# Taxing International Business Income: Dividend Exemption versus the Current System

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# Foreword

Economists, policymakers, and business executives are keenly interested in fundamental tax reform. High marginal tax rates, complex tax provisions, disincentives for saving and investment, and solvency problems in the Social Security program provide reasons to contemplate how reforms of the tax code and other public policies toward saving and investment might increase economic efficiency, simplify the tax code, and enhance fairness. Many economists believe that gains to the economy from an overhaul of the income tax or from a move to a broad-based consumption tax can be measured in the trillions of dollars. Most conventional economic models indicate a potential for large gains from tax reform.

While many economists agree broadly on the simple analytics of tax reform, they are in much less agreement on such key empirical questions as how much saving or investment would rise in response to a switch to a consumption tax, how much capital accumulation would increase under a partial privatization of Social Security, how reform would affect the distribution of taxes, and how international capital markets influence the effects of tax reforms in the United States. This lack of professional consensus has made the policy debate fuzzy and confusing.

With these concerns in mind, Diana Furchtgott-Roth and I organized a tax reform seminar series at the American Enterprise Institute beginning in January 1996. At each seminar, an economist presented new empirical research on topics relating to fundamental tax reform. These topics include transition problems in moving to a consumption tax, the effect of taxation on household saving, distributional effects of consumption taxes in the long and short run, issues in the taxation of financial services, privatizing Social Security as a fundamental tax reform, international issues in consumption taxation, distributional consequences of reductions in the capital gains tax, effects of tax reform on pension saving and nonpension saving, effects of tax reform on labor supply, consequences of tax reform on business investment, and likely prototypes for fundamental tax reform.

The goal of the pamphlet series in fundamental tax reform is to distribute research on economic issues in tax reform to a broad audience. Each study in the series reflects many insightful comments by seminar participants—economists, attorneys, accountants, and journalists in the tax policy community. Diana and I are especially grateful to the two discussants of each paper, who offered the perspectives of an economist and an attorney.

I would like to thank the American Enterprise Institute for providing financial support for the seminar series and pamphlet series.

R. GLENN HUBBARD
Columbia University

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# 1
# Introduction

The rules governing the taxation of the foreign-source income of U.S. corporations are among the most complex in the Internal Revenue Code. In part, this complexity is a result of the conflicting principles and goals of the U.S. tax system. The principle of taxing all types of U.S. business income at the same rate, for example, is at odds with the goal of ensuring the competitiveness of American business abroad. This is because U.S. corporations operating in low-tax countries may be at a competitive disadvantage if they are required to pay a full U.S. tax on income earned abroad while other multinational corporations are not obligated to pay a comparable tax to their national governments. The complex, hybrid tax system that has evolved to address such issues produces a number of surprising and undesirable consequences.

Under the current system, U.S. corporations must pay taxes on all their repatriated income, regardless of where it is earned. The foreign income of a U.S. corporation with an active business abroad, such as a manufacturing operation, is taxed only when it is repatriated. Recognizing the principle that income should be taxed only once, the United States provides a credit against the U.S. tax liability for

the taxes paid to foreign jurisdictions. This foreign tax credit is limited to what the U.S. tax would have been on the total foreign income, so that foreign tax credits in excess of the U.S. rate cannot be used to offset the U.S. tax on purely domestic income.

This system has several unfavorable consequences. One is complexity, including a bewildering assortment of definitions and rules that has emerged around the repatriation of income. At the same time, the system raises relatively little revenue: $5.2 billion on all repatriated nonfinancial business income in 1996. Those revenues were equivalent to a 5 percent tax rate on all repatriated nonfinancial income, compared with the standard U.S. corporate tax rate of 35 percent. The equivalent tax rate is much lower, of course, when that $5.2 billion in tax revenues is measured against *all* foreign nonfinancial business income, including the income that U.S. companies choose not to repatriate.

This monograph explores the advantages and disadvantages of enacting a tax system under which dividends—that is, the repatriated profits from U.S.-controlled subsidiaries abroad—would be exempt from U.S. taxes. Under a dividend exemption system, also known as a "territorial" system, a nation taxes its businesses only on income earned inside its borders. Major trading partners, such as France and the Netherlands, use a system of this type to exempt all active dividends. Germany and Canada achieve much the same result through extensive treaty networks that exempt the foreign-source income of German and Canadian multinational corporations.

This analysis demonstrates the importance of going beyond abstract principles, such as equal taxation of all income, to examine how alternative systems actually work. The current hybrid system has serious shortcomings when compared with a dividend exemption system

regardless of which basic principle or goal—equal taxation or competitiveness—one finds more compelling.

A dividend exemption system would offer several important advantages, including substantial gains in efficiency, simplicity, and even tax revenue. Efficiency gains would be realized because U.S. multinational corporations would not have to devise elaborate schemes for restricting dividend repatriations to minimize their U.S. tax. Nor would U.S. multinationals have to forgo investment opportunities in the United States for the sake of tax avoidance. By dispensing with the need for credits for taxes paid to foreign host governments, a dividend exemption system would eliminate the complex calculations companies must make in claiming those credits against the U.S. tax on repatriated dividends.

A dividend exemption system would also simplify and rationalize the taxation of U.S. exports, including the export of software, as well as royalties received from abroad. Under current law, tax credits from dividends, which tend to bear a high tax rate abroad, are often used to shield export and royalty income from U.S. tax. This practice can create perverse incentives, causing a company to exploit a patent overseas rather than in the United States, for example, because the royalties paid to the U.S. parent would effectively be exempt from U.S. tax.

Even while promising substantial benefits, a dividend exemption system does not appear to have significant disadvantages. One obvious concern is that an exemption system would encourage increased investment in low-tax locations. Dividends from low-tax countries, which can trigger a high U.S. tax because they carry few foreign tax credits, would be free from U.S. tax under a dividend exemption system. On closer examination, however, this fear of increased business investment in tax havens turns out not to be warranted. Indeed,

under dividend exemption, the effective tax rate on U.S. investment in low-tax locations would actually increase. The current burden of the U.S. repatriation tax on investment in low-tax locations is minor because companies can avoid it by deferring repatriations. In countries with an effective tax rate of less than 10 percent, only about 7 percent of income earned was repatriated in 1992. The repatriation rate was even lower in 1996. The data also reveal that repatriation rates approach zero during the first fifteen years that a U.S.-owned company is in business in low-tax countries. These low rates of repatriation indicate that the current system imposes a very small U.S. tax burden on income in low-tax countries. The loss of this revenue would be more than offset by other features of the exemption system, as we envision them.

One such feature of the exemption system proposed here would be a requirement that U.S. overhead expenses, such as interest paid, must be allocated to exempt income by the parent company and would, therefore, be lost as deductions against U.S. taxable income. This is analogous to the deductions for interest expense that U.S. companies forgo when they invest in tax-free state and local bonds. Another feature that would increase the effective tax rate on foreign operations is the full taxation of royalty income, which, under the current system, can be shielded by excess credits flowing over from dividends.

These features of a dividend exemption system produce a surprising result: U.S. tax revenue would likely *increase*. The loss of the relatively modest amount of revenue the U.S. Treasury now collects on dividend repatriations would be more than offset by the overhead deductions that U.S. companies would lose and by the full taxation of royalty, interest, and export income under a dividend exemption system.

While the proposed system would exempt dividends from an active business, it would not exempt other forms of cross-border income. In addition to royalties and interest received from a foreign business, the passive investment income received by U.S. companies abroad would continue to be taxed on a current basis. Existing anti-abuse rules that prevent the booking of income in tax havens would also be maintained.

A dividend exemption system would not be completely without problems, of course. Disputes over expense allocations would increase. Some parts of the Internal Revenue Code would have to be revised to implement the new system on a consistent basis. Overall, however, the system is likely to produce a net gain in efficiency, simplicity, and tax revenue.

# 2
# Primary Features of the Two Systems

## The Current System

Before describing the basic elements of an exemption system, it may be useful to discuss the principal components of the current system in more detail. The United States has a tax system that is based, in part, on residence. American corporations are therefore required to pay U.S. tax on all of their repatriated worldwide income. At the same time, U.S. multinational corporations are required to pay income and related tax to the jurisdictions where their foreign operations are located.

In an effort to avoid double taxation of foreign-source income, the United States provides a credit to multinational corporations for the taxes paid to foreign host governments. This foreign tax credit is limited to what the U.S. tax rate would have been on the income. The limits and credits are calculated by "basket" or type of income, such as passive income, financial services income, or general active nonfinancial income, for example. Foreign tax credits are isolated within each basket to prevent excess

credits generated in highly taxed active businesses from spilling over and shielding lightly taxed income such as passive interest. Our focus in this monograph is on *nonfinancial* business income, which accounted for 70 percent of net repatriated foreign income reported by U.S. corporations for 1994. When consensus is reached on what constitutes an active *financial* business, however, the same principles would apply.

Multinational corporations base the calculations of their foreign tax credits and limits on the combined repatriated income of all their foreign operations and the total taxes paid to host governments. These calculations may place a corporation in either an "excess credit" or an "excess limit" position. Companies in excess credit—those with creditable taxes in excess of their limitation—pay no residual U.S. tax. In this context, the repatriation tax on any foreign dividend is simply the foreign withholding tax, that is, the final taxes imposed by host governments on income remitted to U.S. parent companies. Companies in an excess credit position may apply their foreign tax credits retroactively, going back up to two years, or they may carry them forward for five years and use them in the event they move into an excess limit position. Under current law, multinational corporations may also use these excess credits to offset U.S. taxes on interest and royalty income from abroad, and on income from export sales, half of which may be classified as foreign-source income.

