

# **International Tax Policy Forum and Tax Policy Center Conference**

## ***Corporate Inversions and Tax Policy***

January 23, 2015

The Brookings Institution  
1775 Massachusetts Avenue N.W.  
Washington, D.C. 20036

**International Tax Policy Forum and Tax Policy Center Conference**  
***Corporate Inversions and Tax Policy***  
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# International Tax Policy Forum

Web site: [www.itpf.org](http://www.itpf.org)

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Founded in 1992, the International Tax Policy Forum is an independent group of more than 40 major U.S. multinationals with a diverse industry representation. The Forum's mission is to promote research and education on the taxation of multinational companies. Although the Forum is not a lobbying organization, it has testified before the Congressional tax-writing committees on the effects of various tax proposals on U.S. competitiveness. The ITPF also briefs Congressional staff periodically and sponsors public seminars on major international tax policy issues. The 2013 conference on "Tax Policy and U.S. Manufacturing in a Global Economy" was co-sponsored with Brookings Institution.

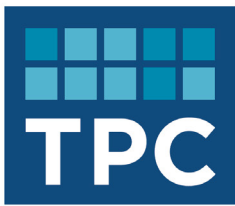
On the research front, the Forum has commissioned over 20 papers on international tax policy topics such as the effects of the interest allocation rules on the competitiveness of U.S. firms, the compliance costs of taxing foreign source income, and the linkages between foreign direct investment and domestic economic activity (see [www.ITPF.org](http://www.ITPF.org)).

Members of the Forum meet three times a year in Washington, DC to discuss key international tax policy issues with leading experts in government, academia, and private practice.

PricewaterhouseCoopers LLP serves as staff to the Forum. **John Samuels**, Retired Vice President and Senior Counsel for Tax Policy and Planning with General Electric Company, chairs the Forum. The ITPF's *Board of Academic Advisors* includes ITPF Research Director Prof. **James Hines** (University of Michigan), Prof. **Alan Auerbach** (University of California, Berkeley), Prof. **Mihir Desai** (Harvard), Prof. **Michael Devereux** (Oxford), Prof. **Michael Graetz** (Yale), and Prof. **Matthew Slaughter** (Dartmouth).

### *ITPF Mission Statement*

*The primary purpose of the Forum is to promote research and education on U.S. taxation of income from cross-border investment. To this end, the Forum sponsors research and conferences on international tax issues and meets periodically with academic and government experts. The Forum does not take positions on specific legislative proposals.*



## TAX POLICY CENTER

URBAN INSTITUTE & BROOKINGS INSTITUTION

The Tax Policy Center, a joint venture of the Urban Institute and the Brookings Institution, has been filling a critical need for effective tax policy analysis since it opened its doors in April 2002. Our objective, timely, and accessible information helps policymakers, journalists, academics, and taxpayers identify and evaluate current and emerging tax policy options. We believe that better information, rigorous analysis, and fresh ideas injected at key points in the policy debate can forestall bad policies and reinforce good ones. Since our inception, we have focused on four overarching areas:

**Fair, simple, and effective taxation.** Virtually everyone agrees that taxes should be simple, fair, and efficient. But policymakers disagree over how to define and achieve those objectives. We quantify trade-offs among these goals and identify reforms that increase simplicity, equity, and efficiency.

**Social policy in the tax code.** Over the past decade, much of social policy has shifted from direct expenditures to tax subsidies. A full assessment of social policy as well as tax progressivity, marriage penalties, and related issues requires consideration of both tax and spending programs. The TPC is evaluating this revolution in tax and social policy.

**Long-term implications of tax and budget choices.** The U.S. faces a dismal fiscal future in part because of unfunded public obligations related to rising health care costs and the retirement of Baby Boomers. We examine the implications of current policies and proposed tax changes on future generations.

**State tax issues.** Many Americans pay more in state and local taxes than they do in federal ones, and like the federal government, states often use the tax system to encourage business development and help low-income families. As part of UI's State and Local Finance Initiative, TPC experts analyze how federal, state, and local tax policies interact, and evaluate the fairness and efficiency of different ways that governments raise revenue.

Awarded 2012's Tax Notes Person of the Year by Tax Analysts

Awarded 2012's Best Think Tank by the Washington Post's Wonkblog

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"The Tax Policy Center, if anything, comprises a gang of raging moderates from both parties who have infuriated ideologues for years by simply telling the truth about the tax system. It has one of the more reliable and unbiased computer models of the nation's tax system."

David Firestone, *The New York Times*

"In a highly polarized political environment, many did not know whom to believe. The Tax Policy Center was there to help. The Center provides non-partisan, expert but common language analysis of the likely implications of tax policies and proposals, making it a key resource for journalists, policy makers, and citizens."

The John D. and Catherine T. MacArthur Foundation, in awarding the Center a 2010 MacArthur Award for Creative and Effective Institutions

"In a tax debate in which bombast and sound bites often crowd out facts, figures, and reasoned analysis, the Tax Policy Center provides all three, in an easy-to-access, easy-to-understand fashion."

David Wessel, *The Wall Street Journal*

### TAXVOX

Timely commentary on tax and budget issues. Its syndication partners include *Forbes* and *The Christian Science Monitor*.

### THE NUMBERS

Tables and estimates from TPC's state-of-the-art microsimulation model of the federal tax system.

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Tax information for citizens, policy analysts, legislators, and the press on federal, state, local, and international tax systems.

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Explanatory and analytical publications, distributional and revenue estimates, and background information on the nation's pressing tax issues.

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*Corporate Inversions and Tax Policy*  
**The Brookings Institution**  
**1775 Massachusetts Ave., NW**  
**Washington, DC 20036**

**January 23, 2015**

- 8:30 am **Registration**
- 8:50 am **Introductory Remarks**  
Bill Gale (Brookings and Tax Policy Center)  
John Samuels (GE)
- 9:00 am **The Inversion Experience in the United States and the United Kingdom**  
Moderator: Eric Toder (Urban Institute)  
Presenters: Paul Oosterhuis (Skadden)  
Mike Williams (UK Treasury)
- 10:10 am **Incentives to Invert and the Market for Foreign Takeovers**  
Moderator: James Hines (Michigan)  
Presenter: Andrew Bird (Carnegie-Mellon)  
Commenter: Mihir Desai (Harvard)
- 11:00 am **Break**
- 11:15 am **Policy Responses to Corporate Inversions**  
Moderator: Michael Graetz (Columbia)  
Presenters: Michael Devereux (Oxford)  
James Hines (Michigan)  
Ed Kleinbard (USC)  
Steve Shay (Harvard)
- 12:15 pm **Luncheon**
- 12:30 pm **Luncheon Address**  
Orrin Hatch (Chair, Senate Committee on Finance)
- 1:15 pm **Adjourn**

# Domestic Taxes and Inbound Acquisitions\*

Andrew Bird  
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January 19, 2015

## Abstract

U.S. corporations face higher tax burdens than those in many other countries, potentially influencing merger and acquisition activity – the key channel for foreign direct investment. If tax rather than productivity differences drive M&A activity, global wealth will be lower, given that ownership will not be arranged to maximize the pre-tax value of assets. I build a theory with both tax and productivity differences among potential acquirers which yields two testable implications: that, relative to high-tax domestic bidders, low-tax foreign bidders will specialize in both high profitability target firms and those with few tax deductions. I test for these effects using the universe of all public U.S. M&As from 1990-2010. My empirical strategy exploits both cross-sectional variation in target profitability and industry-level variation in the generosity of investment allowances due to the bonus depreciation tax reform after 2001. I find clear evidence in support of both predictions. First, a one standard deviation higher target profitability increases the probability that the acquirer will be foreign by 16% (or 2.8 percentage points). This result is robust to controlling for non-tax bidder differences using minority transactions, and is stronger for foreign acquirers resident in tax havens. Second, difference-in-differences estimates imply that the increase in allowances from bonus depreciation caused a 5.3 percentage point drop in foreign acquisitions in the post-reform period, which led to a loss in aggregate wealth on the order of 5% of assets, or \$360B. These two dimensions of sorting suggest new ways in which domestic taxes can affect FDI and have important consequences for the productivity of assets.

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\*This paper previously circulated with the title “The Effects of Taxes on the Market for Corporate Control”. I would like to thank Michael Smart, Robert McMillan, Laurence Booth and Alex Edwards for their guidance and support throughout this project. Thanks also to Dwayne Benjamin, Gustavo Bobonis, Branko Boskovic, Kory Kroft, Joshua Lewis, Nicholas Li, Giorgia Maffini, Peter Morrow, Aloysius Siow, Tom Ruchtli and seminar participants at Brown, Carleton, Carnegie Mellon, Guelph, HEC Montréal, Oxford, Ryerson, Toronto, UBC and Victoria for their helpful comments. I gratefully acknowledge financial support from the Tepper School of Business, the SSHRC CGS Doctoral Fellowship, the Dorothy J. Powell Graduate Scholarship in International Economics and the Royal Bank Graduate Fellowship in Public and Economic Policy. All remaining errors are my own.  
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# 1 Introduction

Cross-border mergers and acquisitions are a major component of foreign direct investment, rising above one trillion U.S. dollars in 2013. This corresponds to about two thirds of aggregate foreign direct investment and almost half of all worldwide merger and acquisition activity (Bloomberg and UNCTAD). Given the sheer scale of these flows, an understanding of how taxes affect equilibrium in the market for corporate control, which gives rise to mergers and acquisitions (M&A), is a key input to optimal policymaking. Furthermore, since the ownership of an asset or firm is an important determinant of its productivity,<sup>1</sup> there could be significant consequences for aggregate wealth arising from any tax distortions of the equilibrium in this market. Specifically, if some potential acquirers have a purely tax-derived comparative advantage in acquiring certain assets, they may be able to outbid other potential acquirers that could make more productive use of the assets. Since an acquirer's post-deal tax savings are completely offset by government revenue losses at the global level, such a situation represents a clear deadweight loss, as the real productivity of the stock of assets is not maximized.

To investigate this issue, I develop a simple model that focuses on the competition among potential acquirers to buy a specific target firm. The model is especially concerned with how the tax rates of the potential acquirers, which are assumed to vary due to differential abilities to shift income to lower tax jurisdictions, interact with the characteristics of the target firm and the domestic tax system. The assumption that international acquirers have tax advantages relative to domestic acquirers is consistent with evidence presented by Markle and Shackelford [2012], who document significant differences between the effective tax rates of multinationals resident in different countries, and particularly high rates for U.S. firms. Given such tax rate differences, my model gives rise to two testable implications: that low-tax foreign bidders are more likely to acquire more profitable target firms than are domestic bidders, and that increases in available tax deductions lead to decreases in the probability of foreign acquisition.<sup>2</sup>

These predicted dimensions of sorting show how the effects of tax rate differences can be tested even without reliable measures of company-level effective tax rates. This is particularly useful as companies have an incentive to obscure their tax planning practices as much as

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<sup>1</sup>For example, Becher et al. [2012] find that productivity gains are the main source of excess returns from utility mergers, while Chen [2011] finds significant dispersion in labour productivity gains for those employed at the targets of FDI, depending on the source of the FDI.

<sup>2</sup>The model works equally well for the alternative scenario where it is domestic bidders that have the tax advantage. In this case, the comparative statics would flip signs. Then the two tests detailed in the text can be thought of as also testing for the sign of the tax difference between domestic and foreign bidders. The data support my assumption of an advantage for foreign bidders.

possible so as to avoid attracting the attention of national revenue authorities. Furthermore, even if raw tax rates can be observed, what matters for corporate behaviour is the *effective* tax rate, which must include the transactions costs associated with tax planning, and these are inherently difficult to discern from accounting disclosures.

Using data on acquisitions of U.S. public companies from 1990-2010, I test these two theoretical implications and find strong evidence in support of the existence of tax clienteles consistent with the theory. In the first test, using cross-sectional variation over target firms, I find that a one standard-deviation increase in the profitability of the target leads to a 16% increase in the probability that the acquirer will be foreign. The main empirical difficulty is that this sorting may be due to non-tax differences between foreign and domestic bidders. To address this issue, I use two distinct strategies, beyond controlling for a variety of observable target characteristics, including industry and time effects. First, I use minority transactions, wherein the bidder acquires less than 50% of the target, as a control group to account for non-tax motivations for equity investments. It seems reasonable to assume that majority and minority transactions are driven by similar non-tax motivations, such as geographic diversification or technology transfer, but that income-shifting and the lower tax rate it brings is only possible for majority owners – those who make the financial and operating decisions. It turns out that minority foreign transactions actually target less profitable targets than do domestic minority transactions. Hence the effect of profitability on the probability of foreign majority acquisitions is actually higher using this control group. The second strategy employed is to split the foreign winners into tax-haven residents and non-tax haven residents. In the comparison of tax haven vs. domestic bidders, the effect of profitability is much stronger than in the non-tax haven vs. domestic comparison. This also provides strong evidence that taxes are the economically relevant difference between bidders, given the likely primacy of tax considerations in the decision to locate or incorporate in a tax haven.

To test the second key implication of the theoretical model – that foreign bidders have a comparative disadvantage in acquiring firms with high levels of tax deductions – I implement a difference-in-differences strategy using plausibly exogenous industry-level variation in the generosity of investment allowances due to the bonus depreciation tax reform after 2001. In particular, a one standard deviation increase in depreciation allowances (relative to the distribution of changes induced by the reform) yields an 18% decrease in relative foreign acquisitions. In line with the nature of the reform, the reduction was largest for industries with high levels of investment in equipment, such as transportation, and minimal for industries like real estate, which invest mostly in land and structures.

The theory delivers an expression for the probability of foreign takeover in equilibrium



that can be readily taken directly to the data, which allows me to go beyond the comparative statics in several interesting ways. First, I use the implications of the model to identify how bidders' discount rates vary with their tax rates and income-shifting opportunities. This extension shows that these discount rates reflect almost the full difference in relative tax rates, which has important implications for optimal policy. Specifically, the effect of the tax base, rather than just the tax rate, on inbound acquisition activity is of first order importance, despite receiving relatively little attention in the literature or popular press. To quantitatively investigate this conclusion, I also use the model to conduct a counterfactual experiment, which shows that ownership patterns were significantly changed by the institution of bonus depreciation in 2001. In particular, foreign acquirers were disadvantaged by the reform, leading to a probability of foreign takeover that was 5.3 percentage points less than it would otherwise have been. The model also allows for the calculation of the loss in wealth due to this change in foreign takeovers. Conservatively, the reform costs on the order of \$36 billion per year through this ownership channel, or 5% of the total assets traded in the M&A market.

