors from countries that tax foreign income while providing foreign tax credits have incentives to concentrate investments in high–tax countries.

There is considerable evidence that patterns of foreign investment respond to incentives created by home–country tax regimes. Hines (1996) compares the location of investment in the United States by foreign investors whose home governments grant foreign tax credits for federal and state income taxes with the location of investment by those whose home governments do not tax income earned in the United States. Investors who can claim credits against their home–country tax liabilities for state income taxes paid in the United States should be much less likely than others to avoid high–tax states, and the behavior of foreign investors is consistent with this incentive. Hines (2001) compares the distribution of Japanese and American FDI around the world, finding Japanese investment to be concentrated in countries with whom Japan has "tax sparing" agreements that reduce home country taxation of foreign income.

Recent empirical work indicates the extent to which ownership decisions of U.S. multinationals are affected by tax incentives. Desai and Hines (1999) measure the extent to which American firms shifted away from international joint ventures in response to the higher tax costs created by separate "basket" provisions of the Tax Reform Act of 1986.[5] Altshuler and Grubert (2003) and Desai, Foley, and Hines (2003) demonstrate that American multinational firms increasingly use "chains of ownership" for their foreign affiliates, including intermediate ownership by affiliates located in countries that exempt foreign income from taxation, to facilitate deferral of home country taxation. The National Foreign Trade Council (1999) argues—through case study examples of the foreign flag shipping, life insurance, and oil and gas pipeline industries—that tax rules have altered the positioning of U.S. firms relative to multinationals from different countries leading to changes in ownership patterns within these industries. And Desai and Hines (2002) analyze dramatic ownership reversals in which U.S. multinational firms expatriate by inverting their corporate structure, reconfiguring their ownership as foreign corporations in order to reduce the burden imposed by U.S. tax rules. These and other cases indicate that ownership

[5] Similarly, Altshuler and Hubbard (2003) use the tightening of anti–deferral rules on financial services income to demonstrate how the location of assets across host countries is influenced by home country rules.

patterns of foreign affiliates and their parent companies are significantly affected by tax incentives in their home countries.

ALTERNATE WELFARE FRAMEWORKS

This section reviews the standard welfare benchmarks used to evaluate the taxation of foreign income, the distinguishing features of CON and NON, and the circumstances in which each is appropriate.

Standard Welfare Benchmarks

Capital export neutrality (CEN) is the doctrine that the return to capital should be taxed at the same total rate regardless of the location in which it is earned. If a home country tax system satisfies CEN, then a firm seeking to maximize after–tax returns has an incentive to locate investments in a way that maximizes pre–tax returns. This allocation of investment corresponds to global economic efficiency under certain circumstances. The CEN concept is frequently invoked as a normative justification for the design of tax systems similar to that used by the United States, since the taxation of worldwide income with provision of unlimited foreign tax credits satisfies CEN. This is not exactly the system that the United States uses, since taxpayers are permitted to defer home country taxation of certain unrepatriated foreign income, and foreign tax credits are subject to various limits. Nonetheless, CEN is often used as a normative benchmark against which to evaluate contemplated changes to the U.S. system of taxing foreign income,[6] since tax systems that satisfy CEN are thought to enhance world welfare.

The standard analysis further implies that governments acting on their own, without regard to world welfare, should tax the foreign incomes of their resident companies while permitting only a deduction for foreign taxes paid. Such taxation satisfies what is known as national neutrality (NN), discouraging foreign investment by imposing a form of double taxation, but doing so in the interest of the home country that disregards the value of tax revenue collected by foreign governments. From the standpoint of the home country, foreign taxes are simply costs of doing business abroad, and therefore warrant the same treatment as other costs. The home country's desired allocation of capital is one in which its firms equate marginal after–tax foreign returns with marginal pretax domestic returns, a condition that is satisfied by full taxation of foreign income after deduction of foreign taxes. This line of thinking suggests that the American policy of taxing foreign income while granting foreign tax credits fails to advance American interests because it treats foreign income too generously. In this view there is a tension between tax policies that advance national welfare (NN) by taxing after–tax foreign income, and those that advance global welfare (CEN) by taxing foreign income while permitting taxpayers to claim foreign tax credits. The practice of much of the world, including Germany, France, Canada, and the Netherlands, that effectively exempts foreign income from taxation, is, by this reasoning, difficult to understand, since it is inconsistent with either national or global interests.