Companies in excess limit—those with fewer foreign taxes to credit than the tentative U.S. tax on the foreign income—must pay a residual U.S. tax. In this instance, the repatriation tax amounts to the difference between the U.S. and foreign tax rate on the repatriated income. The potential repatriation tax, therefore, can be very high on dividends from low-tax countries. For these excess limit parents, any foreign withholding tax on

repatriated income imposes no extra cost because it is fully creditable against the U.S. tax liability.

U.S. multinationals do have the option of deferring repatriation, however. They are not required to pay any U.S. tax on the profits of their subsidiaries incorporated abroad until dividends paid from those profits are remitted to the parent company. The option to defer taxation of foreign income until it is repatriated does not apply to unincorporated foreign branches. Rather, branch income is taxed as it is earned. (How companies can minimize repatriation taxes will be discussed in Chapter 3.)

## Proposed Dividend Exemption System

The dividend exemption system set forth in this monograph generally follows the rules of exemption used by countries such as France and the Netherlands.[1] The system we propose has seven key features:

1. Active foreign income—that is, dividends from incorporated foreign subsidiaries and the income of unincorporated branches abroad—would be exempt from U.S. taxation, and the foreign tax credits associated with that income would no longer play any role. Two requirements would have to be satisfied for the income to qualify as "active." First, it would have to come from a real business such as a manufacturing operation rather than from passive investments such as bonds. In addition, the income would be classified as active only if the taxpayer owned a significant share of the foreign business, perhaps a minimum of 10 percent. Some countries with dividend exemption systems have a higher threshold for the "participation exemption."[2]

2. Royalties and interest paid to the U.S. parent company, which are deductible expenses in the host

country, would be taxed. The concept underlying existing exemption systems seems to be that whatever is deductible abroad is taxed at home—that is, all income should be taxed once.

3. The current anti-abuse regime that applies to controlled foreign corporations (CFCs)—those with more than 50 percent U.S. ownership—would also continue in force. The United States would continue to tax the passive income of CFCs on a current basis. Credits for foreign tax paid on passive income would still be available, of course. Similarly, sales income routed through a tax haven would continue to be subject to current U.S. tax. Whether or not a country has an exemption system should have little bearing on the anti-abuse system it adopts.[3] If anything, adopting dividend exemption would increase the value of anti-abuse rules.

4. The parent company's overhead expenses, such as interest, would be allocated to exempt income and disallowed as deductions from U.S. taxable income. Section 265 of the Internal Revenue Code, which disallows deductions for expenses related to tax-exempt income, would apply. If the parent company could obtain a full interest deduction in the United States while earning exempt income in a low-tax location abroad, the effective tax rate on investing abroad could be negative.

   Under the current system, allocated expenses affect U.S. tax liability only through the foreign tax credit limitation: they enter into the calculation of *net* foreign income, which determines the amount of allowable foreign tax credits. If the multinational corporation does not have excess foreign tax credits, or is not currently repatriating income, the

allocations have no effect on U.S. tax liability. Under exemption, allocations would directly reduce allowable deductions. The amount of the parent company's interest expense that would be disallowed would presumably be based on the relative size of its domestic and foreign assets.

5. Active foreign losses would not offset domestic taxable income.

6. Capital gains (and losses) from the sale of assets producing active income would also be exempt on the grounds that the market value of an asset reflects future dividends.

7. Income from U.S. export sales would be fully taxable and not covered by the exemption of active foreign income. No portion of export income could be classified as exempt foreign-source income. The current "sales source" rule, under which 50 percent of export income can be classified as foreign source, would no longer be relevant. If the U.S. parent company had a selling branch abroad, it could earn exempt income under normal "arms' length" rules, of course. Whether a territorial system provides an incentive for U.S. exports, as is often claimed, will be examined in Chapter 9.

**Potential Benefits of a Dividend Exemption System.** A key benefit of dividend exemption is that companies would no longer incur the special planning expenses and lower returns that are associated with efforts to avoid the repatriation tax on dividends. In Chapter 4, we attempt to measure this efficiency loss using a repatriation equation that estimates the amount of tax that companies would be willing to pay for any additional level of repatriation.

Another important consequence of exempting active dividends and branch income is that the foreign tax credits associated with them would be eliminated and therefore could not be used to shield lightly taxed foreign income from U.S. tax. Excess foreign tax credits have been associated primarily with repatriated dividends because other forms of active income such as royalties tend to be lightly taxed. The elimination of excess credits would produce several improvements in efficiency:

- U.S. companies that are historically in an excess credit position would no longer have an incentive to exploit a technology abroad rather than in the United States because foreign royalties, which are deductible abroad, would no longer be exempt from U.S. tax.

- In the absence of excess credits to shield export income, the sales source rule governing the allocation of export income would become irrelevant.

- The elaborate regulations used to classify computer software income—whether as royalty, sale of goods, or sale of services, for example—would also become irrelevant in the absence of excess credits. Companies would no longer have any incentive to choose a particular mode of selling software abroad based on tax considerations.

A dividend exemption system would provide a variety of other benefits that would simplify the rules of taxation and enhance efficiency. Under the current system, even companies whose operations are not affected by tax considerations have to learn and apply the complex rules on sourcing and credits. Under the proposed exemption system, it would no longer be necessary to compute earnings and profits for active foreign income that is not

affected by the anti-abuse rules—a computation which companies consistently describe as burdensome and time-consuming. Similarly, it would no longer be profitable for companies to devise schemes to trade active tax credits or import active foreign losses. Disputes over which foreign taxes are creditable would largely disappear, and the scope of tax regulations would be greatly narrowed.

**Concerns about Dividend Exemption.** A number of concerns dominate discussions of a dividend exemption system. These include fears that such a system would distort the worldwide allocation of capital, produce a net loss in tax revenue, and encourage income shifting to low-tax locations abroad. Our research suggests that many of the fears about an exemption system are unfounded, often because they are based on a misunderstanding of the burden of repatriation taxes in the current system.

Perhaps the most important concern about a dividend exemption system is its potential impact on investment location. Some economists worry that the worldwide allocation of capital would become more distorted because the elimination of repatriation costs would make investing in low-tax locations more attractive. For purposes of this analysis, we accept the validity of the "capital export neutrality" view that increasing the tax on investment in low-tax countries improves global efficiency. Advocates of the "capital import neutrality" or "competitiveness" school, who claim that U.S. companies should only pay tax to the jurisdictions where they are located so that they remain competitive with foreign-based multinational companies, would presumably be content with a dividend exemption system, although they may think it unfair that exempt income would bear its share of overhead expenses.

Our findings indicate that the incentive to invest in low-tax locations would probably weaken, not intensify, under dividend exemption. For one thing, the burden of

potential repatriation taxes on income in low-tax countries is very small. In countries with an effective tax rate of less than 10 percent, the repatriation rate of manufacturing income in 1992 was about 7 percent. Furthermore, our research indicates that there are virtually no repatriations during the first fifteen years that a CFC is incorporated in these low-tax locations. The overall burden under current law—that is, the sum of the tax on actual repatriations *plus* the cost of avoiding repatriations—is actually smaller than the effective tax rate under exemption. This result can be traced to the allocation of overhead expenses and full taxation of royalty income under a dividend exemption system.

An exemption system would remedy the weakness in existing law that allows an expense deduction without requiring inclusion of the income it produces. Currently, for example, a multinational corporation that is in excess limit—a characteristic of 75 percent of all manufacturing income in 1994—can borrow in the United States, obtain a full deduction for the interest expense, and make an all-equity investment in a low-tax location where it can retain the income indefinitely.[4] Under dividend exemption, in contrast, the interest allocated to exempt foreign income—or, more precisely, to exempt assets—could no longer be deducted from U.S. taxable income. This loss of U.S. deductions is most significant for investments in low-tax countries because companies tend to use much less local debt in such situations.

These conclusions are consistent with our finding that, even while the local effective tax rate has a powerful impact on investment location, excess credit companies are not more sensitive to local tax rates than excess limit companies are. Presumably, companies in excess credit face the same effective tax rate on the margin as all companies would face under an exemption system. While U.S. direct investment abroad is highly

sensitive to local effective tax rates, moreover, it does not appear to be at all sensitive to the local withholding tax rate on dividends, which is the equivalent of the repatriation tax for excess credit companies. These results suggest that repatriation taxes are not a significant factor in corporate investment behavior.

Our findings also indicate that a dividend exemption system is not likely to produce a loss in tax revenue. Indeed, using 1994 data, we estimate that there would be a static revenue gain of more than $7 billion as a result of the full taxation of royalty, sales source, and interest income, along with the allocation of expenses to exempt dividend income. Although the behavioral responses of multinational corporations would probably reduce this gain, those responses do not appear likely to turn the gain into a loss. For one thing, some behavioral responses, such as the shifting of overhead expenses to foreign books, would reduce foreign, not U.S., revenues. The most important behavioral offset seems to be the possibility that CFCs would pay fewer royalties because royalties would be fully taxable on the margin. But the evidence suggests that this would not cause a major erosion of revenue.

At the same time, our findings indicate that eliminating the distortions caused by the current tax on dividend repatriations would provide an estimated efficiency gain of at least $1 billion a year, even without including efficiency gains from the reallocation of capital. Most of this gain reflects the elimination of costs associated with avoiding the dividend repatriation tax. The $1 billion benefit does not include the reduced cost of simply complying with the law, apart from any changes in corporate behavior.