Overall, these results draw attention to a nontrivial tax distortion in the U.S. acquisition market, whereby the ultimate owner of a domestic firm may be determined by skill in avoiding taxes rather than skill in making productive use of the assets. As these two identified tax effects influence foreign acquisitions in different directions, the aggregate effect of income-shifting on inbound merger activity is theoretically ambiguous. However, regardless of the net effect, foreign firms are specializing in high-profit targets which have relatively few available tax deductions. Therefore, even if the aggregate probability effect were negligible, the set of firms that is targeted by international acquirers is not the productivity-maximizing one. This violation of production efficiency decreases aggregate wealth through a reduction in the productivity of assets. Furthermore, the theory and empirical evidence show that these clienteles are shaped by domestic tax rates and rules, and so offer important guidance for domestic policymaking. For instance, base-broadening reforms intended to increase tax revenue by limiting allowable tax deductions may have the unanticipated effect of encouraging foreign acquisitions.

The potential erosion of the U.S. corporate tax base and the implied consequences for the competitiveness of U.S. firms are important current policy issues. In particular, a 2007 report from the United States Treasury Department (Report to the Congress on Earnings Stripping, Transfer Pricing and U.S. Income Tax Treaties) was commissioned by Congress to investigate "the potential for exploitation of inappropriate income-shifting opportunities to erode the U.S. corporate tax base." It was specifically concerned with foreign-controlled domestic corporations using earnings stripping through debt or transfer pricing of intangibles

and finds evidence consistent with the use of these techniques. The strongest evidence they find for lower tax liabilities for foreign-owned corporations is from the case of so-called ‘corporate inversions’ – a type of transaction where a domestic corporation rearranges its ownership structure so that it becomes headquartered in a tax haven (for example, Bermuda, which levies no corporate tax), with the old domestic parent now a subsidiary. This is a purely tax-motivated transaction and may involve tax savings on the foreign earnings of the multinational, since the United States taxes the worldwide earnings of its companies while Bermuda does not. In addition, taxes may be reduced on domestic earnings, as these can to some extent be shifted away from the U.S. to the new headquarters country. Desai and Hines [2002] find that market reactions to corporate inversions imply that market participants expect the transaction to result in both foreign and domestic tax savings. Albeit on a small sample, Seida and Wempe [2004] find direct evidence of tax savings on the order of a third of pre-inversion effective tax rates, mostly explained by domestic U.S. tax savings. Importantly, these tax savings were *legally* accomplished, predominantly through intragroup debt, despite provisions of the U.S. tax code, such as anti-earnings stripping, that were specifically designed to protect the domestic tax base.<sup>3</sup> Corporate inversions and foreign takeovers, especially by tax haven residents, lead to similar opportunities to avoid U.S. taxes on both foreign and domestic earnings, and so this evidence is directly related to the key assumption in my study, regarding U.S. vs. foreign effective tax rate differentials.

## 1.1 A Case Study

The takeover battle for the U.S. electronics manufacturer AMP in 1998 illustrates the potential for tax considerations to affect ownership pivotally, in a way that is directly related to my research design of predicting whether the successful acquirer of a particular target will be foreign.

Tyco and Allied Signal were the putative bidders, and were very similar on most margins, such as assets, sales and specific industry. However, though both companies had been long-time U.S. residents, Tyco had inverted in 1997 to become a Bermuda resident.<sup>4</sup> In the end, Tyco’s winning margin was approximately \$1B (or 10%), which is of the same order of magnitude as the potential tax savings from applying Tyco’s tax rate to AMP’s earnings,

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<sup>3</sup>Inverted corporations appeared to save a very significant amount of U.S. tax while staying under the 1.5:1 safe harbour debt ratio.

<sup>4</sup>This type of ‘endogenous’ location was associated with significant transaction costs and so was never common; furthermore, in 2004, future inversions were effectively shut down for a time by the American Jobs Creation Act. More recently, inversions have once again become popular. However, no members of the S&P 500 inverted through the end of my sample period in 2010 (and less than one a year on average in total) so this rise is of limited relevance to the takeovers in this paper.

rather than Allied Signal's. The reason that this estimate is so large is that AMP was among the most profitable firms in its industry, yielding a large amount of profit that could be shifted out of the United States. This simple estimate of Tyco's tax advantage approximately matches the size of the projected tax benefits of inverting reported in public filings by Cooper Industries in 2001 and Stanley Works in 2002.<sup>5</sup> Tyco's aggressive tax strategies had certainly been noticed in the business press:

CEO Dennis Kozlowski . . . moved Tyco to Bermuda (in 1997), then set up an elaborate machine to finance his empire, in which most debt was issued by a Tyco subsidiary based in Luxembourg. It was an intricate but legal scheme to shave Tyco's tax bills to an absolute minimum. In fact, this tax-avoidance mechanism continues to be one of Tyco's most powerful competitive advantages (Business Week, 2006).

The model and empirics in this paper explore the general ownership implications of multinational tax avoidance strategies.

## 1.2 Prior Literature

An extensive literature in corporate finance has investigated the importance of tax benefits in driving merger and acquisition activity in the domestic context. Kaplan [1989] finds that increased interest deductions (along with other tax effects) can account for anywhere between 21% and 143% of the premium paid in management buyouts of public U.S. firms. Hayn [1989] reports further evidence which suggests that tax considerations motivated acquisitions in the 1980s, while Erickson [1998] finds that these same considerations are a key determinant of the deal structure. Devos et al. [2009] investigate a small sample of large mergers and find that tax-related synergies are positive and can account for about 16% of the combined equity gain between the target and the acquirer following the transaction; tax savings appear to be a more important factor in diversifying mergers.

A more recent literature has begun to address similar questions in an international context by extending optimal tax models to settings where cross-border capital flows take the form of transfers of ownership of existing assets. Desai and Hines [2003] propose the welfare benchmark of capital ownership neutrality, whereby the world tax system should ensure that different potential acquirers face similar relative tax burdens, so that the pattern of asset ownership is not determined by tax considerations. These ideas are formalized and investigated by Becker and Fuest [2010], who build a model of a multinational corporation embarking

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<sup>5</sup>A typical estimate of tax savings from the recent wave of inversions, that of AbbVie's purchase of Shire, is a decline in effective corporate tax rate from 22% to 13%.

on acquisitions both in its home market and a foreign market. They derive repatriation tax systems under which the multinational's private decisions are nationally or globally optimal. My model differs from theirs by taking the tax system as given (subject to income-shifting) and showing how these tax provisions interact with target firm heterogeneity.

There are several recent empirical papers that address related international tax issues using data on mergers and acquisitions. Huizinga and Voget [2009] provide an empirical investigation of the importance of potential repatriation tax burdens after a cross-border merger. They find an economically and statistically significant discouraging effect of the potential repatriation tax burdens on the headquarters location after the merger. These estimates are conditional on the specific target and acquirer and so do not address possible distortions in real ownership patterns since the parties to the deal are taken as given. Feld et al. [2014] directly investigate tax-induced distortions to the benchmark of ownership neutrality, using recent reforms to the international tax systems of Japan and the United Kingdom. They find large effects from the Japanese reform, due to Japan's relatively high statutory tax rate, on the order of a 30% increase in international acquisitions with a Japanese acquirer, causing a \$500M yearly gain in efficiency. In contrast, my study uses inbound acquisitions to assess the competitive effects of the domestic, or target company, tax system.

Arulampalam et al. [2014] also use firm-level merger data to investigate whether taxes in host country  $i$  affect the probability that a multinational corporation resident in home country  $j$  will choose to make an acquisition in country  $i$ . Their theoretical starting point is the decision of a single parent company choosing which host countries to make an acquisition in.<sup>6</sup> They find that higher host country taxes discourage inbound acquisitions in that country. My approach is similar in spirit to theirs but takes the perspective of a single target firm and multiple potential acquirers, which is necessary in order to study competition among bidders in the merger market. Belz et al. [2014] present evidence using international M&A data that target firms' effective tax rates decline following an acquisition; this decline is particularly large when the acquiring firm is tax aggressive, and seems to arise through income shifting. Using a similar empirical approach to my study, Bird et al. [2015] show that the possibility of accessing the stock of 'locked-out' foreign earnings of U.S. firms drives inbound foreign acquisitions, and that this effect is stronger for acquirers from countries which use a territorial system.

Of particular relevance to my study, Swenson [1994] uses a number of U.S. tax reforms from the 1980s to study the general equilibrium tax mechanism suggested by Scholes and

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<sup>6</sup>This focus on the acquirer is shared by well known models in the international trade literature, such as that of Head and Ries [2008] which models cross-border acquisitions as trading off the benefits of control with the costs of monitoring by the acquirer, and the heterogeneous firms model of Nocke and Yeaple [2007], which focuses on the acquirer's mode of entry.

Wolfson [1990]. They emphasize the distinction between explicit and implicit taxes, where the latter arise from changes to pre-tax asset returns. In the context of FDI, investors from countries with worldwide tax systems should prefer to buy assets with high explicit taxes and low implicit taxes, since they would receive a tax credit for any explicit taxes paid. Swenson finds empirical confirmation for this relative preference using differences in FDI flows across countries following tax reforms which changed the explicit/implicit tax mix. Hines [1996] also finds evidence for this mechanism by exploiting state-level tax changes and consequent changes in the investment shares of investors from countries with worldwide tax systems.

The issue of foreign-controlled domestic corporations paying lower taxes than comparable domestic corporations has also been an important issue in the economics and accounting literatures for some time. Grubert et al. [1993] first documented this issue using confidential U.S. corporate tax returns from 1980-1987. They found that foreign-controlled domestic corporations tended to report relatively low levels of taxable income, which fluctuated around zero on average. This is consistent with the use of strategic transfer pricing to lower tax burdens. A number of papers followed, some confirming the original observation and some refuting it; the main issue has been how to control for the endogenous selection of ownership – my study addresses this directly. A recent example is the case study of Blouin et al. [2005], which looked at post-merger tax returns for a small sample of 31 comparable domestic and foreign targets and found no discernible differences in taxable income reporting. Overall, this remains an unresolved question, to which my study provides new insight.

The rest of the paper proceeds as follows: Section 2 develops a simple theory of the market for corporate control, leading to two key testable implications, Section 3 describes the empirical strategy for estimating the profitability effect and the data employed, Section 4 presents the corresponding results, Section 5 discusses the empirical strategy for estimating the tax shields effect, and Section 6 shows the results from estimation of the full model as well as counterfactuals and aggregate wealth calculations. Section 7 concludes.

## 2 Theoretical Model

The objective of the model I develop in this section is to show how target firm characteristics and tax considerations interact in the market for corporate control to determine the ownership of that target firm. To that end, the focus is on bidders' valuations of the target firm, as these will determine the winning bidder in any efficient bargaining process, taking as given that the reservation price of the original owners will be met.

Consider a potential acquisition target, with pre-tax income consisting of profit  $Y$  and available tax deductions  $z$  (such as depreciation allowances), so that the target has taxable

income  $Y^T \equiv Y - z$ . There are two potential acquirers: a representative domestic bidder and a representative foreign bidder, indexed by subscripts  $d$  and  $f$ , respectively. They are each characterized by a nontaxable, idiosyncratic benefit of control,  $\theta_i + \epsilon_i$  where  $\theta_i$  is a fixed component and  $\epsilon_i$  is a stochastic component, and a discount rate,  $r_i$ . Note that this characterization allows for differential fixed costs of acquisition for the different bidders through differences in the  $\theta_i$ . The assumption that the benefits of control are untaxed simplifies the presentation of the model—any differences in taxation are subsumed by the bidder-specific  $\theta_i$  and underlying distributions of the  $\epsilon_i$ . Furthermore, it is assumed that the foreign bidder has access to an income-shifting technology (Gordon and Hines [2002]).

The technology works as follows: if the foreign bidder acquires the target firm, it can shift some profit from the home country, with tax rate  $\tau_d$ , to a low-tax jurisdiction, which has a corporate tax rate of  $\tau_h < \tau_d$ . This could be accomplished using intragroup debt or by manipulating transfer prices of intangible assets, like patents or trademarks. However, the firm faces non-deductible compliance costs to shift  $\omega$  of income.<sup>7</sup> The cost is convex and decreasing in existing taxable income (say, because of higher probability of audit for low reported taxable income, or because of liquidity constraints), given by  $\frac{\gamma}{2} \frac{\omega^2}{Y^T}$ . Then the optimal amount of profit to shift is a constant fraction of original pre-tax income. The effective tax rate for the foreign acquirer can be shown to be  $\tau_f = \tau_d - \frac{(\tau_d - \tau_h)^2}{2\gamma} < \tau_d$ . Hence the income-shifting technology leads the foreign bidder to face a lower effective tax rate on the income of the target, so that  $\tau_d - \tau_f > 0$ .<sup>8</sup> Then the valuation of the target firm by bidder  $i$  is:

$$V_i = \frac{(1 - \tau_i)Y + \tau_i z}{r_i} + \theta_i + \epsilon_i$$

This valuation is composed of three parts: the after-tax profit, the value of available tax shields and the nonpecuniary benefits of control. Note that each bidder uses its own tax rate, rather than the domestic tax rate, to value the tax shields, which is a direct consequence of the income shifting technology—in particular, the fact that the cost of shifting income is proportional to taxable income,  $Y - z$ , rather than just  $Y$ . An alternative rationale for the difference in valuation of the tax shields would be the well-known model of DeAngelo and Masulis [1980], based on a higher likelihood of tax exhaustion with a lower tax rate, so that an additional dollar of deductions would be less valuable.

