



Taxes and Cross-Border Investments: The Empirical Evidence

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Introduction

Neutrality is a longstanding principle governing U.S. taxation of multinational business. It serves as the theoretical underpinning for the U.S. system of worldwide taxation and foreign tax credits. In the international area, neutrality dictates that (a) U.S. investors face the same tax burden on domestic and foreign investment (capital export neutrality) and (b) U.S. investment faces the same U.S. tax burden whether undertaken by U.S. or foreign investors (capital import neutrality).

A recent *Tax Notes* viewpoint (Stuart E. Leblang, "International Double Nontaxation," July 13, 1998, p. 255) contends that neutrality no longer exists in practice. The article claims that by exploiting inconsistencies across national tax systems, tax planners have legally eroded multinational tax neutrality. The article claims that cross-border investments now face lower taxes than purely domestic investments. As support for his assertions, Leblang states, "A combination of recent economic studies and available data suggests that both U.S. investments of foreign corporations, and foreign investments of U.S. corporations, generally face lower taxes than purely domestic investments." (p. 256)

This article challenges Leblang's claim that empirical research supports the proposition that cross-border investments are favorably taxed. This article reviews the extant empirical literature concerning international tax neutrality. We conclude that empirical findings in

this area are insufficient and inconclusive and fail to either support or undermine Leblang's assertions.

Leblang begins by stating that the merger of Chrysler Corporation and Daimler-Benz AG may reduce tax payments in the U.S. and abroad. Ignoring the tax effects arising from the costs or benefits of consolidation, Leblang bases his statement solely on the assumption that the new entity will have greater opportunities to avoid taxes. The source of these perceived improved tax planning opportunities is unclear.

The next section of this article reviews research dealing with the possibility that the purported tax savings from the merger comes from international tax planning economies of scale. The third section addresses the possibility that they come from separating the domicile of the shareholders from the domicile of the company. The fourth section reviews studies that compare the tax burdens of multinationals with the tax burdens of domestic-only companies. Concluding remarks follow.

International Tax Planning Economies of Scale

Both Chrysler and Daimler-Benz have been multinationals for decades; thus, the entity created by their merger is not the beginning of their international tax planning. However, perhaps Leblang believes the size of the new entity shifts the cost-benefit tradeoff of international tax avoidance. If so, tax plans that neither Chrysler nor Daimler-Benz would have undertaken individually might become profitable as a combined enterprise. Similarly, synergies may arise from consolidating the tax planning function of each company. If huge multinationals (e.g., Chrysler plus Daimler-Benz) engage in more tax planning than very large multinationals (e.g., Chrysler and Daimler-Benz as separate companies), then tax burdens should be inversely related to the size of the multinational.

Several studies (Slemrod (1996), Grubert and Slemrod (1996), and Shackelford (1998)) assert that tax avoidance should be increasing with a taxpayer's size because the costs of tax planning are largely fixed. To our knowledge, Olhofs (1998), as part of an ongoing dissertation, is the only study that empirically investigates whether international tax planning increases with the size of the multinational.

Olhofs (1998) contends that firms with more extensive foreign operations should have lower effective tax rates than firms with less extensive foreign operations. To test this hypothesis, she regresses U.S.

multinationals' effective tax rates on the size of the firm's foreign operations and a host of control measures, collected from the firms' financial statements. Contrary to her predictions and Leblang's claims, she reports that firms with more extensive foreign operations have *higher* worldwide effective tax rates.

An alternative explanation for Olhoft's (1998) results is that more profitable companies both pay more taxes and expand more rapidly into global markets. Thus, the apparent link between taxes and foreign activity may overlook the common determinant, profitability. Profitability measures are included in the regression to control for this possible effect, but the success of these controls is indeterminable. However, under no circumstances can the empirical evidence in this study be used to support Leblang's claims that cross-border investment is tax-favored compared with domestic investment.

Foreign Ownership

An alternative interpretation of Leblang's merger example is that improved tax avoidance opportunities arise from separating the domicile of the shareholders from the domicile of the target company. For example, before the merger, Chrysler, an American company, was owned principally by Americans. After the merger, Chrysler's shareholder (the holding company) will be domiciled outside the U.S. If change in ownership is the source of the anticipated tax reduction, then companies owned by foreign shareholders should pay less tax than companies owned by domestic shareholders.