Finally, the burden of the dividend repatriation tax is so small under current law that income shifting is not likely to increase under an exemption system. Our

finding that companies in an excess credit position—those with no current repatriation costs—do not shift more income to low-tax countries than excess limit countries do provides additional support for this conclusion.

**Implications.** Overall, dividend exemption seems to be superior to the current system for taxing foreign-source business income. This is not to say that dividend exemption is the best system or that it would be better than alternative systems. Dividend exemption would increase tax planning and disputes in some areas—most notably in the allocation of expenses, which would become a much more significant issue. It also should be kept in mind that we are comparing the current system with a "pure" exemption system, not the system that may actually be enacted.

One problem with the current system is that its effects are not transparent, because they depend on repatriation behavior. The system is a conceptual hybrid, somewhere between dividend exemption and current accrual taxation. Consequently, it is difficult to develop consistent rules to implement it. The allocation-of-expense rules, for example, seem to assume that deferral has been repealed, because that is the only condition under which these rules would work as intended.

In the balance of this monograph, we review the theoretical literature on the effect of repatriation taxes on corporate behavior; assess the efficiency loss attributable to the costs of dividend repatriation planning; evaluate the effect of dividend exemption on investment location; discuss the revenue consequences of adopting a dividend exemption system; review the potential impact of dividend exemption on income shifting; examine the potential efficiency gains derived from altered corporate treatment of exports and software transactions under

dividend exemption; and describe considerations that are important in evaluating alternative systems.

# 3
# The Effect of Repatriation Taxes on Corporate Behavior

Until the 1980s, most economists held the "old view" that prospective repatriation taxes played an important role in corporate decisions regarding capital investment abroad. Since that time, however, the "new view"—that repatriation taxes do not have a significant impact on corporate decisions about foreign investment—has gained widespread acceptance. For our assessment of the impact of repatriation taxes on investment location, it does not matter whether one adopts the old or new view of the impact of these taxes. Repatriation rates are low in low-tax countries, and the tax rate that companies claim in their credit calculation tends, not surprisingly, to be higher than the local average effective tax rate. Nevertheless, it may be useful to review the models in which repatriation taxes are irrelevant to the CFC's long-run capital stock. The irrelevance of repatriation taxes in these models may be a consequence of either the new view of dividend taxation or the ability of companies to achieve the equivalent of repatriation without paying the tax.

Hartman (1985) was the first to present the new view of dividend taxes in the context of foreign income. The reasoning underlying the new view is straightforward. Consider a "mature" CFC—one with sufficient earnings to fund its investment—that is deciding whether to repatriate another dollar or reinvest it in its local operation. The local effective tax rate is *ETR,* the dividend repatriation tax is $t_R$, and the effective tax rate on investment in the United States is $t_{US}$. If the CFC repatriates now and invests the proceeds in the United States, its wealth after one period is $(1 - t_R)MPK_{US}(1 - t_{US})$, where $MPK_{US}$ is the pre-tax marginal product of capital in the United States. If the CFC reinvests in the foreign location for one period and then repatriates, its wealth is $MPK_F(1 - ETR)(1 - t_R)$, where $MPK_F$ is the foreign return on capital. Comparing the two strategies, we can see that $(1 - t_R)$ appears in both equations and therefore does not affect the CFC's wealth. The only factors that make a difference are *ETR,* $t_{US}$, and the respective rates of return.

Sinn (1993) formalized Hartman's result in a multiperiod model that begins with the parent's initial equity injection. Assuming a given fixed productivity of capital function in a stationary economy abroad, the parent "underinvests" in its CFC to obtain the benefits of deferral, and the CFC reinvests all its earnings until it reaches a mature, steady-state level of capital stock, after which it repatriates all of its earnings.[5] The repatriation tax can affect whether the location is chosen in the first place, but not the final capital stock after a decision to invest has been made. Grubert (1998) presented a simplified two-period model that confirmed the validity of the Hartman-Sinn result even when alternative repatriation vehicles such as royalties are included.

The Hartman-Sinn analysis assumes that CFCs repatriate when they become mature because repatriation is the only available alternative to investing in their

own operations. Several papers have suggested ways in which CFCs could achieve the equivalent of repatriation without paying the U.S. repatriation tax. Weichenrieder (1996) added passive assets to a CFC's potential investments. Under his assumptions about the relationship between equity and debt returns, a CFC could simply invest in passive assets and never have to repatriate the income. In these circumstances, the CFC would immediately arrive at the Hartman-Sinn steady-state level of capital stock, eliminating the need for the parent company to underinvest in the CFC to obtain the benefits of deferral.[6] Here the dividend repatriation tax is irrelevant because CFCs can avoid it.

Altshuler and Grubert (2000) explore other strategies that have the effect of neutralizing the burden of the repatriation tax. One strategy is for the parent to borrow against the CFC's passive assets. Even if borrowing against passive assets is less profitable than investing in the company's own domestic operations, borrowing permits the parent to achieve the equivalent of repatriation. When borrowing is introduced into the model, the parent can finance its domestic operations without receiving a direct repatriation from the CFC.

Altshuler and Grubert also describe several "triangular" strategies for reducing the potential repatriation tax on income from CFCs in low-tax locations. The earlier literature deals with only a single foreign subsidiary. Altshuler and Grubert's triangular strategies are based on the more realistic scenario in which the parent has CFCs in many locations. One straightforward strategy is to have a low-tax CFC invest in a related high-tax CFC and effectively use the high-tax CFC as a low-cost vehicle for repatriations. Another is to have the low-tax CFC pay a dividend through an upper-tier, high-tax operating affiliate in a country with an exemption system. When the dividend is received in the United States, the accom-

panying tax credit is a blend that includes the taxes paid by the upper-tier company. The tendency of low-tax CFCs to pay dividends to other CFCs is quite evident in the data examined.

# 4
# Efficiency Loss Attributable to Repatriation Planning

These strategies to avoid the repatriation tax are not without cost. Alternative vehicles for repatriation are not likely to be perfect substitutes. The empirical estimates reported in Grubert (1998) indicate that dividends are highly sensitive to their tax prices, but the tax elasticities do not suggest perfect substitutability. The CFC can invest in passive assets while the parent borrows from an unrelated party, but the multinational corporation will lose the intermediation spread between borrowing and lending rates. The corporation may also have to set up a complicated and more costly tier structure to maximize credits when it does repatriate the income. The real costs that the repatriation tax imposes on multinationals are not large enough to markedly deter low-tax investments. Still, an average cost as low as 1 percent of foreign earnings is significant when applied to an income base of $100 billion.

Instead of attempting to measure repatriation planning costs directly, it is simpler to use a repatriation equation that relates the amount of a CFC's dividend repatriations to its (excess limit) repatriation tax. This

standard method of measuring efficiency losses uses the equation to project the increase in repatriations if the repatriation tax were eliminated. Furthermore, the equation indicates the tax that each CFC would have been willing to pay for any incremental amount of repatriations. Presumably this amount is equal to the net gain from repatriation compared with retention. The increase in repatriations, coupled with the repatriation taxes corporations would have been willing to pay for additional repatriations, produces the well-known "welfare triangle."

The dividend repatriation equation we use is of the type found in Grubert (1998), except that it is based on data from 1992 rather than 1990. (See Appendix 1 for a description of the data used in this paper.) In the equation, the ratio of CFC dividends to CFC assets is a function of the following:

- CFC earnings.
- CFC age, based on date of incorporation.
- The CFC's dividend repatriation tax, assuming that the parent is in excess limit. The country's average effective tax rate is used to construct the tax price to represent the permanent price.
- The repatriation tax on dividends, assuming the parent company is in excess credit.
- The tax price of other payments such as royalties and interest.
- Various parent company characteristics.

The use of two dividend tax prices in the same equation is based on the presumption that the parent may be uncertain about its long-run credit status. Using a company's current excess credit position to construct the

CFC's current repatriation tax price is less successful statistically. Both variables are highly significant, but, of course, only the excess limit tax price coefficient is used for this exemption simulation. (The dividend repatriation equation is reported in Appendix 2.)

Accordingly, for all manufacturing CFCs with positive repatriation taxes in the 1992 file, we use the equation to project the increase in repatriations when the excess limit repatriation tax is set to zero. The size of each CFC's repatriation tax and the change in its repatriations determine the efficiency gain from eliminating the barrier to repatriations.[7] We then project the gains to the universe in 1996 by using the total assets of nonfinancial affiliates from the annual Commerce Department Survey, *U.S. Direct Investment Abroad: Operation of U.S. Parent Companies and Their Foreign Affiliates*.

This procedure leads to an estimated $840 million welfare gain, at 1996 levels of activity, as a result of eliminating the residual tax on dividend repatriations. The fact that this is less than 1 percent of nonfinancial net income earned abroad suggests that we are not overestimating the efficiency cost of the repatriation tax. Furthermore, the projected increase in dividends does not seem inordinately large—about $9 billion, which is less than one-third of current retentions.[8]

# 5
# Quantitative Evaluation of the Effect of Dividend Exemption on Investment Location

The major concern regarding a dividend exemption system is its effect on investment location. After an extensive examination of this issue, we can conclude that, if anything, the worldwide allocation of capital would improve if a dividend exemption system were enacted. Less real capital would be invested in low-tax countries and more would be invested in the United States.