An equilibrium in the market for control consists of an allocation, which is a probability

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<sup>7</sup>In principle, shifting costs are likely at least partially deductible in either the domestic or foreign jurisdiction. The assumption of non-deductibility simplifies the algebra without qualitatively affecting inferences—if costs were deductible there would be more income shifting, the more so if they are deductible domestically.

<sup>8</sup>This ordering of the tax rates is the key output of the income-shifting technology and could be delivered using different technological assumptions. For instance, both bidders could have the ability to shift income, with the foreign bidder able to do so at relatively low cost,  $\gamma^f < \gamma^d$ .

of foreign ownership conditional on target and bidder characteristics, and a price function, which dictates how any surplus in the deal is shared between the target and the acquirer. However, as long as the allocation awards the target to the firm with the higher (after-tax) valuation, the price function can be ignored in deriving the results that follow.

So, assuming only that the bargaining process is efficient<sup>9</sup> in the sense that acquirer  $f$  obtains the firm if and only if  $V_f - V_d \geq 0$ , we can write the probability that the acquirer will be foreign as:

$$P_{foreign} = P \left( \epsilon_f - \epsilon_d > - \left[ \frac{1 - \tau_f}{r_f} - \frac{1 - \tau_d}{r_d} \right] Y - \left[ \frac{\tau_f}{r_f} - \frac{\tau_d}{r_d} \right] z - \theta \right)$$

with  $\theta \equiv \theta_f - \theta_d$ .

This expression reveals two possible channels for taxes to affect ownership – either from the direct effect of taxes on cashflows, or via tax-induced differences in the discount rates. After-tax cashflow is composed of  $(1 - \tau_i)Y$ , which is clearly *decreasing* in the tax rate, and also the value of the tax shield from  $z$  dollars of deductions,  $\tau_i z$ , which is *increasing* in the value of  $z$  and *increasing* in the tax rate.

In general, we would expect that the tax advantage of the foreign bidder would lead to a relatively higher discount rate or cost of capital, reflecting a higher opportunity cost (since the foreign bidder can take advantage of its low tax rate on alternative investments as well). To proceed further, we need to make an assumption about just how much discount rates are affected by the differing tax rates of the two bidders. A mild but sufficient restriction on this relationship for what follows is:

$$1 \leq \frac{r_f(\tau_f)}{r_d(\tau_d)} \leq \frac{(1 - \tau_f)}{(1 - \tau_d)}$$

This just means that tax differences are partially shifted back to capital suppliers, so that discount rates are decreasing in tax rates. At one extreme – perhaps because of perfect capital markets – both bidders face identical discount rates, despite their differing tax rates. The other extreme, which would arise with segmented, symmetric capital markets where capital is in fixed supply, is that savers capture all the benefits of reduced tax rates. In between these extremes, the elasticity of capital supply is positive and finite. Given this mild assumption, which basically just rules out overshifting, there exist  $\phi$  and  $\psi$ , both greater than zero, such that:

$$P_{foreign} = H(\phi Y - \psi z + \theta) \tag{1}$$

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<sup>9</sup>This is unlikely to be an exact description of reality, given the empirical success of behavioural models of takeovers such as Shleifer and Vishny [2003]; a necessary condition for the results that follow is just that the probability of the foreign bidder winning is increasing in its real valuation advantage.

where  $H(\cdot)$  is the cumulative distribution of  $\epsilon_d - \epsilon_f$ . Then we have the following two key comparative static implications of the model:<sup>10</sup>

1. An increase in target profitability ( $Y$ ) *increases* the probability that the acquirer will be foreign, except for the extreme case of full backward shifting of taxes onto capital suppliers.
2. An increase in the availability of tax shields ( $z$ ) *decreases* the probability that the acquirer will be foreign.

It is these two predictions of the model that will be tested empirically in Sections 4 and 6. The intuition for the first case is that for fixed profitability  $Y$ , post-tax cashflow will be higher for the low-tax bidder except in the limiting case where this advantage is fully offset by a higher discount rate. This effect is stronger the closer are the two bidders' costs of capital. The second result reflects the fact that the tax-deductibility of  $z$  means that its value is just  $\tau_i z$ , which is obviously increasing in the bidder's tax rate. Since the domestic bidder also has a cost of capital no higher than the foreign bidder, it also discounts these higher tax savings at a lower rate than the foreign bidder, which reinforces the direct effect of the tax savings.<sup>11</sup>

To understand what is going on in the model, it is helpful to examine the two extreme cases for the discount rates:

1. Discount rates are identical,  $r_d = r_f$ , then  $\phi = -\psi > 0$ ; the effects of  $Y$  and  $z$  on probability foreign will be equal in magnitude but opposite in sign.
2. Discount rates fully reflect differences in tax rates,  $\frac{r_d}{1-\tau_d} = \frac{r_f}{1-\tau_f}$  then  $\phi = 0$  and  $\psi < 0$ ; only tax shields will affect the equilibrium probability.

The first case embodies the idea (as in Scholes and Wolfson [1990]) that investors facing relatively low tax rates will have a comparative advantage in acquiring assets that face relatively high explicit taxes. Since tax payments are increasing in pre-tax income,  $Y - z$ , this intuition suggests that foreign investors, facing a lower tax rate, will have an advantage in acquiring high-profit firms. It is also clear that profitability and tax shields have a symmetric

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<sup>10</sup>Note that both of these results flip signs if in fact it is the domestic bidders which have the tax advantage. In this sense, the signs of the empirical estimates of  $\phi$  and  $\psi$  can be thought of as jointly testing the sign of  $\tau_d - \tau_f$ , rather than relying on the assumption of a foreign tax advantage.

<sup>11</sup>Since both effects go in the same direction, the second result is robust to an alternative income-shifting technology whereby both bidders deduct  $z$  at the same effective tax rate (despite differences in the taxation of  $Y$ ). This would eliminate the difference in the actual cash savings from foregone tax, but would leave the effect of different discount rates intact.



effect on the foreign probability, as increasing either by a dollar directly changes the valuation difference between the bidders by the difference in their tax rates.

The second case is that envisioned by Desai and Hines [2003] with the idea of capital ownership neutrality. The advantage of a lower tax rate is completely offset by a higher discount rate. Loosely, the intuition is that though such a bidder would indeed derive higher after-tax cashflows from the same before-tax cashflows as a bidder with a higher tax rate, it could get the same relative tax benefit from acquiring any other asset, all else equal. Then there is no direct comparative tax advantage. However, as discussed above, the difference in discount rates leads to different valuations of tax shields, thus giving the advantage to domestic bidders in the case of firms with high levels of tax shields.

Examining the relationships between  $\phi$  and  $\psi$  in the two extreme cases suggests that the ratio  $\frac{\phi}{\psi}$  reveals information about the relative discount rates. If this ratio is one, then we have the case of equal discount rates; as the ratio decreases towards zero, we get closer and closer to full backward shifting, as envisioned in the second extreme case.

### 3 Empirical Strategy: Profitability

The estimating equation is exactly the empirical counterpart of equation (1):

$$P(\text{foreign}_i) = \Phi(\phi Y_i - \psi z_i + \eta X_i + u_i) \quad (2)$$

assuming a normal distribution for the difference in idiosyncratic productivities, and writing the fixed component  $\theta_i \equiv \eta X_i + u_i$ , which can be thought of as the non-tax related valuation difference between the two bidders. In other words, there are observable and unobservable components of this difference, which will be the focus of the empirical strategy. As is typically the case in discrete choice settings, the above model is characterized by scale invariance, so that rather than estimating the actual parameters of interest, I will be estimating the parameters normalized by the variance of the productivity difference. This issue is irrelevant in terms of testing the statistical significance of the model or for estimating the magnitude and direction of tax-induced sorting, but will be important in calculating changes in aggregate wealth in Section 6.

#### 3.1 Data

Thomson SDC Platinum is a comprehensive database of cross-border and domestic business transactions. I take all majority transactions (where the acquirer ends up with  $> 50\%$  of the company) and minority stake purchases (acquirer ends up with  $< 50\%$ ) that involved

a publicly-traded U.S. target from 1990-2010. Given a transaction from SDC, the target company is matched to Compustat to get the necessary accounting variables. Most cases without a successful match are due to the fact that though the target is public, it is not listed on an exchange covered by Compustat.

For a transaction to make it into the main estimation sample, the target company must have a match in Compustat with nonmissing total assets, earnings, debt and intangibles. This last requirement is the one that shrinks the sample the most. Furthermore, deals that are valued at less than one million dollars or that target companies with less than ten million dollars in total assets are dropped. Further details related to the construction of the estimation sample are discussed in Appendix A.

The general approach is to take the set of target firms as given, and then predict whether the successful acquirer will be foreign using characteristics of the target. Hence, the focus is on the probability foreign, conditional on the target being successfully taken over.

The dependent variable in equation (2),  $foreign_i$ , is a dummy variable that is equal to one if the acquirer in the deal was foreign, and zero if the acquirer was a domestic taxable entity. This means that deals with acquirers that were domestic but effectively nontaxable (or at least face a much lower rate than the domestic statutory tax rate), such as government-related entities, pension funds and private equity, are excluded from the analysis. The key assumption is that the group of acquirers with  $foreign_i = 1$  faces a lower tax rate than those with  $foreign_i = 0$ . Given these criteria, 15.9% of the majority sample has a foreign acquirer; in the full sample, which includes both majority and minority transactions, the mean is 16.4%.

The main measure of profitability is earnings before interest, taxes, depreciation and amortization (EBITDA), divided by total assets. This is a very broad measure that should not be affected by most tax planning techniques (which come into play when transforming EBITDA into taxable income). The other accounting controls which are used are intangible assets and long-term debt, both normalized by total assets, log total assets and a dummy variable equal to one if profitability is negative, as a proxy for loss carryforwards.

The main profitability measurement issue that must be confronted is that only pre-takeover profitability is observed (at  $t - 1$ ), since the target firm is almost always taken private following the deal, which occurs at time  $t$ , ending the obligation to report public results. Based on the theoretical model, what we would like is profitability at the time that the takeover decision is made, which could be up to a year after the last publicly available accounting disclosure. To deal with this issue, I use lagged accounting variables and year/industry dummies to construct a very simple forecasting model for future profitability. Specifically, I regress the first lag of profitability (the most recent available) on the second

lag of profitability and other accounting variables and dummies. This produces a model of profitability in period  $t - 1$  in terms of information available at time  $t - 2$ . I then use period  $t - 1$  covariates to predict the unobserved profitability in period  $t$ , at the time of the merger decision. Using further lags of profitability yields very similar predictions, and is not done in the base case since this cuts the estimation sample. This procedure is quite similar to a measurement error methodology, wherein each lag of profitability is viewed as a measure of future profitability plus some independent error.<sup>12</sup>

Table 1 presents summary statistics for the main sample of target firms as well as the universe of firms in Compustat over the same period. The takeover sample appears to be similar to the population of public firms in the United States.

The empirical estimation will proceed as follows. To begin, the focus is on estimating the profitability effect correctly (controlling for the tax shields effect with industry dummies) using several techniques to deal with omitted variable bias. After presenting the profitability results, I then discuss the difference-in-differences strategy for estimating  $\psi$ . Finally, I estimate equation (1) in one step and use it to do a counterfactual policy and wealth simulation.

### 3.2 Empirical Issues: Profitability

The main empirical complication in estimating  $\phi$  is the possibility that profitability,  $Y$ , itself may belong in the set of  $X$  variables, describing non-tax valuation differences between the two types of bidders. This may be the case, for example, because of asymmetric information between domestic and foreign acquirers, of the kind investigated by Gordon and Bovenberg [1996].<sup>13</sup> In particular, one might expect it to be easier for a domestic acquirer to pick out targets with low current profitability but good future prospects, using their superior knowledge of local market conditions. Or there could be differences in the ‘multinational’ composition of the two acquirer groups, domestic and foreign. This could be concerning given the relatively high productivity of multinationals and the possibility of a complementarity between acquirer productivity and real transaction-related synergies.<sup>14</sup> In general, the concern is that bidders would sort on target profitability for reasons other than tax differences, so that we would observe such sorting even if all potential bidders faced the same tax

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<sup>12</sup>Variations on this forecasting method, including the simplest method of using lagged profitability directly, or using further lags of profitability as instruments to correct measurement error yield very similar results throughout the rest of the paper, as can be seen in Table 4.

<sup>13</sup>By building a model of cross-border investment with endogenous information acquisition, van Nieuwerburgh and Veldkamp [2009] show that this information ‘home bias’ persists in equilibrium.

<sup>14</sup>Rhodes-Kropf and Robinson [2008] find that mergers pair together firms with similar market to book ratios, which they attribute to complementarity interacting with search frictions in the market for corporate control.

rate.

To deal with confounding issues of this nature, it is helpful to use minority purchases, defined as ownership changes where the acquirer ends up with less than 50% of the target after the transaction, as a control group. A minority, or stake, purchase provides many of the same benefits in terms of acquiring ownership of part of the income stream as a majority transaction without involving actual control of the target. Importantly, without control, the acquirer cannot use income-shifting strategies since these require changing financial and even operational decisions of the firm. Hence, such transactions could be used as a control for other motives for cross-border transactions<sup>15</sup> and so help to identify any tax-specific effects more precisely. Specifically, if non-tax sorting works in the same way for both majority and minority transactions, then observed sorting on profitability that is unique to majority purchases must be due to the tax difference. This strategy should at least reduce any omitted variable biases inherent in the cross-sectional tests. Intuitively, this strategy can be thought of as one of difference-in-differences using majority transactions as the treatment group and minority transactions as the control group.

A potential remaining issue is that the documented profitability differences across types of acquirers are not due to tax differences. To address this concern, it is useful to employ a comparison between different types of acquirers where the tax differences are starker and more likely to be of first order importance. Specifically, consider the case of tax haven-resident acquirers. Such firms face very low or non-existent taxes levied by their home countries, which is typically the key motivation to locate in such a country, given that tax havens themselves typically have small populations and markets.

Hence, define  $haven_i = foreign_i$ , but exclude any deals where the foreign acquirer was not resident in a tax haven,<sup>16</sup> as the relevant indicator to be explained by target firm characteristics. In this case, the statutory tax difference between the two groups is approximately 35%, the U.S. corporate tax rate, notwithstanding transaction costs.