The third of the standard efficiency principles is capital import neutrality (CIN), the doctrine that the return to capital should be taxed at the same total rate regardless of the residence of the investor. Pure source–based taxation at rates that differ between locations can be consistent with CIN, since different investors are taxed (at the corporate level) at iden-

[6] See, for example, the analysis in U.S. Congress, Joint Committee on Taxation (1991, pp. 232–64), and U.S. Treasury (2000).

tical rates on the same income. In order for such a system to satisfy CIN, however, it is also necessary that individual income tax rates be harmonized, since CIN requires that the combined tax burden on saving and investment in each location not differ between investors. While CEN is commonly thought to characterize tax systems that promote efficient production,[7] CIN is thought to characterize tax systems that promote efficient saving. Another difference is that CIN is a feature of all tax systems analyzed jointly, whereas individual country policies can embody CEN or NN. As a practical matter, since many national policies influence the return to savers, CIN is often dismissed as a policy objective compared to CEN and NN.

It is important to clarify the five main assumptions built into the standard normative framework that delivers CEN and NN as global and national welfare criteria. The first assumption is that the goal of home–country governments (in the case of NN) is to maximize the sum of tax revenue and the after–tax worldwide profits of home–country firms, which is equivalent to maximizing national income. The second assumption is that tax policies of other countries are unaffected by changes in home–country tax policies. The third assumption is that tax rate differences are unrelated to the differences in the benefits that host countries receive from incoming foreign investment. The fourth assumption is that home countries receive no special benefits from the headquarters activities of resident multinational firms. And the fifth assumption is that the activities of foreign firms is unaffected by the repercussions of changes in the home–country taxation of foreign income. The first assumption makes sense if domestic residents are residual claimants (as shareholders, employees, or in other capacities) on the returns earned by home–country firms, and the residence of home–country firms is unaffected by the taxation of foreign income. The first assumption also ignores the second–best nature of taxation, in which governments must distort economies in order to raise revenue, so additional government revenue is typically worth more than income accruing to residents. The second assumption corresponds to countries not acting strategically in setting taxes, while the third assumption requires that tax rates are unrelated to the social value of additional investment. The fourth assumption rules out productivity spillovers from multinationals to other local firms. The first four assumptions have been criticized in the literature, and their implications explored,[8] though defenders of CEN and NN maintain that they are robust to changes in these assumptions.[9]

The fifth assumption underlying the CEN and NN framework, that foreign firms do not respond to changes induced by home–country taxation, has received almost no attention but may be the most critical of all.[10] Investment by domestic firms at home and abroad may very well influence investment by foreign firms, a scenario that is inconsistent with the logic underlying CEN and NN. If greater investment abroad by home–country firms triggers greater investment by foreign firms in the home country, then it no longer follows that the home country

[7] Horst (1980) identifies circumstances in which the optimal taxation of foreign income corresponds to CEN; see also Dutton (1982) and Horst (1982). Rousslang (2000) offers a recent statement of the significance of CEN.

[8] See, for example, Hamada (1966), Hufbauer (1992), Keen and Piekkola (1997), Hines (1999b), and others surveyed by Gordon and Hines (2002).

[9] See, for example, Rousslang (2000).

[10] Exceptions include work by Levinsohn and Slemrod (1993) and Devereux and Hubbard (2000), who consider the possibility that home–country taxation influences the strategic interaction of domestic and foreign oligopolists in world markets.

maximizes its welfare by taxing foreign income while permitting only a deduction for foreign taxes paid. From the standpoint of global welfare, if home and foreign firms compete for the ownership of capital around the world, and the productivity of an investment depends on its ownership, then it is no longer the case that the taxation of foreign income together with the provision of foreign tax credits necessarily contributes to productive efficiency.