First we present empirical evidence on the effect of the repatriation tax on investment location. Evidence that local effective tax rates have a significant impact on investment by U.S. multinational corporations is convincing, but any impact of potential repatriation taxes, at either the firm level or country level of analysis, is difficult to identify.

We then compare the effective tax rate on investment in low-tax locations under the proposed dividend exemption system and under the current system. As we have

observed, the Hartman-Sinn new view of dividend taxation and much of the subsequent literature conclude that the repatriation tax does not affect the amount of capital invested abroad. But even if we accept the old view that prospective repatriation taxes do make a difference, our estimates of the cost of capital in low-tax countries under the two systems suggest that dividend exemption would *improve* the allocation of capital. As noted, repatriation rates from manufacturing CFCs in low-tax countries are very low—7 percent or less in countries with effective tax rates below 10 percent. The contribution of these low effective repatriation taxes to the overall effective tax rate on investment in a location is more than offset by the allocation of overhead expenses to exempt income and the full taxation of royalties under the proposed dividend exemption system.

## Evidence of the Impact of Repatriation Taxes on Investment Location

In previous papers, we have reported that local effective tax rates have a highly significant and quantitatively large effect on investments in manufacturing by U.S. multinational corporations (see Grubert and Mutti 2000 and Altshuler, Grubert, and Newlon 1998). Using these analyses as our starting point, we have added variables to reflect the potential role of repatriation taxes for individual firms, where information on the parent company's excess credit position can be introduced, and for U.S. companies as a whole.

The first column of Table 1 presents a regression based on the real capital invested in manufacturing, a total aggregated across all U.S. multinational corporations in sixty country locations in 1992. The dependent variable in this logarithmic equation is the log of real capital invested. The basic tax variable is the log of (1 – the local average effective tax rate), which can be

TABLE 1

INVESTMENT LOCATION AND TAX RATES IN MANUFACTURING, 1992

| | *Country Level* | *Firm Level* | |
|---|---|---|---|
| | *Log of Total Capital in Location* | *Tobit: Log of Capital in Location* | *Probit: Is Company in Location?* |
| Log of (1 – *ETR*) | 3.13 | 8.27 | .816 |
| | (2.88) | (4.45) | (5.03) |
| Trade Regime | –.76 | –1.20 | –.124 |
| | (3.28) | (4.22) | (4.77) |
| Trade * Log of (1 – *ETR*) | –1.66 | –3.60 | –.451 |
| | (2.62) | (4.77) | (6.68) |
| Log of GDP | .788 | 1.29 | .289 |
| | (9.14) | (8.53) | (33.03) |
| Log of GDP per Capita | .340 | .474 | .130 |
| | (2.42) | (2.16) | (7.75) |
| North America | 2.28 | 7.75 | 1.21 |
| | (3.65) | (3.79) | (26.13) |
| European Economic Community | .50 | 1.90 | .326 |
| | (1.45) | (5.27) | (10.46) |
| Latin America | 1.38 | 1.68 | .477 |
| | (4.15) | (3.66) | (12.53) |
| Asia | .45 | 1.63 | .200 |
| | (1.41) | (4.05) | (5.74) |
| Log of (1 – the withholding tax rate on dividends) | .141 | | |
| | (.14) | | |
| Parent in Excess Credit | | –2.35 | –.203 |
| | | (4.04) | (3.76) |
| Excess Credit * Log of (1 – *ETR*) | | –.217 | –.022 |
| | | (.12) | (.13) |
| No Credit Claimed | | –.318 | –.013 |
| | | (.50) | (.23) |
| No Credit * Log of (1 – *ETR*) | | 3.66 | .377 |
| | | (1.83) | (2.03) |

NOTE: The *t* values are in parentheses. In the firm-level equation, some company characteristics, such as R&D intensity, are not displayed on the table.
SOURCE: Authors' calculations based on U.S. Treasury data files (see Appendix 1).

regarded as an indication of the after-tax return for a given pre-tax return. Alternatively, the variable can be interpreted as the pre-tax return required to achieve a given after-tax return. (See Grubert and Mutti 2000 for a fuller description of these and the other variables.) The trade regime variable indicates the degree of trade and capital restrictions in the jurisdiction. Gross domestic product (GDP), GDP per capita, and the regional variables are basic country characteristics.

We attempt to capture the potential effect of repatriation taxes by adding the log of (1 – the withholding tax rate on dividends) to the equation. For companies that expect to be in an excess foreign tax credit position, the withholding tax represents the cost of repatriating from that location.[9] The first column confirms that the local effective tax rate has a powerful effect on investment location. The elasticity with respect to the after-tax return is more than 3. But the coefficient for the withholding tax variable, although it is positive as expected, is tiny and only a fraction of its standard error. It seems to have no power to explain investment location, although analyses by Grubert (1998) and others show that it *is* an important determinant of dividend repatriations.

The next two columns describe the capital invested by 561 U.S. manufacturing parents in the sixty potential locations. The firm-level data provide an opportunity to use the parent's excess credit position to determine the importance of repatriation taxes. If repatriation taxes play a significant role in the parent's decision making, a parent that expects to be in an excess foreign tax credit position should be *more* sensitive to the local tax rate in the host country. In high-tax locations, the parent would bear the full weight of the local tax, because any excess over the U.S. rate would have no value in shielding other low-tax income. Conversely, it should be more attracted to very

low-tax countries because, with excess credits available, any potential repatriation would not be subject to a residual U.S. tax. The excess credit parent, therefore, would have exactly the effective tax rate on the margin in a location abroad under the current system that it would have under a dividend exemption system.[10]

The second column of Table 1 presents the tobit equation for the amount of capital companies have invested in each of the sixty locations, and the third column gives the probit equation that describes the company's decision on whether to locate in a particular jurisdiction. In each case, we added a variable to indicate whether the parent company was in excess credit in 1992 and then interacted this excess credit indicator with the local effective tax rate to determine whether the excess credit parent was more sensitive to local tax rates. In an effort to account for all the manufacturing parents in the sample, we added another variable to identify parents that did not claim a foreign tax credit and for which an excess credit position could not be computed. These parent companies may have an overall foreign loss or even a worldwide loss.

The tobit and probit equations indicate that companies in excess credit tend to have fewer investments abroad. The interaction of the excess credit indicator and the local effective tax rate, however, clearly indicates that the decisions of these manufacturing parents are not more sensitive to local tax rates. Indeed, contrary to expectation, the coefficients are negative, although they are entirely without statistical significance.[11] In this analysis, it is very difficult to identify any impact that prospective repatriation taxes have on location decisions.

## The Effect of Dividend Exemption on the Cost of Capital Abroad

Adopting the old view that repatriation taxes can increase the required return on capital in a location, we compare

the effective tax rate on investment abroad under an exemption system with the rate under the current system. The following items enter into this calculation:

- The burden of the current residual U.S. tax and its importance in the overall cost of capital in a location.

- The extent to which the allocation of overhead expenses such as interest on exempt income will increase the effective tax rate on investment in foreign locations.

- The implications, under exemption, of the elimination of the bonus to foreign royalties available under current law, because excess credits originating from dividends could no longer be used to shield other forms of foreign income. Under the current system, this bonus encourages the exploitation of a technology abroad rather than in the United States.

We examine each of these components in greater detail before assessing their combined net effect on the cost of capital in low-tax locations.

**Burden of the Current Residual U.S. Tax.** The first question is how much CFCs actually repatriate from low-tax locations. Table 2 presents repatriation rates—the ratio of dividends to earnings and profits after foreign tax—for manufacturing CFCs in 1992 by effective tax-rate category. In calculating the ratio, income subject to subpart F anti-deferral provisions is subtracted from both the numerator and denominator because that income has already borne the U.S. repatriation tax.[12] Regressions indicate that in low-tax locations, virtually all subpart F inclusions are paid out as actual dividends. The table shows the clear relationship between local effective tax rates and repatriation rates. In the low-tax

TABLE 2
REPATRIATION RATES IN MANUFACTURING, 1992

| *Country Average Effective Tax Rate* | *All CFCs* | *CFCs with Positive After-Tax Earnings and Profits* |
|---|---|---|
| Less than 10 percent | .077 | .061 |
| 10–20 percent | .440 | .227 |
| 20–30 percent | .746 | .434 |
| Greater than 30 percent | .931 | .539 |

NOTE: The repatriation rate is total dividends to the United States divided by total after-tax earnings and profits in the cell. Subpart F income is netted from both the numerator and denominator. These data are based on the 7,500 largest CFCs.
SOURCE: Authors' calculations based on U.S. Treasury data files (see Appendix 1).

group, for example, the repatriation rate is 7.5 percent in Ireland and 5.8 percent in Singapore. Further inspection of the firm-level data reveals virtually no repatriations in the first fifteen years after a CFC has been incorporated in these low-tax locations.[13, 14]

An examination of the burden of the repatriation tax also requires an evaluation of the credits that companies claim when they actually make a distribution. One might expect that, in any location, companies with an above-average tax rate would be the ones that are repatriating. In fact, that turns out to be true. We computed the implied effective tax rates on dividends repatriated from each country for 1990 using the Form 1118 file, which reports actual repatriations and the credits that companies claim. These tax rates could be compared with the country average effective tax rates computed from the CFC information return, Form 5471. The Form 5471-based rates apply to all of the CFC's income, including retained earnings.