This larger tax rate difference implies a larger direct cashflow benefit for haven acquirers relative to domestic acquirers, and so a comparison of domestic versus haven acquirers should yield stronger profitability sorting than domestic vs. non-haven foreign acquirers.

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<sup>15</sup>This distinction could be weakened if stake purchases are generally preludes to acquisition of full control – a so-called ‘toehold’ transaction. In this case, stake purchases should be targeting similar targets as mergers. However, there is an empirical literature analyzing the toehold phenomenon which suggests that this is not a concern, and in any case would bias the results against finding a difference. According to Betton et al. [2009], using data on public company transactions from 1973-2002, 13% of all bids for control had any toehold, with only 3% having been acquired within six months of the takeover bid announcement.

<sup>16</sup>The tax haven characterization is taken from Hines and Rice [1994], although is mostly driven by acquirers from Bermuda and Switzerland, which would be on any reasonable list of tax havens.

## 4 Results: Profitability

Table 2 shows the results from estimating equation (2) using cross-sectional target firm variation to examine the effect of target profitability on the probability of the acquirer being foreign.

Looking at the first row of column (1), which includes the accounting controls and year dummies, the semi-elasticity of probability foreign with respect to profitability is 2.20 (standard error: .49). For a one standard deviation increase in profitability, all else equal, this semi-elasticity corresponds to an increase in the chance of foreign acquisition of 4.9 percentage points. This positive effect of profitability on probability foreign matches the prediction of the theoretical model.

A key possible confounding concern is the possibility that cross-country differences in industrial composition or differences in regulation across industries may mean that foreign acquirers on the whole have an affinity for takeovers in certain industries,<sup>17</sup> which may just happen to have higher profitability. However, it is also possible, and indeed likely, for the tax effect to manifest itself in terms of both inter- and intra-industry sorting. The former can be seen in Figure 1, where there is clearly a positive relationship between median industry profitability and mean probability of foreign takeover. How much of this sorting one is willing to attribute to taxes dictates how much weight to put on the decrease in the estimated effect in column (2), which includes 20 industry dummies based on industry sector definitions from the North American Industry Classification System (NAICS). The estimated effect is still positive and significant, corresponding to an increase in the probability foreign of 2.8 percentage points for a one standard deviation in profitability. A comparison of the results in columns (1) and (2) confirms that foreign acquirers both preferentially sort into more profitable industries as well as to more profitable firms within those industries. In the same vein, controlling for differential industry time trends or even interacting industry and year effects yields similar results.

### 4.1 Majority vs. Minority Transaction Comparison

Columns (3) and (4) of Table 2 implement the difference-in-differences style majority-minority transaction comparison. Specifically, each of the independent variables in the model is also included as an interaction with a dummy for a majority transaction. If the assumption about similar non-tax motivations for both types of transactions is valid, then the coefficient on the majority interacted profitability variable corresponds directly to  $\phi$  from the model,

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<sup>17</sup>Harford [2005] and Gorton et al. [2009], among many others, highlight the importance of industry-level variation in explaining merger activity.

which captures the extent of profitability sorting that is driven by tax differences between bidders. The coefficient on the non-interacted profitability variable then describes non-tax motivations for sorting on profitability.

Looking at the first row of column (3), we can see that profitability sorting is stronger than in the baseline model of column (1), with the semi-elasticity increasing from 2.20 to 3.00 (standard error: .78). This is directly related to the non-interacted profitability semi-elasticity of the second row, which is negative. Hence, it appears that in the absence of tax differences, foreign acquirers would actually prefer lower profitability targets. This is consistent with the result in Kotter and Lel [2011] that sovereign wealth funds, a group of investors typically facing no home country taxation, tend to target poorly performing firms facing financial difficulties for their portfolio investments. The pattern of effects by industry also provides some suggestive evidence that this difference is most pronounced for high-tech firms, which may be explained by a particularly strong technology transfer motivation for deals by foreign acquirers.

Going across the table to column (4), which adds industry dummies, the estimate again drops somewhat, though remaining positive and significant, reflecting similar sorting both within and across industries. Figure 2 gives a graphical representation of inter-industry sorting for this comparison.

The effects of the control variables are largely as expected, since the higher fixed costs of foreign acquisitions should lead foreign acquirers to prefer larger target firms. The debt ratio and the intangibles ratio do not have strongly significant effects, particularly in the majority-minority sample. The effect of the loss dummy, which increases foreign acquisitions in columns (1) and (2), appears puzzling given that losses give rise to tax shields, which should be valued more highly by domestic acquirers. However, this effect disappears for majority acquisitions in the majority vs. minority specification, which provides additional evidence that foreign firms have an idiosyncratic non-tax preference for poorly performing firms, all else equal.

## 4.2 Tax Haven Acquirer Comparison Results

Table 3 splits the observed profitability sorting from the main results into comparisons between domestic acquisitions and two mutually exclusive groups of foreign acquirers.<sup>18</sup> The first row of results shows the semi-elasticity of probability foreign with respect to profitability where the sample excludes tax haven acquirers, while the second row shows the same quantity excluding non-tax haven acquirers.

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<sup>18</sup>Similar results obtain using a multinomial logit model with three possible acquirer types, one domestic and two foreign.

With or without industry controls, and using the baseline sample or the majority-minority comparison, profitability more strongly predicts the probability of foreign takeover for the set of tax haven acquirers than for foreign non-tax haven acquirers. Specifically, the tax haven group shows about twice as strong a preference for more profitable targets than does the latter. Had both groups exhibited similar magnitudes of sorting, the concern would have been that the observed effect was driven by some other difference between foreign and domestic bidders. Overall, this table provides significant additional evidence that the observed profitability sorting is due to tax differences between the bidders, since the relative tax rates of haven and non-haven acquirers are very different.

### 4.3 Extensions and Robustness

Table 4 presents results from a number of extensions and robustness checks to the profitability sorting result. Row (1) shows the baseline profitability estimates with accounting and year controls, as in the first column of Table 2.

An important potential barrier for an acquirer attempting to shift income out of a target company is the presence of minority oppression rules in the United States. These dictate that a majority shareholder cannot enter into transactions that directly disadvantage minority shareholders, at least without offering compensation. This would definitely be a hurdle for a transaction which shifted income from one company to another company owned by the majority shareholder, since this transfers income away from the minority shareholder. For this reason, one would imagine that an income-shifting motivation would lead to purchases of the whole target company (and thus buying out any existing minority shareholders).<sup>19</sup> This suggests looking at an alternative sample of deals, consisting of only purchases of 100% of the target company. In such a sample, the tax effects should be magnified, and row (2) shows this to be the case. This is not surprising, since including transactions where income-shifting was not possible or was more costly should bias the result downwards.

A possible concern is that different size acquirers have differential preferences over target firm types, and, in turn, foreign and domestic acquirers vary in size, perhaps because higher fixed costs preclude smaller foreign firms from making acquisitions in the United States. To check this, row (3) includes a control for the log of acquirer total assets. The coefficient estimates are similar to the baseline case. However, due to relatively poor availability of this variable (the sample size drops from 5355 to 3814), mainly due to non-publicly traded acquirers, it is otherwise not included in the models considered in this study.

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<sup>19</sup>This idea is consistent with Mintz and Weichenrieder [2005], who find that the leverage of German multinational subsidiaries is sensitive to host country tax rates, but only for wholly-owned subsidiaries.

One important difference between foreign and domestic acquirers is in the type of consideration used: foreign acquirers are more likely to pay cash for the target (49% of takeovers) than are domestic acquirers (29% of takeovers), which is consistent with Faccio and Masulis [2005]. To the extent that this difference is correlated with target profitability, perhaps because relative bargaining strengths dictate that the bidder has to use cash to pay for the highest quality targets, one might be concerned that it is driving my results. In row (4), I include a dummy variable for cash-only deals, and find that it decreases the profitability effect slightly, though it remains large and significant.

The sign and significance of the profitability effect is also preserved by using different measures of profitability, such as pre-tax income, in row (5). Alternatively, in row (6), rather than use the forecasting method described in Section 4, the profitability measure is just the lagged ratio of earnings before interest, taxes, depreciation and amortization to total assets, and a similar effect is estimated. The somewhat smaller magnitude is also expected, given the likely presence of attenuation bias due to measurement error. Row (7) proceeds in the opposite direction, by adding a second lag of profitability to the future profitability forecast – the results are essentially unchanged.

An interesting observation is that dropping the smallest target firms from the sample, in rows (8) and (9), substantially increases the estimated profitability effect. This provides some compelling evidence against the asymmetric information story discussed earlier. It seems reasonable that the larger the target firm, the more information about the firm and its prospects would be available because of greater media and analyst coverage. In other words, asymmetric information would seem to be most important for the smallest target firms. Rows (8) and (9) show that the effect of profitability on the probability of foreign acquisition is actually much stronger for larger targets.

In non-linear models, such as the probit model, heteroskedasticity in the errors can lead to inconsistency of the coefficient estimates. However, in this case, after accounting for such heteroskedasticity (in the accounting controls) in row (10), the profitability estimates actually get slightly larger.<sup>20</sup> This is also encouraging in the sense that any complementarity between existing profitability and the real takeover surplus would likely manifest itself as heteroskedasticity in profitability.<sup>21</sup> It would be theoretically possible for such a complementarity to drive sorting even in the absence of tax differences, but row (10) shows that this is

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<sup>20</sup>The theoretical model can be extended in a straightforward way to allow for heteroskedasticity in the idiosyncratic productivities of the two bidders. This result suggests that any such heteroskedasticity is actually working against the hypothesized results, and so strengthens the original conclusions.

<sup>21</sup>For instance, if the idiosyncratic productivity is multiplicative in the productivity of the target, then we would observe larger ‘errors’ for more extreme profitabilities. What matters is whether the surplus captured by the acquirer in a takeover is greater for high or low profitability firms, i.e. complementarity vs. ‘corporate turnarounds’.



not the case.

Overall, the profitability effects are positive and significant across a wide variety of specifications. Hence, the original cross-sectional estimates appear to be quite robust.

## 5 Empirical Strategy: Tax Shields

I now return to the strategy for estimating the tax shields term, using bonus depreciation, a recently common (2001-2004, 2008-2010) feature of the U.S. tax code. It allows firms to write off, for tax purposes, an additional 30% or 50% of the cost of new equipment investment in the first year. Because different industries use different types of assets, bonus depreciation affects industries differently, depending on the type of equipment used and the division of investment between equipment, which was eligible for the reform, and structures, which was not.

The general approach is to compare pre-reform (1990-2001Q3) with all post-reform (2001Q4-2010) transactions, given potentially strong anticipation effects from 2005-2007.<sup>22</sup> This suggests a clear difference-in-differences empirical strategy, recalling that the theory says that industries which got a relatively large increase in tax shields from bonus depreciation should experience relative *decreases* in the probability of foreign acquisition following the reform. Note that we would expect to see such an effect even if, as shown by Edgerton [2010], the reform had a minimal effect on marginal investment, because of the substantial inframarginal cashflow benefits associated with existing investment.

### 5.0.1 Construction of tax shields measure

The construction of the bonus depreciation measure is based on Edgerton [2010] and works as follows.

Let  $j$  denote an industry and  $k$  an asset type, then:

$$\alpha_j^{PRE} = \sum_k w_{jk,1997} PV_{k,1997}$$

and

$$\alpha_j^{POST} = \sum_k w_{jk,1997} (0.5 + 0.5(PV_{k,1997}))$$

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<sup>22</sup>House and Shapiro [2008] report a survey from the National Association of Business Economics taken in January of 2004 which found that 62% of business economists anticipated that bonus depreciation would be extended past 2004.

are the present values of depreciation allowances per dollar of investment pre- and post-reform, respectively.

The asset weights,  $w_{jk}$ , for each industry are from the detailed 1997 Capital Flows table from the Bureau of Economic Analysis, and so would not be influenced by bonus depreciation. From the expression, it is clear that the most affected assets are those with the lowest pre-bonus depreciation present value of allowances, which tend to be those with the longest depreciable lives.

This measure of the value of tax writeoffs varies across industry (based on the types of assets in use) and over time *only* due to bonus depreciation. It varies from less than .01 for Oil & Gas Extraction or Real Estate and Accommodation to greater than .05 for Broadcasting and Telecommunications, Forestry and Fishing, Air Transportation, Water Transportation or Paper Products. The distribution of the change in  $\alpha$  for post-bonus depreciation targets is shown in Figure 3. Importantly, the cross-industry structure of the reform was determined mechanically by the pre-existing levels of depreciation allowances, as demonstrated by the expression above, and so was quite plausibly exogenous to takeover activity.

To get the total value of future yearly depreciation allowances per dollar of assets for a given firm rather than the value per dollar of investment, embodied in  $\alpha$ , I need a measure of investment. Specifically, I use investment rates by industry from 1997 ( $I_j$ ) to match the investment by asset data used to construct  $\alpha$ , and to avoid endogeneity of investment with respect to the reform. Multiplying this investment rate, which is just investment divided by total assets, by  $\alpha$  yields the desired measure of future tax shields per year:  $z_j \equiv \alpha_j I_j$ . The results that follow use the 20 broad sectors from the NAICS, as before.

## 6 Results: Full Model

To estimate the full model, including possible sorting along the dimensions of both profitability and tax shields, I implement a difference-in-differences framework, which is derived directly from the theoretical model. The estimating equation is:

$$P(\text{foreign}_i) = \Phi(\phi Y_i - \psi z_i^{PRE} - \psi POST(z_i^{POST} - z_i^{PRE}) + \theta_i) \quad (3)$$

This is precisely as in equation (1), except that, notationally, I explicitly allow  $z$  to vary around the reform. Table 5 presents the results.

