This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The Effects of Taxation on Multinational Corporations

Volume Author/Editor: Martin Feldstein, James R. Hines Jr., R. Glenn Hubbard

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-24095-9

Volume URL: http://www.nber.org/books/feld95-2

Conference Date: January 13-15, 1994

Publication Date: January 1995

Chapter Title: Introduction to "The Effects of Taxation on Multinational Corporati

Chapter Author: Martin S. Feldstein, James R. Hines, Jr., R. Glenn Hubbard

Chapter URL: http://www.nber.org/chapters/c7737

Chapter pages in book: (p. 1 - 6)

Introduction

Martin Feldstein, James R. Hines, Jr.,
and R. Glenn Hubbard

The growing worldwide importance of international business activities has in recent years lead to serious reexaminations of the ways that governments tax multinational corporations. In the United States, much of the debate concerns the competitive positions of U.S. firms in international product and capital markets. In addition, there are those who agree that U.S. international tax rules have become more complex and more distorting in recent years, particularly since the passage of the Tax Reform Act of 1986. Discussions in the U.S. Congress and the administration since 1992 reveal a willingness to consider significant reforms. In Europe, increased liberalization of capital markets prompted discussions by the European Commission of harmonization of corporate taxation. These policy developments around the world not only suggest dissatisfaction with certain features of modern tax practice, but also raise deeper questions of whether current systems of taxing international income are viable in a world of significant capital-market integration and global commercial competition.

Academic researchers have expressed renewed interest in studying the effects of taxation on capital formation and allocation, patterns of finance in multinational companies, international competition, and opportunities for income shifting and tax avoidance. This research program brings together approaches used by specialists in public finance and international economics. The studies presented in this volume analyze the interaction of international tax rules and the investment decisions of multinational enterprises. The 10 pa-

Martin Feldstein is the George F. Baker Professor of Economics at Harvard University and president of the National Bureau of Economic Research. James R. Hines, Jr., is associate professor of public policy at the John F. Kennedy School of Government of Harvard University and a faculty research fellow of the National Bureau of Economic Research. R. Glenn Hubbard is the Russell L. Carson Professor of Economics and Finance at the Graduate School of Business of Columbia University and a research associate of the National Bureau of Economic Research.

pers fall into three groups: (1) assessing the role played by multinational firms and their foreign direct investment (FDI) in the U.S. economy and the design of international tax rules for multinational investment, (2) analyzing channels through which international tax rules affect the costs of international business activities such as FDI, and (3) examining ways in which international tax rules affect financing decisions of multinational firms. The results suggest that there are likely to be significant effects of international tax rules on firms' investment decisions and provide analytical input for future discussions of tax reform.

The Context: Multinational Firms, FDI, and International Tax Rules

Robert Lipsey's paper provides a review of evidence concerning the impact of outbound FDI on employment and economic activity in the United States. Lipsey notes that most "industrial organization" explanations for the rise of multinational firms are based on the notion that multinational enterprises possess specific assets or marketing skills that can be exploited most profitably by producing in many markets. Lipsey argues that the use of foreign production locations helped U.S. multinationals retain global market shares in spite of the decline in the U.S. share of world trade. In addition, the extensive empirical evidence analyzed by Lipsey offers no empirical support for the proposition that overseas production by U.S. multinationals reduces employment in the United States. Instead, the evidence supports the idea that firms experiencing an increase in their multinational activity increase their managerial and technical employment at home.

In the volume's second background paper on FDI, Martin Feldstein addresses the longstanding question of whether outbound FDI by U.S. multinationals reduces domestic investment in the United States. Feldstein's research uses aggregate evidence on investment flows in the OECD countries during the 1970s and 1980s in order to provide information on the general equilibrium effects of FDI. Extending the analytical approach he developed with Charles Horioka to study cross-country correlations of domestic saving and investment (Feldstein and Horioka 1980), Feldstein finds that, holding constant domestic saving, outbound FDI reduces domestic investment by significantly less than one for one. Indeed, his results suggest that each dollar of assets in foreign affiliates reduces the domestic capital stock by between 20 and 40 cents. This finding can be explained by the use of local debt to finance firms' overseas investment. Feldstein argues that local debt finance is available in foreign countries primarily to firms that invest in capital in those countries, due to transaction and information costs associated with financing direct investment. Feldstein's paper makes clear that domestic policymakers might consider the advantages associated with the local financing that accompanies FDI when evaluating the effect of outbound FDI on the domestic economy.