The Form 1118 rates tend to be about 2 percentage points higher on average. (Grubert, Randolph, and Rousslang 1996 report a much larger gap of about 10 percentage points in 1992, but that figure also reflects the mix of repatriations from high- and low-tax countries.) More important, the gap is clearly related to the local average effective tax rate. For example, a country with an average effective tax rate on earnings of 10 percent tends to have a gap of 10 percentage points, producing a residual U.S. tax rate of 17 percent rather than 27 percent.[15]

The final component in the evaluation of the effective burden of the repatriation tax is the efficiency or welfare loss that companies incur when they avoid the repatriation tax and repatriate less than the "optimum." The aggregate amount of this loss, which represents the additional expenses or lower returns that result from constrained repatriations, was presented in Chapter 4. The loss will vary by local tax rate because, for example, CFCs in low-tax locations face a higher repatriation tax and therefore greatly restrict their dividend repatriations. This cost to the companies presumably reduces the value of investing in a low-tax location and should be part of the overall evaluation of the burden of the repatriation tax.

Accordingly, Table 3 presents the efficiency loss attributable to repatriation planning in relation to the pre-tax earnings and profits in each tax category. As expected, the relative efficiency loss is much higher in low-tax locations, but even for CFCs in jurisdictions where the effective tax rate is less than 10 percent, the cost of repatriation planning is equivalent to only 1.7 percentage points of additional tax.

A combination of these components—the repatriation rates in Table 2, which are multiplied by the U.S. tax on repatriation, and the efficiency loss in Table 3—yields an estimate of the overall burden of the dividend repatriation tax for an excess limit parent equal to 3.3 percent of

TABLE 3
RATIO OF EFFICIENCY LOSS TO PRE-TAX EARNINGS AND PROFITS

| *Effective Tax Rate* | *Loss/E&P* |
|---|---|
| Less than 10 percent | .01705 |
| 10–20 percent | .00962 |
| 20–30 percent | .00304 |
| Greater than 30 percent | .00012 |

NOTE: The efficiency loss is calculated from a dividend repatriation equation and CFC data on repatriation taxes under current law.
SOURCE: Authors' calculations based on U.S. Treasury data files (see Appendix 2).

pre-tax equity income in locations with an effective tax rate below 10 percent. In this calculation, we assume that repatriations from countries with an average effective tax rate below 10 percent receive a 15 percent credit, which is less than the equation would indicate. We also assume that this effective burden is paid as income is earned and do not discount it to reflect the small number of repatriations in the early years of a CFC's life.

**Significance of Expense Allocations under Exemption.** Under dividend exemption, the parent's overhead expenses that have to be allocated to exempt income are lost as deductions against U.S. taxable income. In the current system, increased allocations to foreign income increase U.S. tax liabilities only for the minority of companies that are in an excess credit position. Indeed, one reason why investment by companies in excess credit is not more sensitive to local tax rates may be that, on the margin, additional allocations to foreign income offset any smaller burden of prospective repatriation taxes.

The allocation of overhead expenses to exempt income can have a potentially large impact on the effective tax

rate on investment in a location. Consider a simplified, and admittedly extreme, example of a U.S. multinational corporation investing in a country with a zero effective (and statutory) tax rate. The corporation, which is assumed to be in excess limit under current law, has a debt-asset ratio of 50 percent. Because interest allocations do not bite under current law, the parent will carry the additional debt on its own books and receive a full tax deduction. Assume further, for convenience, that the required real return on equity, $r$, is equal to the real interest rate, $i$, that there is no inflation, and that capital does not depreciate. Then if the corporation can avoid any prospective repatriation tax, or if the new view applies, the cost of capital for a marginal investment in the no-tax location is $.5r + .5i\ (1 - .35) = .825r$. (See Altshuler and Grubert 2000.) The second term in the cost of capital reflects the full U.S. interest deduction combined with no inclusion of income in the United States, which results in a cost of capital below the required after-tax rate of return.

Under dividend exemption, the interest expense that is allocated to exempt income disappears as a deduction against domestic taxable income. The extent of this loss in deductions in general depends on the system of interest allocations in place, worldwide fungibility, or the current system in which the parent's interest is allocated on the basis of net equity in the affiliate without taking account of local CFC debt. Under worldwide fungibility, the CFC would simply have to bear the 50 percent worldwide debt-asset ratio (and with zero local tax would be indifferent as to whether its debt was on its own or the parent's books), and the cost of capital would become $.5r + .5i = r$, or more than 21 percent higher than it is under the current system. In this hypothetical example with a zero tax rate, the current interest allocation system would yield the same result because the taxpayer

would never put any debt on the CFC's books. If the CFC has any debt, the current method would allocate more of the parent's interest expense abroad than worldwide fungibility would.

The effect of the interest allocation is, of course, much smaller if the foreign tax rate is close to the U.S. rate because the taxpayer would already have debt on the CFC's books, or would shift it to those books after the enactment of exemption. If the foreign statutory tax rate is equal to or above the U.S. rate, and worldwide fungibility applies, there would be no loss in interest deductions on the foreign investment because the multinational corporation could receive a full deduction by letting the CFC have a debt-asset ratio equal to the worldwide ratio.

This example of the marginal investment in the zero-tax country is obviously extreme. First, even though there is a very strong relationship between local tax rates and CFC leverage, low-tax affiliates do have some debt. (See Altshuler and Grubert 2000.) Furthermore, the multinational corporation might attempt to shift a portion of the debt from the United States to some other high-tax location instead of the low-tax CFC, although the presence of substantial debt in low-tax CFCs indicates that there is a limit on the extent to which debt can be shifted to high-tax CFCs. In our final comparison of the cost of capital in low-tax countries under the current system and under dividend exemption, we will therefore make very conservative assumptions about the size of the interest allocation effect.

Finally, it is important not to overlook overhead (not directly allocable) deductions other than interest and R&D. (We assume that under dividend exemption, R&D will be allocated exclusively to royalties, which remain fully taxable.) The 1994 foreign tax credit file shows that in manufacturing, for example, "other" overhead

deductions for foreign-source income accounted for 44 percent of the total and were larger than allocated interest. When these overhead deductions are allocated to exempt income, the corporation may attempt to shift some of them abroad, particularly to high-tax countries, but these deductions may be more difficult to shift than debt. The principal effect is probably to increase the effective tax rate on foreign investment in general compared with investment in the United States.

**Taxation of Intangibles.** Royalties are now an important component of the income that U.S. companies earn abroad. The Commerce Department's *1994 Benchmark Survey of U.S. Direct Investment Abroad* indicates that royalties paid to the parent company account for more than 10 percent of the income of manufacturing affiliates *before* deduction of royalties, interest, and foreign income taxes. Rents, royalties, and license fees account for more than 17 percent of the active foreign gross repatriated income reported by U.S. manufacturing companies. Therefore, the final comparison of the cost of capital under exemption and under the current system will assume that investment has two components: intangible assets that have been developed in the United States and tangible capital, which can be financed by either equity or debt.

The taxation of this royalty stream from abroad will affect the advantage of a foreign investment compared with exploiting the intangible or making some other investment in the United States, where the return would be fully taxable. Under current law, excess credits originating with foreign dividends can offset the U.S. tax on royalty income. In 1994, this flow of excess credit royalties reduced the U.S. tax liabilities of U.S. parents by $2.7 billion, of which $2.0 billion was in manufacturing.[16] (The loss in credits to sales source income, analyzed in Chapter 8, increases the cost of domestic production

compared with foreign production, but this is quantitatively much less important than the current benefit to foreign royalties.) Under dividend exemption, this benefit to foreign exploitation of an intangible would disappear.

## Effective Tax Rate on Foreign Investment in the Two Systems

We now use the data we have presented to evaluate the effect of a dividend exemption system on the effective tax rate on investment abroad. The emphasis is on locations with an effective tax rate of less than 10 percent because of the concern that exemption will encourage low-tax investments. This evaluation assumes the old view that repatriation taxes affect the cost of capital.

For purposes of the comparison, 90 percent of the investment abroad is assumed to consist of tangible assets and the remainder of intangible assets that have already been developed in the United States. The tangible assets are assumed to be financed with two-thirds equity and one-third debt. We assume that one-third of this debt is now deducted against U.S. tax by parents in excess limit and would not be deductible in the United States (or any other high-tax location) under dividend exemption. The required return to equity is assumed to be equal to the real interest rate and there is no inflation. We further assume, again conservatively, that only half of other overhead expenses—that is, other than interest or R&D—would have to be allocated to exempt income. (These other overhead expenses appear to be about 10 percent of CFC income, according to the deductions that companies report when they calculate their tax credits.) As noted previously, the overall burden of the repatriation tax for investment in locations with effective tax rates below 10 percent is 3.3 percent of net pre-tax income.