The second row of results are all consistent with the theoretical prediction that industries with the highest increases in depreciation allowances should experience relative declines in the probability of foreign acquisitions. In particular, in column (1), the semi-elasticity of

probability foreign with respect to the tax shields measure is -35.41 (standard error: 20.75), which, for a one standard deviation increase in  $z^{POST} - z^{PRE}$ , amounts to a decrease of 2.2 percentage points in the probability of foreign acquisition. Note that the model of this column is not a full difference-in-differences model, as it includes  $z^{PRE}$  as a regressor rather than industry dummies to control for pre-reform differences in probability foreign for different levels of tax shields. Once industry controls are added in column (2), the semi-elasticity actually increases in magnitude to -44.44 (se: 20.71) and is now strongly significant. A possible concern is that this change in probability foreign is driven by industry trends surrounding the reform rather than the reform itself. To that end, column (3) includes 20 industry-specific time trends, and the estimate actually increases significantly, which suggests that secular industry trends in foreign takeovers are actually working against finding an effect from the reform.

Given that bonus depreciation was enacted in 2001 (and was made retroactive to September 11, 2001), one might be concerned that the effect of the reform on foreign takeovers is confounded with heightened regulatory sensitivity to the security implications of such takeovers. To account for such changes, I collect data published by the Committee on Foreign Investment in the United States (CFIUS), which is tasked by Congress with assessing the national security implications of foreign takeovers in the U.S. and potentially blocking them, either overtly or by dissuading the potential acquirer. They reveal, at the three or four digit NAICS level, the distribution of target firms for which a notice was filed. I use this disclosure to encode a dummy variable which is equal to one if CFIUS reported a covered transaction in that target's industry in any year since 2005 (the start of public availability of the data). This is the case for about 58% of the post-reform transactions in my sample. I then include this dummy as well as its interaction with the post-reform dummy as additional controls in  $\theta_i$  in equation (3) in column (4) of Table 5. The tax shield semi-elasticity is actually somewhat larger than the baseline case of column (2), and neither the additional security dummy nor its post-reform interaction is large or statistically significant.

Additional specifications, where the national security dummy variable is one only if CFIUS covered transactions are above some minimum level relative to the number of transactions in my sample,<sup>23</sup> provide a very similar story, suggesting that changes in concerns about national security are not driving the observed sorting around the bonus depreciation reform.

Examining the first row of Table 5 reveals that the profitability semi-elasticities estimated

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<sup>23</sup>The idea is to count only industries with serious security concerns – for example, restricting to industries with at least half as many CFIUS notices as transactions in my sample covers about 25% of post-reform transactions, and yields similar results.

from the full model are very similar to those of the previous section. This is to be expected, as profitability and the change in tax shields from bonus depreciation are basically uncorrelated, conditional on the basic set of accounting controls.

The tax shields estimates can be applied to directly calculate the extensive margin effect of the tax distortions – that is, how much would the fraction of foreign acquisitions change in aggregate from 2001 onwards if bonus depreciation had never been implemented. This involves comparing the actual probability of foreign takeover for each target with the counterfactual probability in the absence of bonus depreciation. This is easily accomplished by setting  $z^{POST} = z^{PRE}$  in equation (3) and calculating the new probability, then averaging over industries.

The ownership effects of bonus depreciation, broken up by industry, are shown in Figure 4. The dark bar shows the estimated probability of foreign takeover for each industry, while the addition of the light bar indicates how much higher this probability would have been in the absence of the reform. The difference goes in the same direction for all industries (since the reform always increased  $z$ ) and is largest for industries with high investment rates and large benefits from the reform, such as the construction and transportation sectors. On the other hand, an industry like real estate, where the prevalence of structures limits the relevance of bonus depreciation on equipment, and which makes relatively little investment per dollar of assets, was not much affected by the reform.

The estimated aggregate effect was to decrease foreign ownership following a takeover by 5.3 percentage points in the post-reform period. Specifically, I find a counterfactual aggregate foreign ownership probability of 24.3%, relative to an estimated 19.0% in the presence of the reform. This roughly corresponds to a change in post-transaction ownership from foreign to domestic of \$190B worth of firms (measured by total assets), which constitutes a striking side effect of a tax reform that ostensibly had nothing to do with asset ownership decisions.<sup>24</sup>

## 6.1 Capital Markets

The preceding sections have examined and verified the two key predictions of the theoretical model in Section 2. However, much more can be learned by comparing the magnitudes of these two effects. In particular, their ratio sheds light on the nature of discount rate differences between bidders, determined in capital markets. Intuitively, this is because both effects can be decomposed into a direct cashflow effect (i.e. more after-tax cash remaining

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<sup>24</sup>To put these magnitudes into context, they can be compared to the ownership variation estimated by Huizinga and Voget [2009]. Their counterfactual experiment envisions a U.S. tax reform moving from a worldwide to a territorial system of international taxation and they find that the fraction of cross-border deals involving a U.S. company that end up with a U.S. headquarters would increase from 48% to 56%.

from given profitability for a foreign acquirer or more after-tax cash remaining from given tax shields for a domestic acquirer) and a cost of capital effect. Hence, this ratio can be used to test for the two extreme cases for cost of capital differences. If this ratio is one, then the cost of capital is the same for the two bidders; if it is zero, then costs of capital fully reflect tax differences between the bidders.

The third row of results in Table 5 shows this key ratio as well as its standard error. The estimates are all near zero, and we can always reject the hypothesis that the true value is one with a high degree of statistical significance, which would be the case of identical discount rates for the two bidders. Typically, the hypothesis that the true value is, in fact, zero, cannot be rejected, which means that discount rates approximately reflect the full tax differences across bidders. This means that taxes are fully shifted back to capital suppliers, so that the bidder facing the relatively lower tax rate faces a commensurately higher cost of capital. Another way of expressing this point, which will be important in the wealth calculation that follows, is that the *pre-tax* cost of capital,  $r_i^* \equiv \frac{r_i}{1-\tau_i}$  is the same in each country. Hence, for equal tax rates and real productivities, a given level of profitability makes the same contribution to world wealth regardless of the owner of the asset, even though after-tax costs of capital are not equalized across bidders.

## 6.2 World Wealth

The striking extensive margin effects from bonus depreciation illustrated in Figure 4 lead naturally to the question of the importance of this channel to shareholder wealth and tax revenues. Given the multinational focus of the model, the natural benchmark is world wealth. The goal is to find an empirically implementable expression for the change in world wealth from a change in the generosity of tax shields. Let  $s$  be the share of tax revenue going to the foreign country in case of a foreign acquisition (since some tax revenue would leave the domestic country and possibly accrue to the foreign country through post-merger income-shifting).<sup>25</sup> Then we can write world wealth as the value of the firm plus tax revenues,

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<sup>25</sup>Effective tax payments by the acquirer are actually composed of payments to both governments plus transaction costs related to income-shifting. I assume that these extra costs can be thought of as lump-sum transfers to other agents in one of the two countries, so that a fraction  $s$  of effective taxes go (lump sum) to foreign agents and  $1 - s$  to domestic agents.

discounted by the relevant country-specific pre-tax rate of return:

$$\begin{aligned}
WW &= \mathbf{I}_f \left[ \frac{1 - \tau_f}{r_f^*} Y + \frac{\tau_f}{r_f^*} z + \epsilon_f + \theta_f + \left( \frac{s\tau_f}{r_f^*} + \frac{(1-s)\tau_f}{r_d^*} \right) (Y - z) \right] \\
&\quad + (1 - \mathbf{I}_f) \left[ \frac{1 - \tau_d}{r_d^*} Y + \frac{\tau_d}{r_d^*} z + \epsilon_d + \theta_d + \frac{\tau_d}{r_d^*} (Y - z) \right] \\
&= \mathbf{I}_f \left[ \left( \frac{1}{r_f^*} - \frac{1}{r_d^*} \right) Y + \epsilon_f - \epsilon_d + \theta - (1-s)\tau_f \left( \frac{1}{r_f^*} - \frac{1}{r_d^*} \right) (Y - z) \right] + \frac{Y}{r_d^*} \\
&= \mathbf{I}_f [\epsilon_f - \epsilon_d + \theta] + \frac{Y}{r_d^*}
\end{aligned}$$

where  $\mathbf{I}_f$  is an indicator variable for a foreign takeover and the last line uses  $r_f^* = r_d^*$ , as found in the previous subsection.

The final line makes clear that the optimal decision rule ( $I_f$ ) is to grant the target to the foreign acquirer if  $\epsilon_f + \theta > \epsilon_d$ ; that is, to let the winner be the bidder with the highest *real* productivity, which can only be the case when taxes do not affect ownership. This would be the case if either tax differences were eliminated or the two effects happened to be exactly offsetting. Figure 6 graphically illustrates the change in world wealth from an increase in the generosity of tax shields.

### 6.3 Empirical Implementation

The preceding results are all independent of the scale parameter, which arises, as in all discrete choice models, because of scale invariance. That is, one could multiply each valuation by some constant and not change any of the results on the extensive margin. In the probit models which have been used to this point, there is an implicit normalization of the error variance to one.

To progress to a concrete estimate, we need the change in wealth going from  $z^{PRE}$  to  $z^{POST}$  (due to bonus depreciation) expressed in terms of empirically identified parameters. Integrating over  $\epsilon \equiv \epsilon_f - \epsilon_d$ :

$$\Delta WW = \int_{\phi Y - \psi z^{POST} + \theta}^{\phi Y - \psi z^{PRE} + \theta} [\epsilon + \theta] dF(\epsilon)$$

The issue is the normalization of the errors:  $\hat{\epsilon} \equiv \epsilon/\sigma$  which implies  $\hat{\phi} \equiv \phi/\sigma$  etc. where the ‘hat’ parameters are what is produced by the estimation. Substituting yields:

$$= \sigma \int_{\hat{\phi} Y - \hat{\psi} z^{PRE} + \hat{\theta}}^{\hat{\phi} Y - \hat{\psi} z^{POST} + \hat{\theta}} [\hat{\epsilon} + \hat{\theta}] f(\hat{\epsilon}) d\hat{\epsilon} \tag{4}$$

This is the world wealth change, per dollar of target assets, from the ownership effects of the reform.<sup>26</sup> To get the aggregate change, this expression must be multiplied by the total assets of the target and summed over all targets in the market in the post-reform period. There are several important assumptions underlying this expression. First of all, I must assume that the costs of capital are not themselves affected by the reform, though this is consistent with the finding in Desai and Goolsbee [2004] that bonus depreciation led to investment increases of only one to two percent. A related point is that this is the change in wealth from the ownership margin only, and so does not include the potential effect of these induced changes in investment levels.<sup>27</sup>

Regardless of which set of estimates is used to calculate this wealth effect, the result is always a negative number times the (positive) unknown scale parameter. This is not surprising, since the tax shields effect, which discourages foreign acquisitions, outweighs the positive profitability effect in the empirical results, so that the estimated tax distortions always discourage foreign ownership on net. Then, since world wealth is falling in the magnitude of the tax distortion, and bonus depreciation increases the size of this distortion, the net effect is negative. However, for comparative purposes, it is very useful to have an actual dollar measure of the change in wealth, beyond just identifying the direction of the change. For this, an estimate of the scale parameter,  $\sigma$ , is necessary, as the estimation procedure above cannot identify it. Hence, further data are necessary.

### 6.3.1 Estimation of scale

Intuitively, to transform the estimated quantity distortion into a dollar value, it is necessary to know something about the valuation of the runner-up bidder. Then, given the already estimated tax wedge, one could calculate how much real value was potentially lost by the less productive bidder acquiring the target. With ideal data, it would be possible to estimate a model with an additional equation describing the difference between the two highest bids, which would allow the scale to be identified. Unfortunately, the runner-up's valuation is usually not observed and so this multiple equation approach is not feasible. However, I collect a small sample of losing bids gleaned from SDC and from media descriptions of merger fights, which is sufficient to recover a rough estimate of the necessary parameter.

Exhaustive search yielded a dataset of 300 cases in the original sample with an identifiable

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<sup>26</sup>The cutoff productivities are not affected since each component is normalized, so that the cutoff is scale invariant. This is exactly what allows calculation of the counterfactual probabilities without worrying about the scale parameter.

<sup>27</sup>To the extent that the reform actually caused increased investment, the valuation difference between bidders with different tax rates would actually increase, because of the increase in associated tax shields, exacerbating the distortion.

losing bidder and associated bid. Of these, 48 have a foreign winning bidder and domestic losing bidder or vice versa. However, in some specifications, I include the remaining cases with matching winner and loser to increase the sample size. This should bias my estimate downward, because in cases where the winner and loser are both domestic, the difference in their bids should be strictly lower than that between the winner and the unobserved highest foreign bid.

The estimating equation is as follows, where the quantity of interest is the standard deviation of the residual,  $e_i$ :

$$P_{di} - P_{fi} = \beta X_i + e_i \quad (5)$$

where  $P_{di}$  is the price offered by the top domestic bidder,  $P_{fi}$  is the price offered by the top foreign bidder,  $X_i$  is a broad set of target level controls, including both tax and non-tax variables, and  $i$  indexes the target firm. Both prices are normalized by the total assets of the target. This formulation parallels the valuation difference from the theoretical model. To the extent that some of the surplus in the acquisition is captured by the acquirer, the estimated standard deviation will understate the true variation.<sup>28</sup>

Including various sets of controls, paralleling earlier sections, yields a root mean squared error of approximately 0.38; this estimate is not much changed by the inclusion of deals where both bidders are either domestic or foreign. In the context of the model, this parameter is the standard deviation of the difference in idiosyncratic productivities between domestic and foreign bidders per dollar of assets.<sup>29</sup>

As can be seen from equation (4), the unitless estimates described above must be multiplied by this scale to get a dollar value for the wealth change. This procedure yields a wealth loss of approximately \$360 billion from 2001 to 2010, relative to \$7,325 billion worth of assets traded in the M&A market in my sample. This corresponds to a novel welfare effect from this reform of \$36 billion per year. Alternatively, the aggregate loss is worth about 5% of the total assets of target companies in the bonus depreciation period. It is important to note that the estimated effect comes from taking the set of acquired firms as given, and so does not include changes driven by reform-induced selection into or out of this sample. Since tax effects do not seem to be important to selection in the first place, this alternative

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<sup>28</sup>Andrade et al. [2001] survey the literature and perform their own updated empirical analysis to find that approximately all gains from a merger accrue to target firm shareholders, though this is an area of considerable recent debate. For example, Netter et al. [2011] find that the gain to acquirers is usually positive in a very broad sample of takeovers; Savor and Lu [2009] use exogenous takeover failures to show that stock mergers create value for the acquirer's shareholders; Ahern [2012] reports that the average gains to the target and the acquirer in a merger are approximately equal.