Capital Ownership Neutrality[11]

Tax systems satisfy capital ownership neutrality if they do not distort ownership patterns. It is easiest to understand the welfare properties of CON by considering the extreme case in which the toal stock of physical capital in each country is unaffected by international tax rules. In this setting, the function of foreign direct investment is simply to reassign asset ownership among domestic and foreign investors. If the productivity of capital depends on the identities of its owners (and there is considerable reason to think that it does), then the efficient allocation of capital is one that maximizes output given the stocks of capital in each country. It follows that tax systems promote efficiency if they encourage the most productive ownership of assets within the set of feasible investors.

Consider the case in which all countries exempt foreign income from taxation. Then the tax treatment of foreign investment income is the same for all investors, and competition between potential buyers allocates assets to their most productive owners. Note that what matters for asset ownership is comparative advantage rather than absolute advantage: if French firms are always the most productive owners of capital, but they do not have the resources necessary to own everything, then efficiency requires that French firms own the capital for which their rate of return difference with the rest of the world is the greatest. The United States would reduce world welfare by taxing foreign income while permitting taxpayers to claim foreign tax credits, since such a system encourages American firms to purchase assets in high–tax countries and foreign firms to purchase assets in low–tax countries. These tax incentives distort the allocation of ownership away from one that is strictly associated with underlying productivity differences.

CON is satisfied if all countries exempt foreign income from taxation, but the exemption of foreign income from taxation is not necessary for CON to be satisfied. If all countries tax foreign income (possibly at different rates), while permitting taxpayers to claim foreign tax credits, then ownership would be determined by productivity differences and not tax differences, thereby meeting the requirements for CON. In this case the total tax burden on foreign and domestic investment varies between taxpayers with different home countries, but every investor has an incentive to allocate investments in a way that maximizes pretax returns. More generally, CON requires that income is taxed at rates that, if they differ among investors, do so in fixed proportions. Thus, CON would be satisfied if investors from certain European coun-

[11] The phrase "capital ownership neutrality" appears in Devereux (1990), which discusses the possibility that productivity levels vary with owners and investigates the implications of such differences for world welfare. The paper concludes that, in settings in which productivity varies more with owners than with location, source–based taxation is recommended for global efficiency. While the conclusion is that productivity differences associated with location are more important than those associated with owners, it is noteworthy that the paper considers the implications of productivity that differs between owners. Devereux (1993, 1998), Devereux and Pearson (1995), and Slemrod (1995) analyze related issues, including interactions of corporate and individual tax regimes.

tries face home and foreign tax rates that are uniformly 1.2 times the tax rates faced by all other investors.

In order for the allocation of capital ownership to be efficient it must be the case that it is impossible to increase output by trading capital ownership among investors. This efficiency condition requires not necessarily that capital be equally productive in the hands of each investor, but that the potential gain of reallocating ownership to a higher–productivity owner be exactly equal to the cost of such a reallocation by offsetting ownership changes elsewhere. Since taxpayers allocate their investments to maximize after–tax returns, the marginal dollar spent on new investments by any given investor must yield the same (expected, risk–adjusted) after–tax return everywhere. It follows that, if net (host country plus home country) tax rates differ between investments located in different countries, marginal investments in high–tax locations must generate higher pre–tax returns than do marginal investments in low–tax locations. Selling an asset in a low–tax location and purchasing an investment in a high–tax location increases output by the firm engaging in the transaction, but (generally) reduces output by the firm on the other side of this transaction. If both parties face the same tax rates, or face taxes that differ in fixed proportions from each other, then CON is satisfied, ownership reallocation would have no effect on total productivity, and the outcome is therefore efficient. If some countries tax foreign income while others do not, then it is impossible to restore CON without bringing them all into alignment. Individual countries have the potential to improve global welfare by moving their taxation of foreign income into conformity with an average global norm, though the general theory of the second best applies (see, e.g., Dixit 1985), and a movement toward conformity is not always guaranteed to improve global welfare.