From these data, we conclude that the average effective corporate tax rate on investment in low-tax countries—those with nominal rates of 10 percent or less—is now 6 percent. We estimate that under a dividend exemption system, the comparable corporate tax rate would be 8 percent. These calculations take account of the local tax and the impact of the assumed changes in U.S. law on the U.S. taxpayer. The allocations of overhead expenses and the taxation of intangible income outweigh the modest burden of the repatriation tax on dividends. It thus appears safe to conclude that dividend exemption will *not* encourage more investment in low-tax locations than the current system does.[17]

# 6
# Revenue Implications of Dividend Exemption

The revenue consequences of dividend exemption are difficult to estimate because we cannot precisely predict the behavioral responses that it will engender. It is, therefore, useful to start with a "static" estimate using the 1994 foreign tax credit file, before considering any potential changes in corporate behavior.[18]

The no-behavioral-change estimate amounts to a revenue gain of $7.7 billion in the general active (nonfinancial) basket. This static estimated gain of $7.7 billion is conservative because it assumes that *all* dividends in the general, active basket would be exempt, including deemed dividends under the anti-abuse rules. Some of these dividends will continue to be taxed in a dividend exemption system. The potential gain is also understated because it does not fully reflect the neutralization of active foreign losses. U.S. companies that did not claim a foreign tax credit, because of foreign losses or because they did not repatriate any income, were not represented in the data file used to make the estimate.[19]

There are two basic reasons for this somewhat surprising, albeit static, $7.7 billion revenue gain. One is the elimination of spillover foreign tax credits originating with dividends that now shield royalties, interest, and sales source income from U.S. tax. This feature of the current system has become particularly important because of the rapid growth in royalties from abroad. The second reason is the allocation of overhead expenses to exempt foreign income, which increases the U.S. tax liabilities of all taxpayers, not just those in excess credit.[20] That is, gross active dividends are no longer part of worldwide taxable income, but the expenses allocated to foreign income directly lower deductions from taxable income. This can partly or wholly offset the exemption of dividends.

The behavioral changes of companies may erode much or all of this potential revenue gain, but not all of these changes will reduce U.S. tax collections. Some will come at the expense of foreign governments. As discussed, companies will attempt to shift some of their overhead expenses, such as interest, to a high-tax jurisdiction where they may be fully deductible. In the long run, U.S. tax revenue will also depend on how dividend exemption affects investment in the United States. If dividend exemption tilts the cost of capital in favor of the United States, domestic capital investment and U.S. tax collections can be expected to increase.

Interest received by the parent in the general active basket, which would be fully taxable under exemption, would seem to be the most obvious inducement for a behavioral change that would reduce the revenue gain. The switch in the way a CFC is capitalized could be implemented without running afoul of the transfer pricing rules. But interest received by parents in the general basket is relatively small—$4.1 billion in 1994, which is less than 3 percent of foreign gross income and less than

6 percent of net foreign-source income. (Royalties and rents are more than five times greater.) Furthermore, much of this interest comes from high-tax countries where the repatriation tax is low under current law. Grubert (1998) describes this strong positive relationship between interest paid to related parties by a CFC and the local statutory tax rate. It appears, therefore, that the potential recapitalization of CFCs could not offset a major portion of the static revenue gain. CFCs may also have an incentive to reduce the amount of royalties paid to the parent because royalties would be fully taxable under an exemption system, without any benefit of credits flowing from dividends. This will be discussed more fully in Chapter 7.

We assume that the rules governing the calculation of net active foreign branch income would conform to the way in which exempt CFC income net of royalties is determined. If a U.S.-developed intangible is used in a foreign branch under current law, no explicit royalty is observed, and the foreign branch's income is determined by allocating expenses to the parent and the branch. Since both domestic and foreign income are currently taxable, calculating the branch's share is relevant only for calculating the foreign tax credit limitation. A dividend exemption system, however, would determine what share is exempt. A royalty based on the usual transfer pricing rules would have to be deducted from exempt branch income. Otherwise, companies that have transferred highly valuable intangibles abroad would switch from a CFC to a branch structure to avoid the tax on royalties. Another possibility, if allocations continue to be used, is that the branch would bear the share of the parent's R&D expenses that it would have to carry under a bona fide cost-sharing agreement.

# 7
# Will Dividend Exemption Promote Income Shifting?

Another major concern about adopting a dividend exemption system is that it will encourage greater income shifting to low-tax locations. To the extent that this income is moved out of the United States, it will erode the static gains discussed in the previous chapter. In addition, increased opportunities for income shifting can distort behavior by causing companies to rearrange their operations to save tax. Because foreign base sales rules and other anti-transfer-pricing abuse provisions in subpart F would be retained, income from sales routed through a low-tax country would be fully taxed in the United States.[21]

The incentive to shift income from one country to another on the margin depends on the difference in statutory tax rates. As demonstrated, the effective burden of the repatriation tax that is at the center of the current system is very light. The opportunity for repatriating tax-free from a low-tax location does not seem to confer an advantage much greater than simply deferring the income under the current system. This will be confirmed when the income-shifting behavior of excess credit and excess limit

companies is compared. But royalties paid to the United States require special scrutiny because they will be fully taxable under exemption. At present, royalties paid to an excess credit taxpayer are effectively exempt on the margin: not only are they deductible in the host country, but they are exempt in the United States.

We begin by comparing the shifting behavior of excess limit and excess credit corporations. Except for the differing impact on royalties or other foreign-source payments to the United States under current law, excess credit taxpayers now have the same incentive to shift income to low-tax locations as *all* taxpayers would have under exemption. So it is important to determine whether excess credit taxpayers now shift more income to low-tax countries because they can repatriate from them without paying a residual U.S. tax.

Table 4 presents a regression equation for the ratio of CFC earnings to assets. This type of equation goes back ten years, beginning with Grubert and Mutti (1991). The sample is composed of all manufacturing and trade CFCs among the largest 7,500 CFCs. The explanatory variables are various parent characteristics, such as R&D, advertising intensity, and profitability, along with the age of the CFC. The basic tax variable in these shifting equations is the local statutory tax rate, because differences in statutory tax rates indicate the benefit of shifting income in or out on the margin. As expected, the local statutory tax rate has a large and significant effect on CFC profitability. Here we add a dummy variable for the parent's excess credit position, and then interact that variable with the local statutory tax rate. We use the resulting interaction term to determine whether companies with excess credits are more sensitive to local tax rates. The final two independent variables are the withholding tax rate on dividends, which is the equivalent of the dividend repatriation tax relevant if the

TABLE 4
PROFITABILITY AND EXCESS CREDIT POSITIONS OF MANUFACTURING AND TRADE CFCS, 1992

| *Independent Variables* | *Coefficient* |
|---|---|
| *Parent Characteristics:* | |
| R&D/Sales | .372 |
| | (4.05) |
| Advertising/Sales | .393 |
| | (5.91) |
| Net Income/Assets | .300 |
| | (8.84) |
| *CFC Characteristics:* | |
| Age Less than 5 Years | –.030 |
| | (3.42) |
| Age 5–15 Years | .003 |
| | (.47) |
| *Tax Variables:* | |
| Local Statutory Tax Rate | –.164 |
| | (4.02) |
| Parent in Excess Credit | .008 |
| | (.38) |
| Excess Credit * Tax Rate | .029 |
| | (.58) |
| Withholding Tax Rate on Dividends | –.034 |
| | (1.33) |
| Repatriation Tax of Company in Excess Limit | .0185 |
| | (.61) |

NOTE: The *t* values are in parentheses. There are 3,425 observations. The dependent variable is pre-tax CFC profits/total CFC assets.
SOURCE: Authors' calculations based on U.S. Treasury data files (see Appendix 1).

company is in excess credit, and the repatriation tax if the company is in excess limit.

In Table 4, the coefficient of the interaction term shows that the profitability of companies in excess credit seems to be *less* sensitive to local tax rates, not more, although the coefficient has no statistical significance. The coefficient for the withholding tax rate on dividends is negative and approaches borderline significance (it was significant in the analysis of the 1990 file reported in Grubert 1998). This tax will remain and apply to all companies under a dividend exemption system because the withholding tax will no longer be available as a credit. But the coefficient of the excess limit tax on dividends, which is eliminated by exemption, is never significant. This is consistent with the modest burden of the U.S. repatriation tax and the ease with which companies are able to avoid it.

Royalties may be one reason that excess credit companies do not shift more income to low-tax locations; these companies may simply repatriate more royalty income and use their excess credits to offset the U.S. tax liability on this income. While there is some evidence from CFC payments that royalties are higher if the parent is in excess credit, the effect does not seem to be large in the aggregate.[22] The share of total royalties received by parents in excess credit is, in fact, somewhat smaller than their share of all active income.

While it is impossible to dismiss this issue, we can put the possible importance of the shift from royalties into perspective. First, the strong incentive to pay less royalty on the margin applies only to royalties that are received by companies in excess credit—a characteristic of about 23 percent of manufacturing corporations. In addition, an examination of the 1992 CFC file finds that more than 90 percent of royalties paid by manufacturing subsidiaries were from countries with a statutory tax

rate of 30 percent or higher. A switch to locally taxable equity income from deductible royalties should, therefore, not yield much of a tax gain.[23]

Another indication of the sensitivity of royalties to excess credit status can be obtained from the growth in royalties over time. The share of foreign manufacturing income in an excess credit position has declined markedly since the short-lived jump caused by the Tax Reform Act of 1986. By 1994, only about a quarter of foreign manufacturing income was earned by companies in an excess credit position. But royalties have continued to increase. Commerce Department statistics reveal that, between 1989 and 1995, related party royalties more than doubled from $10.1 billion to $20.3 billion, while their share of the gross product of manufacturing affiliates increased from 1.8 percent to 2.8 percent. Accordingly, while U.S. parents with excess credits would have much less incentive to obtain royalties from their CFCs under dividend exemption, a substantial switch from royalties to equity income seems unlikely.

# 8
# Other Efficiency Gains

If a multinational corporation has excess foreign tax credits under the current system, it has an incentive to exploit an intangible abroad rather than in the United States because the royalty, the return on the intangible, will be exempt. This same availability of excess credits can also alter corporate behavior in other areas, specifically in deciding how much to export and how to provide computer software to foreign customers.