<sup>29</sup>I also consider an alternative specification wherein I treat the observed market value prior to the takeover bid as an estimate of the next-best valuation – this allows for a much larger sample size of 3910. In this case, the estimated standard deviation is about 0.5.



channel appears to be relatively less important. Additionally, any positive or negative direct effects of bonus depreciation on capital investment or tax revenues are not included in this estimate, as they are beyond the scope of this investigation.

Figure 5 shows how this wealth loss varies across specifications from Table 5 and for different values of the scale parameter, in terms of both percentage of assets and in dollar terms. Across all specifications and for a wide set of scale parameters, the implied distortion is large, especially in the context of the magnitude and goal of the reform. This wealth change is made up of two parts: tax revenues and shareholder wealth. Since the reform led to a decrease in foreign acquisitions, which are assumed subject to a lower tax rate, tax revenues must have actually increased.<sup>30</sup> Hence, shareholder wealth fell by more than the \$360B figure. How this loss was distributed between foreign and domestic shareholders depends on how the takeover price distributes the deal surplus between target and acquirer shareholders. If, for example, target firm shareholders receive approximately the whole surplus, as suggested by Andrade et al. [2001], then the full effect of the shareholder wealth loss accrues to those shareholders through lower transaction values. In this empirically plausible case, domestic wealth falls, underscoring the importance of this channel to domestic policymakers.

## 7 Conclusion

This paper presents a model of cross-border mergers and acquisitions which gives a set of empirical predictions about the nature of tax clienteles. The empirical results show that foreign acquirers systematically target more profitable firms for acquisitions. As would be expected if this observation is driven by tax differences, the results are strikingly larger for tax haven-resident acquirers. Furthermore, an exogenous increase in the value of tax shields for firms in particular industries leads to relative decreases in foreign acquisitions in those industries most affected by the reform. These results are all consistent with the theoretical model.

The model also implies that the relationship between the magnitudes of these two dimensions of sorting can be used to test for cost of capital differences between the two types of bidders. In particular, the empirical results imply that the tax differences between foreign and domestic bidders are strongly reflected in their discount rates. This has significant implications for optimal tax policy and, in particular, highlights the importance of differential valuation of tax shields in determining ownership of assets, which has been an underappreciated point in previous literature. Increasing the availability of tax shields, perhaps by increasing the generosity of depreciation allowances for given investment, appears to be

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<sup>30</sup>This abstracts from the direct effect of the reform on tax revenues, as discussed above.

a powerful way of influencing the market for corporate control to the advantage of domestic acquirers. However, simulations using variation in these allowances from bonus depreciation suggest that the induced shift in ownership towards domestic companies actually has a large, negative effect on world wealth. Whether such a reform is nonetheless good for the domestic economy depends on whether the existing level of foreign ownership is too high or too low, and how transaction gains are shared between target and acquirer shareholders.

Overall, this paper provides a variety of evidence for the importance of tax factors in the market for corporate control, which significantly affect the pattern of foreign ownership both within and across industries. Several different policies could be pursued to address this distortion. Increasing barriers to income-shifting, either through stronger enforcement or stricter transfer pricing and earnings stripping rules, would address the problem to the extent that differences in discount rates are only due to income-shifting. However, such an approach has already proven difficult, as evidenced by my results, and would have its own costs, in terms of distorting real cross-border production, research and financing decisions. Notwithstanding any associated net revenue losses, a decrease in the statutory corporate income tax rate would directly decrease the incentive for income-shifting, which would decrease the valuation differential between foreign and domestic bidders and so lead to a more efficient ownership pattern and higher aggregate wealth.

## References

- Kenneth R. Ahern. Bargaining power and industry dependence in mergers. *Journal of Financial Economics*, 103(3):530–550, 2012.
- Gregor Andrade, Mark L. Mitchell, and Erik Stafford. New evidence and perspectives on mergers. *Journal of Economic Perspectives*, 15(2):103–120, 2001.
- Wiji Arulampalam, Michael P. Devereux, and Federica Liberini. Taxes and the location of targets. Working paper, 2014.
- David A. Becher, J. Harold Mulherin, and Ralph A. Walkling. Sources of gains in corporate mergers: Refined tests from a neglected industry. *Journal of Financial and Quantitative Analysis*, 47(1):57–89, 2012.
- Johannes Becker and Clemens Fuest. Taxing foreign profits with international mergers and acquisitions. *International Economic Review*, 51(1):171–186, 2010.
- Thomas Belz, Leslie Robinson, Martin Ruf, and Christian Steffens. Tax avoidance as a driver of mergers and acquisitions. Working paper, 2014.
- Sandra Betton, B. Espen Eckbo, and Karin S. Thorburn. Merger negotiations and the toehold puzzle. *Journal of Financial Economics*, 91(2):158–178, 2009.
- Andrew Bird, Alexander Edwards, and Terry Shevlin. Does the U.S. System of Taxation on Multinationals Advantage Foreign Acquirers? Working paper, 2015.
- Jennifer L. Blouin, Julie H. Collins, and Douglas A. Shackelford. Does acquisition by non-U.S. shareholders cause U.S. firms to pay less tax? *Journal of the American Taxation Association*, 27(1):25–38, 2005.
- Wenjie Chen. The effect of investor origin on firm performance: Domestic and foreign direct investment in the United States. *Journal of International Economics*, 83(2):219–228, 2011.
- Harry DeAngelo and Ronald W. Masulis. Optimal capital structure under corporate and personal taxation. *Journal of Financial Economics*, 8(1):3–29, 1980.
- Mihir A. Desai and Austan Goolsbee. Investment, overhang and tax policy. *Brookings Papers on Economic Activity*, 2004(2):285–355, 2004.
- Mihir A. Desai and James R. Hines. Expectations and expatriations: Tracing the causes and consequences of corporate inversions. *National Tax Journal*, 55:409–440, 2002.
- Mihir A. Desai and James R. Hines. Evaluating international tax reform. *National Tax Journal*, 56:487–502, 2003.
- Erik Devos, Palani-Rajan Kadapakkam, and Srinivasan Krishnamurthy. How do mergers create value? A comparison of taxes, market power, and efficiency improvements as explanations for synergies. *Review of Financial Studies*, 22(3):1179–1211, 2009.

- Jesse Edgerton. Investment incentives and corporate tax asymmetries. *Journal of Public Economics*, 94(11-12):936–952, December 2010.
- Merle Erickson. The effect of taxes on the structure of corporate acquisitions. *Journal of Accounting Research*, 36(2):279–298, 1998.
- Mara Faccio and Ronald W. Masulis. The choice of payment method in European mergers and acquisitions. *The Journal of Finance*, 60(3):1345–1388, June 2005.
- Lars P. Feld, Martin Ruf, Uwe Scheuering, Ulrich Schreiber, and Johannes Voget. Effects of territorial and worldwide corporation tax systems on outbound M&As. Working paper, 2014.
- Roger H. Gordon and A. Lans Bovenberg. Why is capital so immobile internationally? Possible explanations and implications for capital income taxation. *American Economic Review*, 86(5):1057–1075, 1996.
- Roger H. Gordon and James R. Hines. International taxation. In A. J. Auerbach and M. Feldstein, editors, *Handbook of Public Economics*, volume 4 of *Handbook of Public Economics*, chapter 28, pages 1935–1995. Elsevier, 2002.
- Gary Gorton, Matthias Kahl, and Richard J. Rosen. Eat or be eaten: a theory of mergers and firm size. *The Journal of Finance*, 64(3):1291–1344, 2009.
- Harry Grubert, Timothy Goodspeed, and Deborah L. Swenson. Explaining the low taxable income of foreign-controlled companies in the United States. In Alberto Giovannini, R. Glen Hubbard, and Joel Slemrod, editors, *Studies in International Taxation*. University of Chicago Press, 1993.
- Jarrold Harford. What drives merger waves? *Journal of Financial Economics*, 77(3):529–560, 2005.
- Carla Hayn. Tax attributes as determinants of shareholder gains in corporate acquisitions. *Journal of Financial Economics*, 23(1):121–153, 1989.
- Keith Head and John Ries. FDI as an outcome of the market for corporate control: Theory and evidence. *Journal of International Economics*, 74(1):2–20, 2008.
- James R. Hines. Altered states: Taxes and the location of foreign direct investment in America. *American Economic Review*, 86(5):1076–1094, 1996.
- James R. Hines and Eric M. Rice. Fiscal paradise: Foreign tax havens and American business. *Quarterly Journal of Economics*, 109(1):149–182, 1994.
- Christopher L. House and Matthew D. Shapiro. Temporary investment incentives: Theory with evidence from bonus depreciation. *American Economic Review*, 98(3):737–768, 2008.
- Harry P. Huizinga and Johannes Voget. International taxation and the direction and volume of cross-border M&As. *Journal of Finance*, 64:1217–1249, 2009.

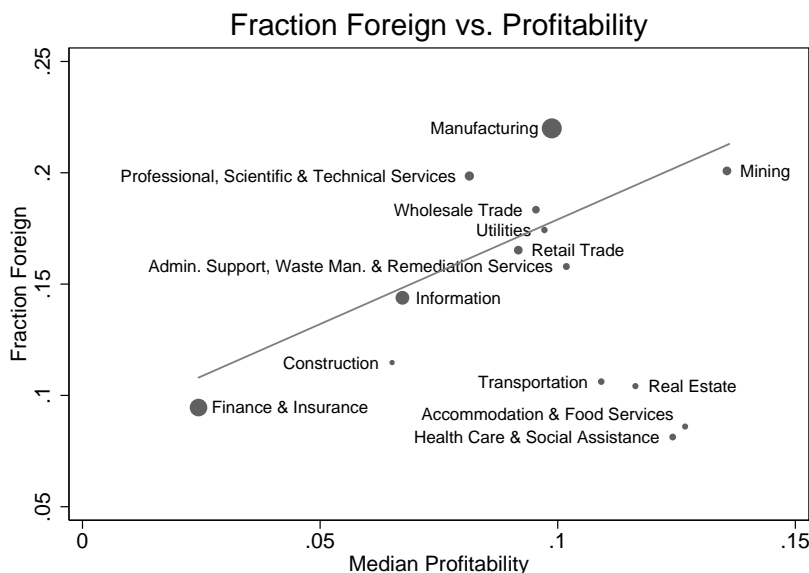
- Steven Kaplan. Management buyouts: Evidence on taxes as a source of value. *The Journal of Finance*, 44(3):611–632, July 1989.
- Jason Kotter and Ugur Lel. Friends or foes? Target selection decision of sovereign wealth funds and their consequences. *Journal of Financial Economics*, 101(2):360–381, 2011.
- Kevin S. Markle and Douglas A. Shackelford. Cross-country comparisons of corporate income taxes. *National Tax Journal*, 65(3):493–528, 2012.
- Jeffrey Netter, Mike Stegemoller, and M. Babajide Wintoki. Implications of data screens on merger and acquisition analysis: A large sample study of mergers and acquisitions from 1992 to 2009. *Review of Financial Studies*, 24(7):2316–2357, 2011.
- Volker Nocke and Stephen Yeaple. Cross-border mergers and acquisitions vs. greenfield foreign direct investment: The role of firm heterogeneity. *Journal of International Economics*, 72(2):336–365, 2007.
- Matthew Rhodes-Kropf and David T. Robinson. The market for mergers and the boundaries of the firm. *The Journal of Finance*, 63(3):1169–1211, 2008.
- Pavel G. Savor and Qi Lu. Do stock mergers create value for acquirers? *The Journal of Finance*, 64(3):1061–1097, 2009.
- Myron S. Scholes and Mark A. Wolfson. The effects of changes in tax laws on corporate reorganization activity. *Journal of Business*, 63 (Part 2):S141–S164, 1990.
- Jim A. Seida and William F. Wempe. Effective tax rate changes and earnings stripping following corporate inversion. *National Tax Journal*, 57(4):805–828, 2004.
- Andrei Shleifer and Robert W. Vishny. Stock market driven acquisitions. *Journal of Financial Economics*, 70(3):295–311, 2003.
- Deborah L. Swenson. The impact of U.S. tax reform on foreign direct investment in the United States. *Journal of Public Economics*, 54:243–266, 1994.
- Stijn van Nieuwerburgh and Laura Veldkamp. Information immobility and the home bias puzzle. *The Journal of Finance*, 64(3):1187–1215, 2009.

## A Sample Construction

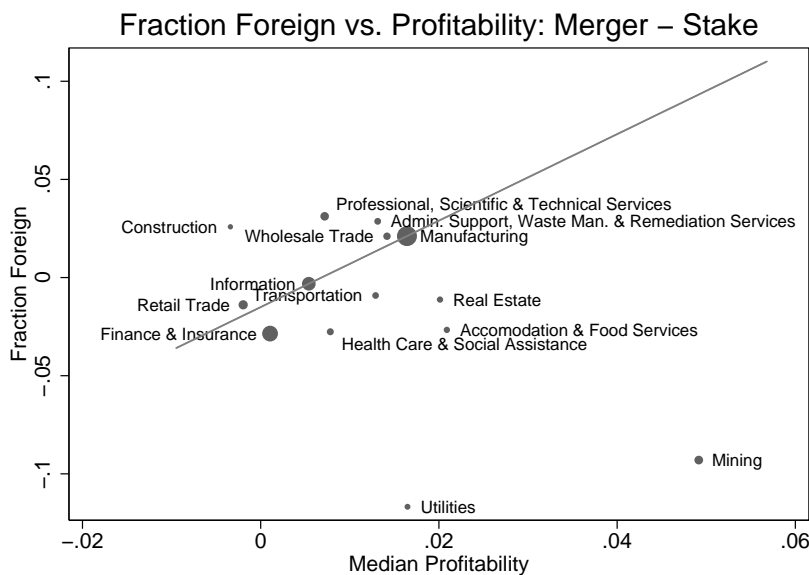
A small complication is caused by some cases of multiple transactions associated with one announcement date. To deal with these, all the transactions from the same announcement date, for the same target and acquirer, are aggregated by adding up the transaction values and fraction of shares acquired to yield a single transaction that is included in the estimation sample.