Grubert, Goodspeed, and Swenson (1993), Grubert (1997), and Collins, Kemsley, and Shackelford (1997) compare foreign-controlled domestic (U.S.) corporations (FCDCs) to U.S.-domiciled companies. Each examines actual corporate tax returns. All find that FCDCs face lower U.S. effective rates than similar domestic companies. However, none documents a link between the taxes paid and the domicile of the shareholders.

Grubert, Goodspeed, and Swenson (1993) (GGS). Examining tax returns from 1980-1987, GGS document that FCDCs report lower levels of taxable income than domestic-controlled companies. They also report that the taxable incomes of FCDCs persist around zero for many years. Both findings are consistent with foreign-controlled U.S. companies managing their tax liabilities to avoid taxes more than other U.S. companies.

GGS attempt to explain the difference between foreign-controlled and domestic-controlled firms. They report that one-half of the difference is attributable to observable non-tax factors, such as exchange rate fluctuation, firm size, and age. The remaining half cannot be assigned to any observable factor.

GGS stops short of providing empirical support for Leblang's assertions. The unaccounted for half of the differential may arise because of transfer pricing or other manipulation of FCDC's U.S. taxable income. If so, such a finding would provide support for Leblang's position. However, GGS provides no such evidence.

Among the possible nontax explanations, the difference may arise because foreigners are disadvantaged in the market for corporate control, accept lower returns to garner market share, or encounter more unanticipated losses. These nontax explanations seem as compelling as explanations involving tax management, because most of the domestic-controlled companies in this study also are multinationals that face global tax planning opportunities similar to those FCDCs encounter. It is not clear why U.S. multinationals would be less tax aggressive than non-U.S. multinationals.

Grubert (1997). Grubert (1997) extends the GGS study using tax returns from a more recent period, 1987-1993. Besides the issues evaluated in GGS, Grubert (1997) considers significant, minority shareholdings (25-50 percent) by foreigners, transactions with offshore affiliates, different types of income, and alternative econometric specifications.

We estimate that the average domestic company would pay \$4 million more in taxes if it were a multinational.

The inferences are unchanged from GGS. FCDCs continue to report lower levels of taxable income than domestic-controlled companies. FCDCs' taxable incomes persist around zero. Again approximately half of the foreign-domestic differential can be explained by observable nontax factors. One new finding is that FCDCs (most of which are 100 percent foreign-owned) exhibit similar levels of profitability as 25 to 50 percent foreign-controlled domestic firms, suggesting that the role of foreign ownership in determining taxable income levels may be less clear.

Collins, Kemsley, and Shackelford (1997) (CKS). CKS also extend GGS by attempting to determine whether the FCDCs' persistence around zero taxable income arises from transfer price manipulation. CKS examine the U.S. tax returns of FCDC wholesale traders from 1981-1990. They concentrate on that sector because its production function is relatively simple and its companies can manipulate taxable income by managing the prices between the foreign manufacturer and the U.S. distributor. CKS hypothesize that if FCDCs are managing taxable income, then sales (determined by external markets) and cost of goods sold (determined by internal prices) should decouple. When the distributor's U.S. taxable income rises above (falls below) zero, then the foreign parent increases (decreases) the costs of inventory. By focusing on a sector purported to engage in transfer pricing manipulation and the account through which such manipulation should occur, CKS provide a powerful test of the tax management implied in GGS.

CKS find that the relations between sales and cost of goods sold in the tax returns of foreign-owned U.S. wholesalers maintaining near-zero taxable income do not differ from the relations found in the financial statements of other companies. The control groups include U.S.-domiciled wholesalers, foreign-domiciled wholesalers, and the parents of the sample firms. CKS

conclude that at least for wholesalers and inventory purchases, the GGS-documented persistence around zero taxable income cannot be linked to transfer pricing management. The findings provide no support for Leblang's claims. Moreover, the failure of such a strong research design to detect manipulation raises doubts about whether any of GGS and Grubert's (1997) unaccounted differential is attributable to tax management.