The welfare implications of CON are less decisive in settings in which the location of plant, equipment, and other productive factors is mobile between countries in response to tax rate differences. Tax systems then determine the location of production as well as patterns of ownership and control, so the net effect of taxation on global welfare depends on the sum of these effects. There is considerable econometric evidence that international tax rate differences influence the location of property, plant, and equipment investment,[12] which conforms to anecdotal accounts of tax–motivated FDI in low–tax locations such as Singapore and Ireland. Hence pure source–based taxation at rates that differ between countries may encourage excessive investment in low–tax countries,[13] even though it would satisfy CON. If one country were then to tax foreign income while providing foreign tax credits, it would have the effect of reducing the welfare cost of real capital misallocation, but do so at the cost of distorting the ownership and operation of industry. Whether the cost of having too many factories in the Bahamas is larger or smaller

[12] See, for example, Grubert and Mutti (1991), Hines and Rice (1994), Altshuler, Grubert, and Newlon (2001), and Desai, Foley, and Hines (2002, 2003).

[13] As Hines (1999b) and others note, the welfare cost of excessive investment in low–tax countries takes country tax rates to be unrelated to the social value of FDI. Tax rate differences between countries may instead be correlated with the net benefits governments perceive foreign direct investment to bring. Countries for whom the economic activity associated with foreign direct investment is most valuable, due to local economic conditions, tax policies, or other government policies, are the most likely to offer foreign investors attractive tax climates. Conversely, countries that perceive important costs to be associated with foreign direct investment are generally unwilling to try to attract foreign investment with low tax rates. To the extent that local tax rates reflect the local costs and benefits of FDI, it no longer follows that investment in low–tax countries is excessive from the standpoint of global welfare.

than the cost of discouraging value–enhancing corporate acquisitions is ultimately an empirical question, though the importance of ownership to FDI suggests that its welfare impact may also be substantial.

National Ownership Neutrality

The same circumstances that make CON desirable from the standpoint of world welfare also imply that countries acting on their own, without regard to world welfare, have incentives to exempt foreign income from taxation no matter what other countries do. The reason is that additional outbound foreign investment does not reduce domestic tax revenue, since any reduction in home–country investment by domestic firms is offset by greater investment by foreign firms. With unchanging domestic tax revenue, home–country welfare increases in the after–tax profitability of domestic companies, which is maximized if foreign profits are exempt from taxation. Tax systems that exempt foreign income from taxation can therefore be said to satisfy "national ownership neutrality" (NON). Hence it is possible to understand why so many countries exempt foreign income from taxation, and it follows that, if every country did so, capital ownership would be allocated efficiently and global output thereby maximized.

National welfare is maximized by exempting foreign income from taxation in cases in which additional foreign investment does not reduce domestic tax revenue raised from domestic economic activity.[14] This condition is satisfied if, to the extent that marginal foreign investment reduces domestic investment by domestic firms, it triggers an equally productive amount of new inbound investment from foreign firms. In more general cases, the welfare–maximizing tax treatment of foreign investment depends on the extent to which foreign investment substitutes for domestic investment lost due to new outbound FDI, and the relative productivities of foreign–owned and domestic–owned capital in the home country. If foreign investment and domestic investment are equally productive in the home country, but inbound foreign investment replaces only 75 percent of domestic investment lost due to outbound FDI, then the analysis implies that the optimal home–country policy is to tax 34 percent of the after–tax foreign income earned by home–country firms.[15]

The analysis of NON takes as its basis the setting used in the standard NN analysis of home country tax policies, one in which home–country welfare is a function of the after–tax profitability of home–country firms. With worldwide ownership of firms, it is possible that home countries no longer attach any special value to the profits of their resident companies. If so, then home–country welfare becomes a function of tax revenue and after–tax in-

[14] This result is similar to those obtained by Slemrod, Hansen, and Procter (1997) in a related context. The desirability of exempting foreign income from taxation presumes strict adherence to international transfer pricing rules. One possible justification for the taxation of foreign income with provision of foreign tax credits is that such a system removes the incentive to reallocate taxable income to low–tax foreign jurisdictions, thereby protecting the domestic tax base (see, for example, McIntyre, 1993). The evidence, surveyed by Hines (1999a), indicates that the location of taxable income is sensitive to tax rate differences, though whether home-country taxation of foreign income is effective in protecting the domestic tax base (and whether it requires protection) is an open question.