	N	Value (\$B)
All mergers with U.S. target	145,619	15,298
...target is public	9,970	8,735
...match in Compustat	7,565	8,341
...meet size restrictions	6,809	8,286
...necessary accounting controls	5,939	7,120
...necessary acquirer type	5,383	6,461

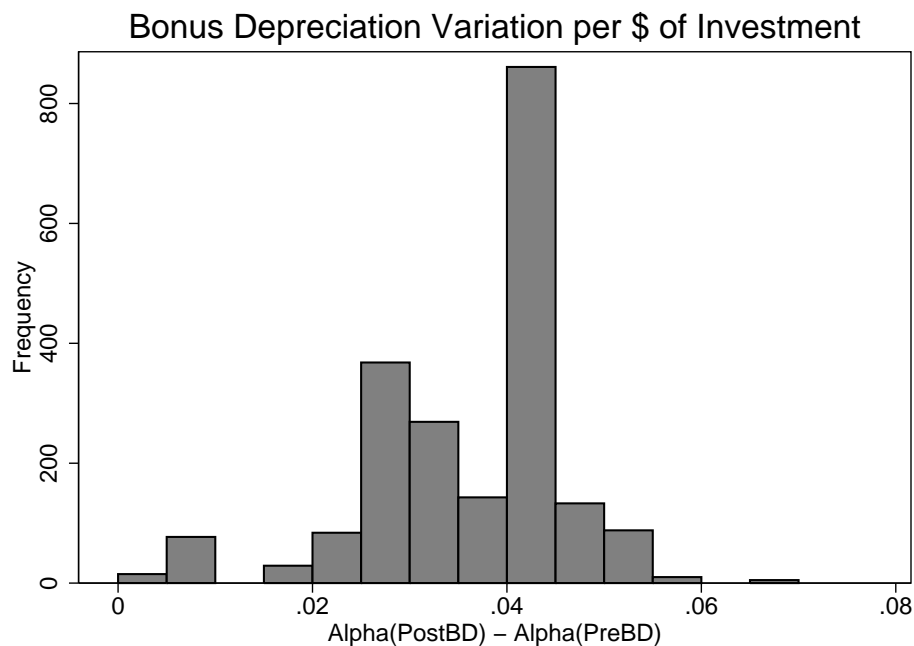
Most unmatched public companies are due to being listed on exchanges that are not covered by Compustat. The remaining missing matches are due to changes in CUSIPs and company names in the early 1990s, before SEC EDGAR data were available to aid in the matching. Though the number of transactions declines a fair amount after imposing necessary restrictions, the estimation sample still contains a significant fraction of the relevant deals by transaction value.



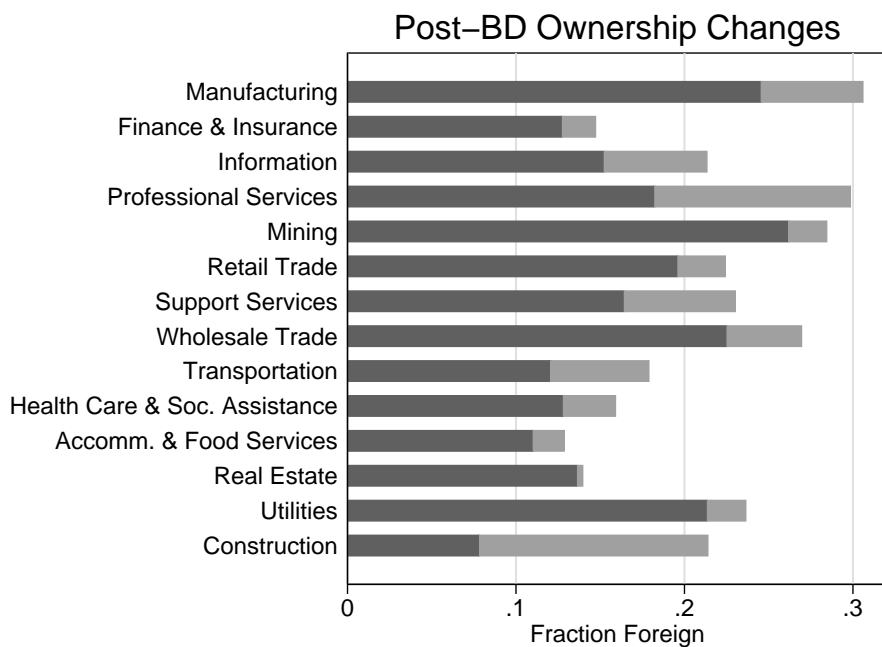
**Figure 1:** Within 20 NAICS-defined industries, this is a scatter plot of the fraction of targets which were acquired by a foreign bidder against the median profitability in that industry. The size of the datapoint is a qualitative indicator of the number of transactions observed in that industry.



**Figure 2:** For each of 20 NAICS-defined industries, the y-variable is the difference between the probability of foreign acquisition and the probability of a foreign stake purchase; the x-variable is the relative difference in profitability between majority and minority acquisition targets. The size of the datapoint is a qualitative indicator of the number of transactions observed in that industry.

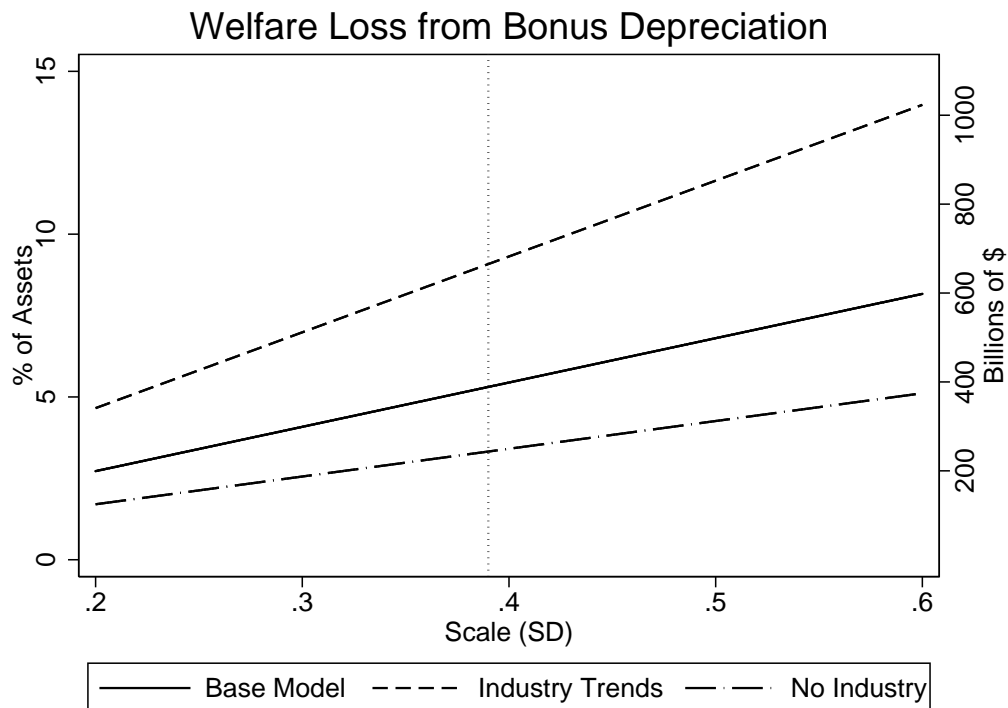


**Figure 3:** This is a histogram of the bonus depreciation-induced change in the present value of depreciation allowances for all post-reform acquisition targets. It shows the changes in  $\alpha$ , the present value of depreciation allowances per dollar of assets, induced by the reform.

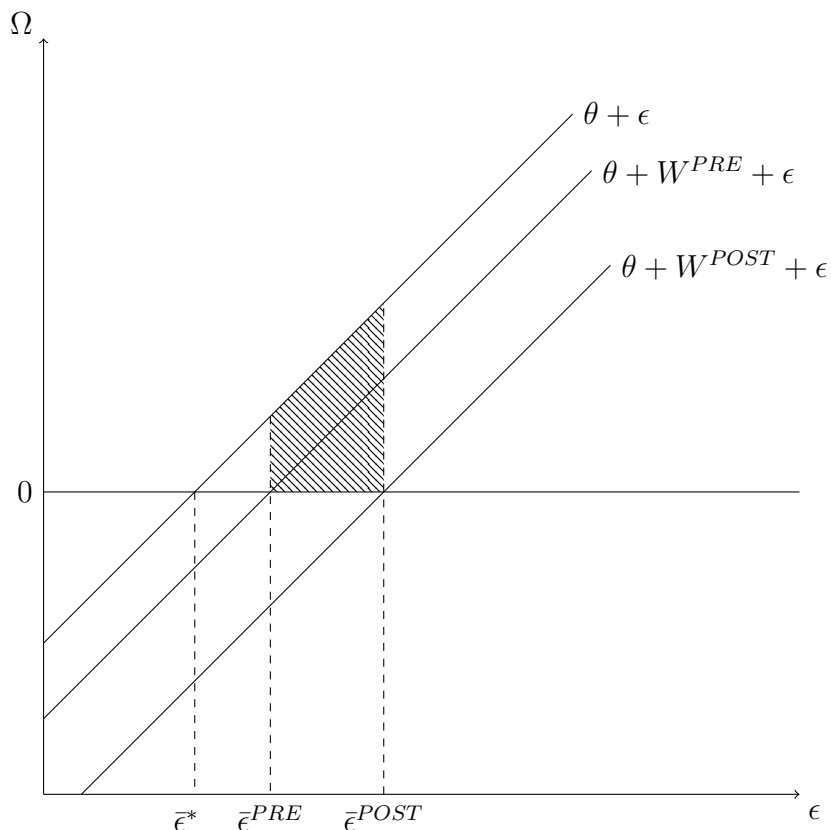


**Figure 4:** This shows the ownership changes caused by bonus depreciation – the dark line shows estimated foreign probability with the reform and the light line shows the counterfactual effect of removing the reform.





**Figure 5:** This shows the loss in world wealth from the ownership changes caused by bonus depreciation (for each of the specifications from Table 5 and different values for the  $\sigma$  parameter).



**Figure 6:** This is a graphical illustration of the change in world wealth (on the y-axis) caused by a change in the tax wedge, with the foreign-domestic productivity difference on the x-axis. In particular, the shaded area is the wealth change caused by a change in the tax wedge from  $W^{PRE} \equiv \phi Y - \psi z^{PRE}$  to  $W^{POST} \equiv \phi Y - \psi z^{POST}$ , with productivity difference  $\epsilon \equiv \epsilon_f - \epsilon_d$  and the overbars denoting the cutoff value for each tax wedge. The illustrated case shows a negative initial tax wedge (as is found empirically), which discourages foreign acquisitions, and so leads to a cutoff productivity difference (foreign less domestic) that is higher than is optimal. The increase in tax shields makes the tax wedge more negative and so exacerbates this problem, resulting in a *loss* in world wealth.

	Majority Sample		All Compustat Firms
	Median	Mean	Mean
Total Assets (\$M)	221	2,324 (21,179)	6,222 (58,681)
Profitability (%)	7.0	5.0 (14.0)	5.8 (22.6)
$I(\text{Prof.} < 0)$ (%)	-	20.2	18.8
Intangibles (%)	1.9	11.0 (17.1)	10.3 (16.7)
Debt (%)	8.2	17.5 (24.8)	18.9 (28.5)
Foreign (%)	-	16.0	-
Haven (%)	-	2.0	-
N	5,383	5,383	142,739

**Table 1:** N = 5,383 for main estimation sample. The ‘All Firms’ category includes all firms in Compustat from 1990-2010 with greater than \$10M in assets and non-missing values for all accounting controls. Standard deviations are in parentheses.

	Majority		Majority - Minority	
Profitability * Majority	2.204***	1.265**	2.996***	2.253***
	(.489)	(.509)	(.775)	(.807)
Profitability	-	-	-0.797	-0.994*
			(.563)	(.594)
Total Assets * Majority	.0285	.0849***	.0204	.04938*
	(.0205)	(.0221)	(.0251)	(.0286)
Total Assets	-	-	.00795	0.0352
			(.0301)	(.0346)
Debt Ratio * Majority	-.557*	-.414*	-.656	-.511
	(.316)	(.234)	(.496)	(.449)
Debt Ratio	-	-	.101	.0983
			(.326)	(.358)
Intangibles * Majority	-.0678	.0236	.118	-.00983
	(.573)	(.419)	(.698)	(.547)
Intangibles	-	-	-.186	.0334
			(.315)	(.358)
Loss Dummy * Majority	.691***	.455**	.222	.0287
	(.122)	(.132)	(.219)	(.234)
Loss Dummy	-	-	.467***	.424***
			(.152)	(.158)
Industry	N	Y	N	Y
N	5,383		8,715	

**Table 2:** Probits, all containing accounting controls and year dummies. The dependent variable is one for a foreign acquirer and zero for a domestic acquirer. Values are semi-elasticities of probability foreign with respect to each variable. \*, \*\*, \*\*\* denote significance at 10%, 5% and 1%, respectively. Mean probability foreign is 0.159, and the standard deviation of profitability is 0.140. Standard errors are bootstrapped over 100 repetitions to account for variability in the construction of the profitability measure. The first two columns use the majority only sample, while the third and fourth add in minority transactions.