## Exports

Under the tax code's 863(b) sales source rules, 50 percent of export income can be classified as foreign source, which means that it can be shielded from U.S. tax by excess foreign tax credits. For a parent with excess foreign tax credits, 50 percent of export income is exempt compared with the typical 15 percent under Foreign Sales Corporation (FSC) provisions. This tax exemption lowers the cost of exports by lowering the pre-tax return required in export production. In 1994, this tax benefit to exports for multinational corporations that were in excess credit amounted to $315 million on the margin.

To evaluate how this reduction in export costs affects U.S. welfare, we use a computable general equilibrium model that we have developed over the years to explore international tax issues. Grubert and Mutti (1994) describe a recent version of this model. The simulation indicates that the $315 million tax benefit results in a welfare loss to the United States of about $150 million, net of the cost of additional FSC usage when companies no longer have excess foreign tax credits available. This welfare loss is attributable simply to the deterioration of U.S. terms of trade: the United States receives less for its exports than it would without the tax benefit.

## Computer Software

In 1998, the Treasury Department promulgated ten pages of densely packed section 861-18 regulations, including more than twenty examples, governing the source of income from software provided to foreign customers. Basically, the transaction could be classified as producing sales income, service income, or royalties, depending on what rights were transferred and what the payment depended upon. The classification of the transaction is important to taxpayers because 100 percent of royalty income can absorb excess foreign tax credits compared with 50 percent of sales income and none of service income. Accordingly, a computer software corporation with a valuable program has an incentive, if it has excess credits, to transfer the rights to that program to a foreign affiliate in exchange for future royalties and to let its affiliate sell the diskettes to foreign customers rather than providing the diskettes itself.

The elimination of excess credits will render the complicated software regulations obsolete and eliminate any distortions in the mode with which software is exported. Under existing circumstances, the efficiency loss is

relatively small. According to Bureau of Economic Analysis estimates for 1997, exports of software in the form of goods totaled $3.3 billion, royalties for the right to reproduce software amounted to $2.4 billion, and exports of specialized software services totaled $600 million. Even if one assumes a relatively high degree of substitutability among these alternative vehicles, the estimated efficiency loss is less than $10 million per year.

# 9
# Related Issues

## Evaluation of Alternative Systems

Many other alternatives to the present system have been put forward, including the complete elimination of deferral, a minimum distribution rate for CFCs, and taxation of foreign income on an accrual basis but at a lower rate.[24] Evaluating these alternatives is beyond the scope of this monograph, but our analysis suggests that the following eight factors should be considered:

1. *The efficiency loss associated with constraining repatriations.* Any system not based on repatriation, such as the repeal of deferral, will eliminate this loss.

2. *The effective tax rate in high-tax and low-tax countries.* As we have seen, this may depend very significantly on how overhead expenses such as interest are allocated to foreign income. For example, in the proposal to tax foreign income at a lower rate, are overhead expenses still fully deductible at home at the U.S. corporate rate?

3. *Spillover of credits from equity income.* This is possible in any system that provides credits for active income. Even if deferral is eliminated, a company may have excess credits from equity income that can shield royalties and export income.

4. *The taxation of royalties and interest.* In some proposals, such as a minimum distribution rate for foreign income, it is not clear how royalties and interest would be taxed.

5. *The calculation of foreign tax credits.* If deferral is eliminated but foreign income is taxed at a lower rate, how will foreign tax credits be calculated? Can high taxes in some countries effectively exempt low-tax income because foreign taxes are in effect fully creditable?

6. *Incentives for other governments to lower or raise taxes on U.S. companies.* The complete elimination of deferral may induce host governments to "soak up" the U.S. tax. Dividend exemption gives a foreign government an incentive to lower taxes on U.S. companies.

7. *Complications other than repatriation planning.* For example, do earnings and profits still have to be computed for foreign business income? Also, is the importation of foreign losses still possible?

8. *Added complications.* For example, a minimum distribution rate for each CFC is basically a per country or per item scheme, which can become very complicated because payments are made through a series of tiers. Per country schemes also add complexity because overhead expenses may have to be allocated to each location.

## Dividend Exemption and Subpart F

A few provisions of the anti-deferral rules in subpart F would become obsolete if dividend exemption were enacted. The current U.S. tax on active dividends paid by one CFC to another, for example, would seem unnecessary because the dividend would not be taxable if paid directly to the parent. The current U.S. tax (deemed dividend) on CFC investment in U.S. property, presumably designed to prevent the parent from receiving a tax-free payment that is the functional equivalent of a taxable dividend, would appear unnecessary if dividends were exempt.

But the case for other foreign-base company rules may in fact be strengthened. Exemption applies to foreign dividends but not to payments to the parent that are deductible abroad, such as interest and royalties. This would suggest that interest paid by one CFC to another should be taxable. Otherwise, the parent could easily inject equity into a tax-haven CFC, which lends to another CFC, thereby escaping the U.S. tax that would apply if the interest were paid directly to the parent.

Similarly, because dividend exemption makes a sharp distinction between domestic income and active equity income that is foreign, the case for foreign-base company sales rules, which are aimed at income from sales that are booked through a tax haven, would seem even stronger than under current law. A continuing backstop to the transfer pricing rules would, if anything, become more important.

## Will the Allocation of Deductions Add Further Distortions?

The allocation of overhead deductions to exempt income would become a very important feature of a dividend exemption system. One possible complication arises from

the current system for allocating interest to foreign income. The U.S. parent allocates its interest expense to foreign income based on its net equity in its foreign affiliates. The foreign company's debt is not taken into account in this "water's edge" procedure. The implication is that domestic investment may be discouraged even if, on the margin, it is financed with a modest amount of extra debt. (See Altshuler and Mintz 1995.)

But converting to a system of worldwide fungibility, which takes foreign debt into account before making any required allocation to foreign assets, would go a long way in alleviating this problem. Adopting worldwide fungibility might be feasible in a revenue-neutral proposal if dividend exemption in fact raises revenue. In that case, any expansion of domestic investment would not cause any additional allocation to foreign income as long as it was not financed with a greater share of debt than the company's worldwide ratio of debt to assets.

Adopting worldwide fungibility would also cure another potential problem: the possibility that the loss of U.S. deductions because of allocations of expenses to exempt income could cause double taxation. Consider, for example, a U.S. company in a high-tax country such as Japan. Under the current system of interest allocation, the U.S. parent may lose interest deductions over and above the foreign tax that its high-tax affiliate pays abroad. But under worldwide fungibility, the parent could eliminate the problem by engaging in "self-help" and shifting enough debt to its high-tax affiliate to bring its debt level up to the corporation's worldwide debt-asset ratio. Indeed, the high-tax affiliate probably has a high level of debt already. Dividend exemption would therefore discourage foreign investment in low-tax locations because this self-help would not be enough. Having to shift debt from the United States to the low-tax subsidiary would produce an increase in worldwide tax,

because the increase in U.S. tax from the lost interest deductions would not be offset by the reduced tax abroad.

### Is Dividend Exemption an Incentive for U.S. Exports?

The widely held view that dividend exemption amounts to an export incentive is of dubious validity. It seems to assume that U.S. exporters could shift a large amount of export income to a tax-haven trading company by underpricing exports, and further, that this income would be exempt from U.S. tax. This implies that the Treasury's anti-abuse rules that impose U.S. tax on this type of trading income would be repealed, contrary to the explicit assumption at the beginning of this monograph. As we have stressed, there is no necessary link between dividend exemption and the anti-abuse rules. Repeal of these trading company rules could be very risky, at least for the Treasury, because U.S. companies importing their foreign production could avail themselves of the same opportunities. Indeed, the tax-haven company could be used to book purely domestic transactions.

Beyond that, the repeal of the foreign trading company rules would not be enough. The normal transfer pricing and income attribution rules would have to be inoperative. Otherwise the tax haven entity could not claim any income. We have in previous studies found higher profitability in low-tax countries, which is consistent with the ability of companies to exploit the uncertainty in the transfer pricing rules. But it would seem unwise to support dividend exemption in the hope that it would be an incentive for exports. That would hinge on both the risky elimination of the anti-abuse rules and the ability of companies to justify significant income in the shell tax-haven trading company.

# 10
# Conclusions

We have presented a quantitative comparison of the workings of two systems for taxing international business income—a proposed dividend exemption system versus the current hybrid arrangement that is organized around repatriation, foreign tax credits, and deferral. Neither system can make any great claim to conceptual superiority. Using the practical perspective adopted here, however, our analysis strongly suggests that dividend exemption is the superior system. It would produce a major gain in simplification. Companies would no longer have to bear the cost of constraining dividends in their efforts to minimize the residual U.S. tax. A dividend exemption system would also have useful byproducts, including the rationalization and simplification of the taxation of export income and royalties, because removing active dividends from the system would also eliminate excess credits. At the same time, dividend exemption does not seem to have any significant disadvantages. U.S. tax revenue is not likely to suffer, and greater investment in low-tax countries would not be encouraged.

Perhaps the current system can be viewed as a reasonable compromise between capital export neutrality and capital import neutrality, but imposing a tax only on

those companies that cannot find an alternative to repatriation does not have any obvious theoretical merit. Because of the lack of conceptual clarity in the current system, some of the rules seem to be designed as if deferral had been repealed. For example, the expense allocation rules would work in a system with no deferral because the income associated with the expenses would be included in the U.S. tax base. For its part, dividend exemption is consistent with pure capital import neutrality, but that can only be regarded as optimal under a very restrictive set of assumptions, including perfect portfolio mobility of capital and a very special pattern of product demand interactions. (See Grubert and Mutti 1995.)