[15] Specifically, if home–country firms have fixed capital stocks, so additional FDI comes at the expense of domestic investment, then the optimal repatriation tax rate, given by τ_r, can be shown to equal: $\tau_r = (1 - \tau^*)\tau(1 - \gamma)/(1 - \tau\gamma)$, in which τ is the domestic tax rate and τ^* is the foreign tax rate. γ is the product of the additional foreign investment triggered by a dollar of outbound FDI by home country firms and the ratio of the marginal products of foreign and domestic investors in the home country. This 34 percent calculation uses the U.S. statutory rate of 35 percent [(1 – 0.75) / (1 – 0.35*0.75)].

comes of domestic residents. As is well–known from the results of Diamond and Mirrlees (1971), competition between jurisdictions then produces an outcome in which countries find it in their interest to exempt all capital income from taxation. If followed by all countries, such an outcome satisfies all of CON, NON, CEN, NN, and CIN.

EVALUATING CURRENT REFORM PROPOSALS

Various proposals for reforming the taxation of foreign income are currently under consideration by the United States Congress. The likely impact on domestic and global welfare of three of these proposals is explored in this section.

The Homeland Investment Act of 2003

The Homeland Investment Act, as proposed by House members, provides for temporary relief from repatriation taxes imposed by the United States. A so–called toll tax of 5.25 percent would be imposed on all repatriations from all foreign subsidiaries, above a base amount determined by examining repatriation behavior over the last several years. This legislation, which would provide this relief for only one year, is designed to facilitate the repatriation of earnings that multinational firms maintain overseas in order to avoid an even larger tax obligation upon repatriation. As a consequence of electing for this treatment, the parent firm would also lose the value associated with 85 percent of the foreign tax credits associated with these earnings. Alternative versions of this bill, including the Invest in the USA Act as proposed in the Senate, include stipulations that tie this relief to specific plans for investing the repatriated earnings domestically.

The reactions of individual firms to such a measure, and the impact on tax revenues, depends on their current foreign tax credit situation, their anticipated future tax liability on those unrepatriated earnings and their anticipation of future such opportunities for relief from repatriation taxes. Estimates of the actual amounts of repatriated earnings range upward from an estimate provided by the Joint Committee of Taxation of a one–year flow of $135 billion. The revenue consequences are a function, in turn, of the gross amount of those flows, subsequent repatriation activity, and the ways in which such a one–time repatriation impacts future allocations of interest expense and future earnings abroad.

The American Competitiveness and Corporate Accountability Act of 2002

The American Competitiveness and Corporate Accountability Act of 2002 (ACCA) attempted to combine several reforms of the taxation of international transactions for U.S. multinational firms. Specifically, the legislation included changes to the taxation of income associated with exports, the taxation of foreign source income, the tax treatment of corporate inversions, and the rules meant to regulate corporate sheltering activities. The largest source of additional government revenue in this legislation came from the proposed repeal of the Extraterritorial Income Act, an act that replaced the export subsidy provided through Foreign Sales Corporations. In response to a World Trade Organization finding that the United States must remove its export subsidies, the ACCA repealed these export incentives. Additionally, the ACCA raised revenue by clarifying the economic substance doctrine regarding tax avoidance activities, and by strengthening the earnings stripping rules that prevent expatriated firms from aggressively using debt to reduce taxable income in the United States.

These revenue–generating aspects of ACCA were coupled with a substantial simplification of tax rules related to for-

eign income. First, the "basket" rules that limit cross–crediting of foreign taxes paid on separate types of foreign income were simplified and their impact thereby reduced. Second, the rules that govern the allocation of interest expense and the interactions of foreign tax credits with the Alternative Minimum Tax were simplified. Finally, the rules preventing deferral of income associated with foreign sales subsidiaries were eased. These provisions, and several other more minor ones, were attempts to simplify and reduce the taxation of foreign income; when combined with the anti–sheltering and export provisions, ACCA was revenue–neutral.