Standard models of optimal taxation predict that small open economies will not impose source-based taxes on capital income. This theoretical prediction is inconsistent with observed tax rules in most developed countries, in which corporate tax rates are high—indeed, comparable to maximum tax rates on individuals. Roger Gordon and Jeffrey MacKie-Mason argue that this apparent inconsistency is not surprising if the principal task of the corporate tax were not so much to raise revenue, but instead to discourage income shifting between the individual and corporate tax bases (and between domestic and foreign subsidiaries). In an international taxation setting, a country needs to tax the overseas incomes of domestically owned subsidiaries in order to prevent firms from facing tax incentives to exploit technologies abroad rather than domestically. Moreover, if the tax rates imposed by foreign governments were lower than the domestic corporate tax rate, multinationals would face incentives to circumvent domestic taxes by shifting their profits abroad through aggressive transfer pricing even if the firms that own the profitable technologies remain at home. Gordon and MacKie-Mason extend their research on the consequences of income shifting for the design of domestic capital taxes to show that avoidance of income shifting can explain a number of features of actual international tax rules, including transfer-pricing regulations and enforcement penalties, allocation rules for interest and R&D expenses, and the foreign tax credit. Their research suggests the potential importance of considering income shifting in any normative analysis of international tax rules, as well as the importance of studying empirically the extent to which income shifting occurs in response to tax rate differences.

International Tax Rules and the Cost of Capital for FDI

Tax policy influences investment decisions through its effects on cost of capital and the returns to different activities. Tax systems influence the investment decisions of multinational firms through a complicated interaction of home- and host-country taxation and differences across countries in the tax treatments of debt and equity finance. Joosung Jun's paper estimates the extent to which international tax rules affect the cost of capital for transnational investment, focusing on a comparison of the costs of capital incurred by U.S. firms and their competitors in major markets. Jun's calculations suggest that foreign subsidiaries of U.S. firms that are financed by parent equity generally face higher costs of capital than do local firms in major foreign markets. These U.S.-owned subsidiaries generally are disadvantaged vis-à-vis competing firms from countries in which some form of corporate tax integration is in place. The increasing internationalization of capital markets implies that differences in tax rules play an important role in explaining differences in the cost of capital faced by firms investing overseas.

Many policy discussions focus on the sensitivity of FDI to changes in the cost of capital for FDI. That cost of capital is affected not only by pretax financial costs of capital, but also by tax parameters in "home" (residence) and "host" (source) countries. Jason Cummins and R. Glenn Hubbard use previously unexplored (for this purpose) panel data on outbound FDI by several hundred subsidiaries of U.S. multinational firms during 1980–91 to measure more precisely the effect of taxation on FDI, and to analyze subsidiaries' investment decisions. The authors consider tax incentives created by host-country tax rates, investment incentives, and depreciation rules, and by variation (over time and across firms) in the tax cost of repatriating dividends from foreign subsidiaries. The authors fit a neoclassical model with tax considerations to the data on U.S. subsidiaries' investments in Canada, the United Kingdom, Germany, France, Australia, and Japan. The results reject a simple specification in which taxes do not influence investment. The estimated tax effects are economically important: Each percentage-point increase in the cost of capital reduces by 1–2 percentage points a subsidiary's annual rate of investment (investment during the year divided by the beginning-of-period capital stock).

As it does in the domestic corporate tax system, the alternative minimum tax (AMT) complicates the foreign investment incentives of U.S. corporations. The presence of the AMT is not merely a wrinkle: in 1990, 53 percent of all assets, and 56 percent of the foreign-source income of U.S. multinational corporations, was accounted for by firms subject to the AMT. The AMT's restrictions on deductions, inclusion of certain income excluded under the regular tax, lower tax rate than that in the regular tax system, and limitation on foreign tax credits modify the incentives for subsidiaries to invest and to repatriate dividends. In their paper, Andrew Lyon and Gerald Silverstein analyze these incentives. The authors show that the AMT may strengthen the incentive for AMT firms to invest abroad rather than in the United States. In addition, the AMT may create a temporary timing opportunity in which firms may repatriate overseas income at lower cost than if the firms were subject to the rules of the regular system. Using Treasury tax return data for 1990, Lyon and Silverstein analyze the prevalence of AMT status among U.S. multinationals, their receipt of foreign-source income, and the tax prices faced by these firms on additional foreign-source income. The results suggest that repatriation decisions respond to AMT incentives. Future research using tax return data over many years is, of course, necessary to determine whether these patterns persist over time.