Many of the problems in the current system could, of course, be fixed without adopting an exemption system. The source rules for royalties and export income could be changed. The role of expense allocations could be altered to permit these allocations to reduce U.S. taxable income directly instead of operating, if at all, through the foreign tax credit limitation. Apart from the clash with the philosophy of the current system and the complications such a piecemeal system would introduce, these potential revisions would still leave the tax on dividends, which seems to have little merit.

Dividend exemption would bring new complications in some areas. Disputes with the IRS over the allocation of overhead expenses would increase because they would have greater importance in determining U.S. tax liabilities. Some of the rules in current law would have to be amended. For example, the calculation of net exempt branch income would have to be consistent with the net equity income of an incorporated subsidiary that is potentially exempt. The use of hybrid securities would also have to be restricted to prevent some income from escaping taxation in all locations. But overall, the adoption of a

dividend exemption system is likely to produce a net gain in simplicity and efficiency.

# Notes

1. Our assumption about the allocation of expenses is a natural extension of U.S. tax principles regarding exempt income.

2. For portfolio investors, the Passive Foreign Investment Company (PFIC) and Foreign Personal Holding Company rules would still apply.

3. The National Foreign Trade Council (1999) report on foreign income indicates that France, which has an exemption regime, has relatively rigorous controlled foreign corporation provisions. Some exemption countries try to limit the use of tax havens by only exempting income that is earned in a specified list of "good" countries.

4. If the company is deferring the repatriation of all income under the current system, the allocation does create an overall foreign loss, which may eventually have to be recaptured by reclassifying income repatriated in the future as domestic. This causes no problem if the company will be in an excess limit position, however. Recaptured foreign losses tend to be small—about $150 million in the general basket in 1994.

5. If the productivity of capital function grows over time, the company may not have to underinvest, but the Hartman-Sinn result for a mature CFC that eventually has enough earnings to finance its growth would seem to hold up.

6. Weichenrieder's common arbitrage assumption is that $r$, the required after-tax return on equity, is $(1 - t_{US})i$, where $i$ is the interest rate. This guarantees that the return on passive assets is as high as the domestic equity return even after accrual taxation of the interest. The Altshuler-Grubert (2000) analysis does not depend on this assumption.

7. Tobit estimation is used for the repatriation equation because many CFCs make no dividend repatriations. The projected changes

in dividends are based on the usual methods of prediction using a tobit equation as described in Maddalla (1983).

8. When companies pay more dividends, they may be switching from a payment that requires a current U.S. tax. We may, therefore, be overestimating the efficiency gain. On the other hand, because of the difficulty in measuring repatriation tax prices, there is a downward bias in the responsiveness coefficients.

9. For companies in excess limit, the repatriation tax increases for lower local effective tax rates. Specifically, it is the difference between the U.S. and foreign tax rate on the "grossed-up" dividend, or $(t_{US} - ETR)/(1 - ETR)$, where $t_{US}$ is the U.S. corporate rate and $ETR$ is the local effective tax rate. The repatriation tax for companies in excess limit is therefore highly correlated with $ETR$ and is not included as a separate independent variable. The size of the basic tax coefficient, 3.13, would suggest that the repatriation tax cannot be acting as much of an offset.

10. This refers only to net equity income and abstracts from the taxation of royalties.

11. One possible explanation for the firm-level results is that more mobile companies are more likely to be in low-tax locations and thus more likely to be in excess limit. The regression in the first column based on dividend withholding tax rates may, therefore, be a more valid test of the independent role of repatriation taxes.

12. If, as widely assumed, the arbitrage condition is that $r$, the required return on equity, is $(1 - t_{US})i$, where $i$ is the interest rate, then investing in passive assets, even with a subpart F current tax on the passive interest, is as good as repatriation. (See Weichenrieder 1996.) If the interest rate is below the level called for by this condition, as Altshuler and Grubert (2000) assume, passive assets are not a perfect substitute for repatriation. But the extent to which they are inferior will be captured by the estimate of the efficiency loss associated with high repatriation taxes.

13. The calculations are restricted to countries with populations in excess of 100,000 because it is not clear why some CFCs that are incorporated in pure tax havens are classified in manufacturing. Adding these CFCs raises the repatriation rate in the low-tax category to about 11 percent. The tabulations are limited to manufacturing CFCs owned by nonfinancial parents.

14. The repatriation rate of CFCs incorporated for more than fifteen years in these low-tax countries is about 19 percent. It might be claimed that the low repatriation rate for young CFCs reflects the Sinn underinvestment effect, and that the repatriation

tax *is* having a significant deterrent effect on real investment during the CFC's immature phase. As we have seen, however, the underinvestment effect can occur in theory only in a very simple model where the CFC has no alternatives, except for repatriation or investment in passive assets or lower-tier affiliates. Furthermore, Sinn assumes a stationary productivity of capital function. If the CFC's market is expanding, the underinvestment phase may disappear or be attenuated even under his assumptions about investment alternatives, because the CFC can obtain the benefit of deferral without restricting its investment. Finally, examination of the real activities of CFCs in low-tax countries in the 1992 tax files indicates that their sales are lower than average only during the first five years, not afterward.

15. The regression equation is gap = .152 – .55 *ETR*.
(4.06) (3.94)

16. The savings by companies in excess credit totaled $1.1 billion. It might be claimed that this is more relevant for the incentive to exploit an intangible abroad on the margin, and that is what is assumed in the comparison that follows.

17. The effective tax rate is calculated in the standard way, first computing the cost of capital or gross pre-tax return required to both compensate investors and pay the host and home governments.

18. In making this estimate, it was necessary to divide expenses in the general basket between exempt income and income that will continue to be taxed, such as royalties and sales source income. The static revenue estimate assumes that active rents received from abroad are not exempt. They are presumably deductible by the foreign payer. Rents are included in the same category as royalties in the tax return data, but royalties and license fees account for the major share. In some cases, rents and royalties are difficult to distinguish conceptually. For example, rents for leasing computer equipment are sometimes classified as royalties.

19. If foreign losses cannot reduce domestic taxable income, there will be no more recapture of foreign losses, a feature of current law that raises some revenue. But this recapture is not very significant—$150 million in 1994, of which $50 million was by companies in excess credit.

20. The estimates are based on the allocations actually made under current law, including interest allocations. Introducing worldwide fungibility would, of course, reduce the revenue gain significantly, but it is difficult to estimate the amount with any

precision. If there were no allocations of U.S. interest to foreign income, the static revenue gain would fall to $4.9 billion.

21. As under current law, the U.S. tax would apply only to sales income earned in countries with effective tax rates less than 90 percent of the U.S. rates. Thus, multinational corporations could not use this provision as a device to bring in excess foreign tax credits to shield other income.

22. This effect of excess credit positions on royalties is observable only if royalties are subtracted from foreign-source income to calculate a "first dollar of royalties" excess credit position.

23. The growth of "hybrids" since 1992 may make these data on tax rates in high-tax locations somewhat obsolete.

24. See, for example, the proposal for a minimum distribution rate for active CFC income in Leblang (1998).

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# Appendix 1

# Description of Data

The data used in the paper are based principally on corporate tax files compiled by the Statistics of Income Division of the Internal Revenue Service and are described in greater detail in Grubert and Mutti (1998) and Grubert (1998). The various linked files provide information for Form 1120, the basic corporate tax return; Form 1118, on which corporations claim a credit for foreign taxes; and Form 5471, the information return on which U.S. parents report on the operations of each of their controlled foreign corporations. Information on corporate R&D was derived in part from COMPUSTAT and linked with the tax files.

Table 1 is based on the real capital reported by CFCs on Form 5471. Excess credit positions were obtained from the parents' 1118s. The data in Table 2 were obtained from Schedule M of the 5471, which reports on the CFC's transactions with its related parties. Table 4 uses the income (earnings and profits) and asset data reported on Form 5471. Country tax provisions such as the statutory tax rate and the withholding taxes on various types of payments are from *Corporate Taxes: A Worldwide Summary,* published by Price Waterhouse. Country average effective tax rates were computed from the income and foreign taxes paid items on the 5471s.

# Appendix 2

# Dividend Repatriation Equation Used to Calculate Efficiency Loss

(Tobit Estimation)

| *Independent Variables* | *Coefficient* |
|---|---|
| Parent R&D/Sales | .276 |
| | (1.40) |
| Parent Advertising/Sales | .022 |
| | (.17) |
| Age of CFC < 5 years | –.156 |
| | (6.27) |
| Age 5–15 | –.097 |
| | (5.64) |
| Age 15–25 | –.022 |
| | (1.56) |
| Size of Affiliate (Log of Assets) | .013 |
| | (2.33) |

| | |
|---|---|
| CFC Earnings/Assets | .577<br>(13.06) |
| Repatriation Tax if Parent in Excess Limit | –.219<br>(5.07) |
| Repatriation Tax if Parent in Excess Credit | –.192<br>(3.15) |
| Withholding Tax Rate on Royalties | .066<br>(.07) |
| Withholding Tax Rate on Interest | .163<br>(1.86) |
| Parent in Excess Credit | .056<br>(4.49) |
| CFC Subpart F Income/Assets | .096<br>(.51) |

NOTE: Dependent variable is the ratio of CFC dividends to CFC assets.

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