International Taxation and Multinational Activity. Edited by JAMES R. HINES JR. Chicago: University of Chicago Press, 2001, Pp. 274.

Within the last three decades, federal and subnational governments around the world have become increasingly appreciative of the benefits of foreign direct investment and increasingly aggressive in their efforts to attract multinational firms. At the same time, firms have become increasingly sophisticated about managing their tax obligations and innovations in production processes have created new opportunities for firms that want to optimize location decisions in response to cost differentials. These simultaneous and interrelated developments mandate that the profession's understanding of taxation and investment be embedded within a deep understanding of how multinationals respond to the myriad tax incentives they face around the world.

During this same time period, the academic literature on international taxation and multinational firms has evolved through three overlapping lines of inquiry. First, Richman (1963) began a line of inquiry centered on exploring optimal tax rules for countries to adopt depending on various welfare objectives. Elaborations of these initial models to more realistic settings have created a rich theoretical literature on optimal tax rules.[1] Second, the application of "new view" logic in the international setting by Hartman (1985) and the subsequent dynamic implications considered by Sinn (1993) and Hines (1994) provided a more detailed theoretical framework of tax incentives at the multinational firm level by emphasizing the conditions under which repatriation taxes can influence the level and nature of outbound investment. Finally, the impetus provided by these theoretical developments, along with the availability of considerably richer data sources, gave rise to a third wave of research that provided detailed empirical work on the responsiveness of firms to tax incentives. This third stream has been developed, in large part, through the collections of conference papers organized by the National Bureau of Economic Research and published by the University of Chicago Press. The most recent installment in this series, *International Taxation and Multinational Activity* (edited by James R. Hines Jr.), provides the best available guidebook to a detailed understanding of the responsiveness of multinational firms to international tax incentives and the culmination of this stream of research.[2]

Despite its surprisingly mundane title, this volume provides an excellent overview of the workings of the web of international tax rules, a new set of results on the changing nature of firm responsiveness to tax rules, and a nuanced understanding of the different margins on which firms respond. As such, the volume significantly advances the empirical research

1 See Treasury (2000) for a description of the evolution of this literature.

2 See Razin and Slemrod (1990), Giovannini, Hubbard, and Slemrod (1993) and Feldstein, Hines, and Hubbard (1995) for the earlier installments in this series.

agenda concerning multinational firms and international taxation by moving beyond the question of "do multinational firms respond" to "how do multinational firms respond."[3] In addition to deepening the questions asked within this research agenda, the volume features an impressive array of data sources—ranging from international patenting patterns to confidential tax return data—and methodologies—ranging from valuation methodologies borrowed from the accounting literature to estimates of the multinational production function—in order to provide new perspectives on these questions. The contributors are some of the best researchers working in the area and the discussants provide frank and helpful critiques of the papers that help frame the results provided in the paper.

The nine contributions in the volume are grouped into efforts that consider the responsiveness of investment to tax rules, manifestations of tax avoidance by multinational firms, and the manner in which tax rules affect the location of inventive activity and associated spillovers. Within the investment section, Rosanne Altshuler, Harry Grubert, and Scott Newlon document the increasing sensitivity of locational decisions and they provide considerably higher measures of investment elasticities—a near doubling—than previously reported in the literature. While Jack Mintz provides some important qualifications regarding the use of average tax rates to determine the impact of taxes in investment, this paper promises to become a new standard in the measurement of the sensitivity of FDI to differences in host country tax rates. Jim Hines challenges the characterization of tax sparing policies as ineffective by examining the relative magnitude of Japanese and American FDI in developing countries. These policies, which attempt to ensure that incentives provided by developing countries to multinational firms are not offset through interactions with home–country rules, are found to be an effective stimulant to investment from developed to developing economies. His usage of UK tax sparing agreements as instruments for tricky endogeneity issues and his challenge to accepted wisdom through careful empirical work makes this contribution vintage Hines. Shang–Jin Wei also extends the reach of the tax–FDI literature by jointly considering capital controls, measures of corruption and tax rates in order to investigate the possibility that corruption can increase welfare by easing the constraints imposed by these other regulations. While this intriguing notion isn't validated in the data, Wei provides some nice intuitive specifications for considering this hypothesis and interprets his results with judicious restraint. Finally, Deborah Swenson advances two distinct streams of inquiry by using subnational variation in tax rules and disaggregate data to understand how different types of FDI—plant expansions, new plants, acquisitions, joint ventures, and equity increases—respond to tax incentives. Her usage of these levels of variation demonstrates how aggregate studies may mask considerable tax–induced effects on the composition of investment.