Most empirical analyses of business fixed investment assume that firms exploit fully incentives for investment offered by the tax code, whether or not tax rules differ from those used to measure income for financial accounting purposes. Jason Cummins, Trevor Harris, and Kevin Hassett investigate the reasonableness of this assumption by comparing the responsiveness of investment to tax incentives in countries with different tax accounting and financial accounting reporting requirements ("two-book" countries) with the responsiveness in countries in which tax accounting and financial accounting reporting are identical ("one-book" countries). The United States is an example of the first type of country, while Germany is an example of the second. Cummins, Harris, and Hassett formulate a neoclassical model of domestic investment using firm-level panel data from 13 countries to test whether, all else equal, firms in one-book countries are less responsive to tax incentives than are firms in two-book countries. The empirical results suggest that differences in accounting regimes generate significant differences in the responsiveness of investment to tax policy; in particular, firms operating in "pure" one-book systems behave as though they face additional costs when taking advantage of investment incentives. The research program begun in this paper suggests fruitful extensions to studies of the impact on investment of interactions of accounting and tax regimes.

Economists and policymakers often argue that the presence of technologically advanced industries enhances national prosperity, in part due to the spillover effects of research and development (R&D) activities. Because externality-generating R&D activities may be underprovided by private markets, many governments subsidize R&D in some form. Whether these subsidies in fact stimulate additional R&D activity is the subject of a vigorous debate. James Hines analyzes the impact of withholding taxes on cross-border royalty payments on the R&D activities of multinational firms. High withholding tax rates make it costly for foreign subsidiaries to import technology from their U.S. parents. The high cost of technology should stimulate local R&D if local R&D is a substitute for imported technology, or dampen local R&D if it is a complement for imported technology. Hines tests a model of subsidiary R&D activity using country-level data on tax rates and R&D expenditures by U.S. subsidiaries. He examines the effect of royalty taxes on the local R&D intensities of foreign affiliates of multinational corporations, looking both at foreign-owned affiliates in the United States and at U.S.-owned affiliates in other countries. He finds that higher royalty taxes are associated with greater R&D intensity on the part of affiliates, suggesting that local R&D is a substitute for imported technology.

International Tax Rules and Financing Decisions

A longstanding question in the analysis of taxation of multinational corporations is whether home-country taxes due on repatriation of foreign-source income affect subsidiaries' repatriation decisions. In principle, as long as the home-country tax does not change, and parent firms derive no value from a particular pattern of repatriations, taxes due upon repatriation are unavoidable costs. Hence, neither the investment decisions nor the repatriation decisions of mature foreign subsidiaries should be affected by home-country taxation of repatriated earnings. Studies using cross-sectional data on firms indicate, however, that U.S. subsidiaries' dividend remittances are sensitive to the U.S. repatriation taxes. Panel data are needed to proceed further in this line of inquiry because such data allow an investigator to distinguish between effects of transitory and permanent variation in U.S. tax rates on repatriations. This is precisely the agenda pursued by Rosanne Altshuler, Scott Newlon, and William Randolph. These authors analyze a data set consisting of U.S. tax return information for a large sample of foreign subsidiaries and their U.S. parent firms for the years 1980, 1982, 1984, and 1986. The empirical tests exploit information about cross-country differences in tax rates to estimate separate effects on remittances attributable to the permanent and transitory components of tax prices of dividend repatriations. The intuition is that, while cross-country differences in average repatriation tax prices or statutory tax rates are correlated with permanent components of tax price variation, they are uncorrelated with transitory variations. Hence, these measures can be used to construct instrumental variables for tax prices that permit separate identification of permanent and transitory tax price effects. Altshuler, Newlon, and Randolph find that the transitory tax price effect is larger than the permanent effect, suggesting that subsidiaries concentrate repatriations to U.S. parents in periods in which the tax prices of repatriations are transitorily low.

Kenneth Froot and James Hines argue that the investment and financing of multinational firms may be affected by the changes in interest allocation rules introduced by the Tax Reform Act of 1986. The rules reduce the tax deductibility of interest expenses for firms in excess foreign tax credit positions. The resulting increase in the cost of debt finance gives firms incentives to use forms of financing other than debt. Furthermore, to the extent that perfect substitutes for debt are not available, the overall cost of capital rises. Froot and Hines test this proposition by comparing investment before and after 1986 by firms in deficit credit and excess credit positions, holding constant other determinants of investment. The study analyzes data on 416 firms with international business operations. The authors find that, over the 1986–91 period, firms that could not fully deduct their U.S. interest expenses both borrowed less (on average, 4.2 percent less debt measured as a fraction of firm assets) and invested less in property, plant, and equipment (on average, 3.5 percent less) than firms whose deductions were not affected by the interest allocation rules. These results suggest that firms substitute away from debt as it becomes more expensive, and that firms reduce their capital investments in response to higher borrowing costs produced by the change in interest allocation rules.

Reference

Feldstein, Martin, and Charles Horioka. 1980. Domestic saving and international capital flows. *Economic Journal* 90: 314–29.