Multinationals vs. Domestic

Although Leblang's example of Chrysler and Daimler-Benz obviously does not compare multinationals with domestic-only companies, his article implies that multinationals have tax avoidance opportunities that domestic-only companies do not. Harris, Morck, Slemrod, and Yeung (1993) and Collins and Shackelford (1995) compare the tax liabilities of U.S.-only companies with the tax liabilities of U.S. multinationals. Controls are included in their analyses for non-tax factors that affect tax liabilities. However, a major concern in both articles is whether domestic-only companies can be compared with the largest U.S. multinationals. If the two sets are not comparable, determining whether taxes change when a firm becomes a multinational is difficult, if not impossible, and the empiricist is rendered incapable of presenting evidence for or against Leblang's assertions.

Harris, Morck, Slemrod, and Yeung (1993) (HMSY). Although HMSY's purpose is to learn whether U.S. multinationals shift income (and thus tax liabilities) between the U.S. parent and foreign subsidiaries, their research design enables us to compare domestic-only companies and multinationals. HMSY examine 200 randomly selected, U.S. manufacturing firms from 1984-1988. They regress U.S. tax liabilities on categorical variables that identify whether the U.S. firm has a subsidiary in a particular foreign country or region. For example, the Canadian variable equals one if the firm has a subsidiary in Canada and zero otherwise.

A finding that the regression coefficient estimate for the country and regional variables is negative (positive) for low-tax (high-tax) locations is consistent with U.S. multinationals shifting income to reduce taxes. HMSY report that the regression coefficient estimates for the variables representing the most heavily taxed and least heavily taxed regions are consistent with income shifting. Consistent with many other articles, HMSY conclude that large multinationals reduce their overall U.S. tax burden through income shifting.

More importantly for this article, however, they find that large U.S. multinationals face higher U.S. tax liabilities than domestic-only firms, even after any potential income shifting. This finding is contrary to Leblang's position. HMSY's evidence is consistent with cross-border investment facing higher taxes than domestic investment. Although large multinationals may reduce their total tax burden by shifting income in and out of the U.S., their worldwide tax burden remains higher than that of domestic-only firms.

Collins and Shackelford (1995). Our own comparison of U.S. multinationals and U.S. domestic-only companies from 1982-1991 confirms HMSY's findings. We classify firms as domestics if they report zero

foreign tax provision in their financial statements. After controlling for industry and year, we find that U.S. multinationals face 4 percent higher effective tax rates than U.S. domestics, and U.S. multinationals pay 30 percent more of their NIBT (net income before taxes) in taxes than domestics. The spread between multinationals and domestics increased during the sample period, consistent with the Tax Reform Act of 1986 increasing the tax burden on multinationals. We estimate that the average domestic company would pay \$4 million more in taxes if it were a multinational.

Conclusion

Many empirical papers document that taxes affect international commercial activity (see Hines's 1996 review). Numerous papers investigate transfer pricing practices alone. This article has focused on the subset of international tax studies that shed the most direct light on Leblang's claims that cross-border investment is taxed advantageously compared with domestic-only activity. We find insufficient empirical evidence to support Leblang's assertions about the taxation of multinationals.

Documentation of multinational tax planning alone does not imply that multinationals are tax-favored. Even documentation that multinationals engage in more tax planning than domestic-only companies is insufficient. Multinationals and domestic-only companies face different tax environments.

The extant research is rigorous, but limited, and provides inadequate evidence to support any position.

In our 1995 study, where we find that U.S. multinationals face higher effective tax rates than domestic-only companies, we provide three reasons why multinationals could face heavier tax burdens. One, multinationals operate in countries with higher tax rates than the U.S. Two, some features of the U.S. tax law (e.g., foreign tax credit limitations, interest allocation, and less favorable cost recovery for foreign assets) impose higher U.S. taxes on foreign-source income than on domestic-source income. Three, the most profitable domestic companies likely are the most active investors in global markets. High profits for these companies over many years have increased their returns to tax planning and may explain their expertise in tax planning. If so, it is their long-run profitability, rather than their international operations, that explains their tax planning activity. Moreover, if multinationals do face heavier tax burdens than other companies (as some studies suggest), then they must engage in more tax planning simply to avoid being tax-disadvantaged compared with their domestic-only competition.

Determining whether becoming (a larger) multinational or gaining foreign ownership reduces overall taxes is a difficult empirical task. The extant research is rigorous, but limited, and provides inadequate evidence to support any position.

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