The segment of the volume dedicated to tax avoidance provides an even more wide–ranging examination of how tax rules can alter behavior. Harry Grubert attempts to distinguish between increased aggressiveness by companies in structuring internal transactions to minimize taxes from the increasingly aggressive efforts of countries to court investors through reduced tax burdens. This central question is very slippery and Grubert employs confidential tax return data to highlight how

[3] See Hines (1997) for an excellent review of prior empirical work and Slemrod (1997) for a critique of the then extant literature.

simple analyses of firm behavior may mask a more complex interaction between states and firms. Julie Collins, John Hand, and Doug Shackelford provide a distinctive perspective on the impact of repatriation taxes by innovating on two margins —the use of variation arising from the accounting treatment of reinvested earnings and the use of a valuation methodology that employs accounting information and is premised on clean surplus accounting. Their results on the perception of future tax liabilities associated with deferral considerably advance the accounting literature on the valuation of tax liabilities, the profession's understanding of how deferral motivations are influenced by accounting treatments, and manager's understanding of how investors consider their international activities. Finally, Kim Clausing demonstrates that corporate tax incentives materially influence the nature and composition of intrafirm trade balances. Clausing's effort nicely connects the international tax literature with the growing intrafirm trade literature and provides some compelling and robust results on tax–induced transfer pricing within multinational firms.

Much of the attention given to attracting FDI through tax incentives stems from the premise that significant spillovers will result from increased FDI. The final section of the volume provides two contributions that examine this fundamental premise. Jason Cummins explores this question through a growth accounting exercise for U.S. multinationals that reveals the importance of affiliate investment to overall firm level growth and the cycles of productivity improvements within multinational firms. Jim Hines and Adam Jaffe investigate the complementarity of domestic and foreign R&D by using tax–induced variation in the cost of domestic R&D to explain the patenting patterns of the foreign affiliates of those parents. This creative identification strategy and the use of novel data combine to provide some compelling evidence on the complementary nature of domestic and foreign R&D.

The collection of scholars and papers in this volume is impressive by any measure. The volume only disappoints in the manner that much of the extant literature on international taxation and multinational firms disappoints. The papers in this volume concentrate on the activities of manufacturing firms while the ways in which these rules and taxes impact services firms remains relatively unexplored. The volume also artificially distinguishes between investment and tax avoidance when a paper such as the Clausing contribution is instructive on both avoidance and investment. More importantly, the interaction of tax incentives with the many other incentives faced by firms—accounting treatments, capital budgeting constraints, agency problems inside the firm —remains, largely, *terra incognita* for this literature. Embedding these tax rules within a broader appreciation of multinational decision–making, both theoretically and empirically, remains the next large step for this literature to make. The intersection of industrial organization, international trade, corporate finance, and public finance remains a rich and unexplored area for future speculation.

As such, this volume not only provides some of the best available contributions within this third stream of research that emphasizes empirical estimates of responsiveness but also points the way toward what will hopefully be the fourth wave of research in this arena. The efforts of Wei to link tax rules with other institutional barriers to investment, of Collins, Hand, and Shackelford to link tax incentives with accounting decisions, and of Clausing to link intrafirm trade decisions with tax motivations are all examples of the potential symbiosis between the growing literature on international taxation and other subdisciplines within economics. The use of international tax rules as a wedge to understand major questions in other disciplines and the use of instruments and identification strategies from other literatures to enhance our understanding of international tax rules will provide a rich stream of future research. Thanks to the efforts of the scholars assembled in this excellent volume the territory explored in this third wave of research is sufficiently well–charted that scholars can now employ many of these lessons for the next generation of explorations.

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