The Job Protection Act of 2003

A third proposed change to the taxation of international income is the Job Protection Act of 2003 (JPA), proposed by Representatives Crane and Rangel. This legislation would also repeal the U.S. export subsidies, while providing transition relief for affected taxpayers until 2009. The idea behind the transition relief is to permit taxpayers to claim export tax benefits based on the benefits they obtained in 2001, thereby cushioning the effect of the tax change while not providing marginal incentives for additional exports in the years after 2003. The revenue raised by repealing the export incentive is then used to grant taxpayers a 10 percent tax deduction for income arising from domestic production activities, though this deduction is reduced by the fraction of income that taxpayers earn from production activities located abroad. Once this deduction is fully phased in by 2009, therefore, domestic production would be subject to a 31.5 percent tax rate (90 percent of the standard tax rate of 35 percent), whereas the United States would tax foreign income at its standard 35 percent tax rate.

Evaluating Proposed Reforms

Do these proposals promote world or national welfare? It is difficult to assess the impact of an unanticipated temporary reform such as the Homeland Investment Act, though this reform could have permanent features if taxpayers anticipate that something like it could be enacted again in the future. By the metric of CEN and NN, the Homeland Investment Act's significant reduction in repatriation taxes reduces global and U.S. welfare by encouraging excessive foreign investment, particularly in low–tax countries. In contrast, the ownership framework used by CON and NON implies that the reduction in repatriation taxes would advance national welfare, and very likely also advance world welfare by reducing the repatriation taxes that distinguish the American tax system from the systems used by so many other countries.

The ACCA offers a more thorough reform of international tax rules. Its proposed simplification of basket rules, base company sales rules, and interest allocation rules all would permit taxpayers to receive foreign tax credits for more of their foreign tax payments than they do under current rules. Such a reform advances global welfare in a CEN framework that calls for complete foreign tax crediting, though it reduces national welfare as interpreted by NN. From an ownership standpoint, the ACCA simplifications would promote world welfare to the degree that the U.S. system—with its elaborate allocation and basket rules—differs from exemption and foreign tax credit systems around the world. To the degree that the ACCA strips away some of the idiosyncrasies that have come to characterize the American system, the CON standard implies that it would promote world welfare; and the NON standard certainly implies that the ACCA would promote national welfare.

The JPA would reduce the taxation of domestic activity while leaving intact the taxation of foreign activity. In imposing a relatively heavier tax on foreign (compared to domestic) income than does the current U.S. system, the JPA would promote national welfare from a NN standpoint, though it could reduce global welfare by moving the United States away from a classic foreign tax credit system. From an ownership standpoint, the JPA would reduce national and global welfare, as measured by NON and CON, by moving the United States tax system further from conformity with the rest of the world, thereby encouraging excessive domestic ownership of U.S. assets.

CONCLUSION

The welfare principles that underlie the U.S. taxation of foreign income rely on the premise that direct investment abroad by American firms reduces the level of investment in the United States, since foreign competitors are assumed not to react to new investments by Americans. It follows from this premise that the opportunity cost of investment abroad includes foregone domestic economic activity and tax revenue, so national welfare is maximized by taxing the foreign incomes of American companies, whereas global welfare is maximized by providing foreign tax credits. If, instead, direct investment abroad by American companies triggers additional investment in the United States by foreign companies, which is likely in a globally competitive market, then entirely different prescriptions follow. National welfare is then maximized by exempting foreign income from taxation (NON), and global welfare is maximized by harmonizing the taxation of foreign income among capital–exporting countries (CON).

It is tempting to think of international tax differences as influencing the location of economic activity rather than determining the ownership of assets around the world. In fact tax systems do both, but given the central importance of ownership to the nature of multinational firms, there is good reason to be particularly concerned about the potential for economic inefficiency due to distortions to ownership patterns. Tax systems that satisfy CON ensure that the identities of capital owners are unaffected by tax rate differences, thereby permitting the market to allocate ownership rights to where they are most productive. Proposed and pending international tax reforms in the United States have the potential to affect national and global welfare. In order to evaluate these tax reforms properly, it is necessary to consider their implications for patterns of capital ownership throughout the world.

Acknowledgments

We thank Michael Devereux, Michael McIntyre, Peter Merrill, and Joel Slemrod for helpful comments on an earlier draft, and the American Tax Policy Institute and the Division of Research at Harvard Business School for financial support.

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