	Majority		Majority - Minority	
	(1)	(2)	(3)	(4)
Profitability	2.078***	1.040*	2.794***	2.068**
<i>foreign<sub>i</sub> = non-tax haven foreign acquirer</i>	(.560)	(0.597)	(0.894)	(0.924)
Profitability	4.087***	3.653**	5.468**	4.785**
<i>foreign<sub>i</sub> = tax haven acquirer</i>	(1.522)	(1.624)	(1.799)	(2.023)
Industry	N	Y	N	Y
N	5,277/4,432		8,480/7,028	

**Table 3:** Probits, all containing accounting controls (log total assets, intangibles ratio, debt ratio and dummy for negative earnings) and year dummies. The dependent variable is one for a foreign acquirer and zero for a domestic acquirer. Values are semi-elasticities of probability foreign with respect to each variable. Standard errors are bootstrapped with 100 repetitions to account for variability in the construction of the profitability measure. Columns (1) and (2) use the majority only sample, while the values in columns (3) and (4) correspond to the interaction of profitability and majority after including minority deals.

	Profitability	N
(1) Baseline	2.204*** (.489)	5,383
(2) Only Full Control Transactions	2.612*** (.586)	4,738
(3) Control for Acquirer Assets	3.100*** (.687)	3,814
(4) Control for cash deals	2.062*** (.515)	5,383
(5) $Y = \text{pre-tax income} / \text{assets}$	1.249*** (.389)	5,383
(6) $Y = \text{lagged EBITDA} / \text{assets}$	1.705*** (.373)	5,383
(7) Two profitability lags	2.231*** (.491)	5,383
(8) Total Assets > \$25M	3.006*** (.536)	4,879
(9) Total Assets > \$100M	3.976*** (.859)	3,417
(10) Allowing for heteroskedasticity in profitability	2.483*** (.533)	5,199

**Table 4:** \*, \*\*, \*\*\* denote significance at 10%, 5% and 1%, respectively. The dependent variable is one for a foreign acquirer and zero for a domestic acquirer. Values are semi-elasticities of probability foreign with respect to profitability. Standard errors are in parentheses following the coefficient estimates. Each row includes accounting controls (log total assets, intangibles ratio, debt ratio and dummy for negative earnings) and year dummies. Standard errors are bootstrapped with 100 repetitions to account for variability in the construction of the profitability measure.

$$P(\text{foreign}_i) = \Phi(\phi Y_i - \psi z_i^{PRE} - \psi \cdot POST(z_i^{POST} - z_i^{PRE})) + \beta X_i$$

	(1)	(2)	(3)	(4)
Profitability ( $\phi$ )	2.068*** (.759)	1.191** (.470)	1.192** (.484)	1.186** (.496)
Tax shields ( $-\psi$ )	-35.41* (20.75)	-44.44** (20.71)	-58.02** (25.97)	-52.16** (26.11)
$\hat{\phi}/\hat{\psi}$	.058 (.047)	.027 (.027)	.021 (.015)	.022 (.019)
Industry	N	Y	Y	Y
Industry Trend	N	N	Y	N
N	5,366	5,366	5,366	5,366

**Table 5:** \*, \*\*, \*\*\* denote significance at 10%, 5% and 1%, respectively. The dependent variable is one for a foreign acquirer and zero for a domestic acquirer. All probits include accounting controls (log total assets, intangibles ratio, debt ratio and dummy for negative earnings) and year dummies. Values are semi-elasticities of probability foreign with respect to profitability. Standard errors are bootstrapped with 100 repetitions and clustered at the industry level to account for variability in the construction of the profitability measure and the fact that measured variation in bonus depreciation comes at the industry level. Column (1) includes the pre-reform level of tax shields ( $z_i^{PRE}$ ) which varies at the industry level, column (2) replaces this variable with industry dummies and column (3) additionally includes industry-specific trends. Column (4) also includes a national security dummy as well as its interaction with the post-reform dummy (unreported, not statistically significant).

# **Does the U.S. System of Taxation on Multinationals Advantage Foreign Acquirers?**

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## **Does the U.S. System of Taxation on Multinationals Advantage Foreign Acquirers?**

### **Abstract**

The ability for deferral of home country taxation on multinationals' foreign earnings within the U.S. tax code creates an incentive for firms to avoid or delay repatriation of earnings to the U.S. Consistent with this incentive, prior research has documented a substantial lockout effect resulting from the current U.S. worldwide tax and financial reporting systems. We hypothesize and find that U.S. domiciled M&A target firms with more locked-out earnings are more likely to be acquired by foreign acquirers, compared to domestic acquirers as a result of this tax advantage. The effect is economically significant; a standard deviation increase in our proxy for locked-out earnings is associated with a 14% relative increase in the likelihood that an acquirer is foreign. We also examine the impact of the home country tax system of the foreign acquirers. Because multinationals facing territorial tax systems are able to shift income to save taxes to a greater extent than firms domiciled in worldwide countries, the tax advantages for a foreign firm acquiring a U.S. target with locked-out earnings are potentially greater when the foreign firm operates under a territorial tax system. We find that foreign acquirers of U.S. target firms with locked-out earnings are more likely to be residents of countries that use territorial tax systems.



## 1. Introduction

Merger and acquisition activity plays an important and significant role in the global economy. Cross border mergers and acquisitions have been increasing over time and by 2007 accounted for almost half of all merger and acquisition activity (Erel et al. 2012). Various business and political leaders in the U.S. have expressed concerns over how the U.S. tax system potentially subsidizes and favors foreign takeovers (White 2014, Hatch 2014). In this study, we examine whether the system of worldwide tax system and related financial accounting rules utilized by the United States (U.S.) is associated with the likelihood that a U.S. target is acquired by a foreign buyer.

Countries tax the foreign earnings of multinational firms domiciled in their country in different ways. Prior research and organizations such as the Organization for Economic Cooperation and Development (OECD) generally classify these tax systems as either worldwide or territorial.<sup>1</sup> Under a worldwide tax system, the earnings of foreign subsidiaries are taxed in both the foreign jurisdiction where they are earned, and in the multinational's home country. The home country taxation at the parent level can often be deferred until the foreign earnings of the subsidiary are repatriated to the parent firm with a credit for foreign taxes paid. Under a territorial tax system, the earnings of foreign subsidiaries are taxed in the foreign jurisdiction where they are earned with little or no associated tax obligation to the parent firm's home country.

The U.S. taxes its multinational corporations on a worldwide basis. Within the U.S. tax system, taxes owing to the U.S. government on the earnings of foreign

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<sup>1</sup> Worldwide tax systems are also referred to as "credit" systems as the parent usually receive a tax credit in the home country for the tax paid in a foreign jurisdiction. Territorial tax systems are also referred to as "exemption" systems as the parent firm is exempted (or partially exempted) from home country taxation of the profits of their foreign subsidiaries.

subsidiaries of U.S. domiciled multinational corporations are deferred until those earnings are repatriated back to the U.S. The allowance within the U.S. tax code for deferral of home country taxation on multinationals foreign earnings creates an incentive for firms to avoid or delay repatriation of earnings to the U.S. In this study we use the term “earnings lockout” or “locked-out earnings” to refer to the past earnings of U.S. multinationals’ foreign subsidiaries that have not been repatriated to the U.S. as a result of the tax incentives to avoid/delay repatriation. Firms’ locked-out earnings can be held in the form of cash (i.e., trapped cash) or other financial assets, or can be reinvested in the foreign subsidiary as operating assets. Prior research has documented that firms’ repatriation decisions are sensitive to the level of repatriation taxes (Desai et al., 2001; Hines and Hubbard, 1990) and that the potential tax cost associated with repatriating foreign income is related to the magnitude of U.S. multinational cash holdings (Foley et al., 2007).

The U.S. financial accounting treatment for taxes on foreign earnings under Accounting Standard Codification section 740 (ASC 740) potentially exacerbates the lockout effect. ASC 740 allows multinational firms the option of designating foreign earnings as permanently reinvested abroad. If earnings are designated as permanently reinvested, firms can avoid the recognition in the current period of any U.S. tax expense related to foreign earnings for financial accounting purposes, thereby reporting lower total expenses and higher net income. The ability of U.S. multinationals to designate foreign earnings as permanently reinvested has the potential to increase the lockout effect of the U.S. worldwide tax system. Consistent with this notion, prior research has

documented a substantial lockout effect resulting from the current U.S. worldwide tax and financial reporting systems (Graham et al., 2010, 2011, Blouin et al., 2012).

If U.S. firms retain greater levels of foreign earnings overseas as a result of the U.S.'s worldwide tax system and the related financial reporting rules, these U.S. firms become more attractive targets for foreign buyers as the foreign buyers enjoy a tax-advantage resulting from the acquisitions. The tax-advantage is created by two primary factors. First, foreign acquirers have a tax-advantage related to the locked-out past earnings of the U.S. multinational targets. Through the merger or acquisition a foreign acquirer may be able to free the multinational's foreign subsidiaries' past earnings from the U.S. worldwide tax system by accessing those past earnings through "out-from-under" strategies. Second, the foreign acquirer can exploit an additional tax-advantage on a go forward basis. With appropriate tax planning, future foreign (e.g., non-U.S.) earnings of the new entity could avoid or lower U.S. repatriation taxes that would exist under the old corporate structure (see further discussion in section 3).

To test our first hypothesized relation between the residency of acquirers and earnings lockout in target firms we examine a comprehensive sample of 4,611 majority acquisitions of U.S. public company target firms from 1995 to 2010.<sup>2</sup> The sample includes all acquisitions valued over one million dollars of U.S. firms, both those with and without foreign operations, that have at least ten million dollars in total assets. The baseline likelihood of an acquirer of a U.S. corporation being foreign is 17% rising to 23% if the U.S. corporation has foreign earnings/operations. We measure earnings lockout using two main proxies. For our primary analysis, we hand collect the balance of

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<sup>2</sup> We end our sample period in 2010 as this is the most recent year that we hand collected financial statement data on permanently reinvested earnings, our primary proxy for locked-out earnings.

permanently reinvested earnings (PRE) reported in the tax footnote of the financial statements. PRE is an accounting designation made by U.S. multinationals. A multinational firm designates foreign earnings as PRE when those earnings are indefinitely reinvested in a foreign jurisdiction. The designation of foreign earnings as PRE enables the multinational to avoid current period reporting of the eventual U.S. taxes on future repatriations of those earnings. Using a probit model, we observe a positive association between the reported level of PRE at a target firm and the probability that an acquirer is foreign. The effect is economically significant. A standard deviation increase in the level of PRE of a target firm is associated with a 2.3 percentage point increase in the likelihood that its acquirer is foreign. This relation is not likely explained simply by the extent of foreign activity across the target firms in our sample, as we control for the extent of foreign activity of the target firm by including various controls for the firm-specific level of foreign activity in our model.<sup>3</sup>

Next, we use an alternative measure of earnings lockout based on a firm's potential repatriation costs, as inferred from the previous three years' foreign earnings and taxes, based on Foley et al. (2007). Specifically, this measure is calculated as pre-tax foreign income multiplied by the U.S. corporate statutory tax rate less any current foreign tax expense, scaled by total assets. We again observe results consistent with an increased likelihood of a foreign firm acquiring U.S. target firms with locked-out earnings.

We also examine how the type of tax system utilized by a country impacts the likelihood that an acquirer of a U.S. target is from that country as the tax advantage

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<sup>3</sup> Specifically, we include (i) an indicator variable set equal to one if the firm reports any nonzero value for foreign earnings or foreign taxes paid, (ii) the fraction of the firm's earnings that are foreign, and/or (iii), the firm's foreign sales scaled by total assets.

enjoyed by a foreign acquirer depends on the type of tax system the acquirer faces in their home country. As noted above, foreign profit tax systems of countries can be grouped into two broad categories: worldwide systems and territorial systems. Markle (2013) documents that multinational firms facing territorial tax systems shift more income than do multinational firms facing worldwide tax systems. Because multinationals facing territorial tax systems shift income to save taxes to a greater extent, the advantages for a foreign firm acquiring a U.S. target with locked-out earnings are potentially greater when the foreign acquirer operates under a territorial tax system. Following an acquisition of a U.S. target, foreign acquirers from territorial systems enjoy greater tax benefits and have greater incentives to shift profits out of the acquired U.S. parent and the old foreign subsidiaries of that U.S. parent in order to avoid U.S. taxation.<sup>4</sup> As a result, we hypothesize that foreign acquirers of U.S. target firms with locked-out earnings are more likely to be residents of countries that use territorial tax systems. This second hypothesis follows directly from our first hypothesis discussed above and has the added benefit of improving identification of our main hypothesized effect.

We test our second hypothesis a number of ways. First, we compare foreign acquisitions from territorial countries to U.S. acquisitions and, consistent with expectations, we observe a significant association between locked-out earnings and territorial foreign acquirers. Second, we compare foreign acquisitions from worldwide countries to U.S. acquisitions; in this falsification test, we do not observe a significant association between locked-out earnings and worldwide foreign acquirers. Third, we

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<sup>4</sup> The incentives to acquire a U.S. target with locked-out earnings could still exist for a foreign acquirer in a worldwide country. If the statutory tax rate in the acquirer's country is lower than the U.S. statutory rate, the worldwide system foreign acquirer will still benefit from a tax advantage relative to a U.S. acquirer as the tax due upon repatriation will be applied at the lower rate.

compare foreign acquisitions from territorial countries to foreign acquisitions from worldwide countries. Although the sign on the coefficient is consistent with expectations, it is not significant at traditional levels, possibly due to low power. To increase power we next we compare foreign acquisitions from territorial countries to all acquisitions from worldwide countries (i.e., both U.S. and worldwide foreign acquirers). Consistent with expectations we observe a significant association between locked-out earnings and territorial acquirers.

In our final test of our second hypothesis, we exploit an exogenous change in the tax system for a subset of acquiring firms –those resident in countries that changed international tax systems during our sample period. Two major economies, the United Kingdom and Japan, both switched from worldwide tax systems to territorial tax systems during our sample period. This test allows stronger causal identification and we observe a significant association between locked-out earnings and foreign acquisitions occurring under the territorial (as opposed to worldwide) tax regime. Taken together, these test provide strong evidence consistent with the second hypothesis, that the association between the likelihood of an acquirer being foreign and a target's level of locked-out earnings is concentrated in acquiring firms located in territorial tax systems.

While not the focus of this study, the incentives to undergo a corporate inversion parallel the tax preferences for foreign firms to acquire U.S. targets. In an inversion, a corporation changes its residence from a high-tax location, such as the U.S., to a low-tax location. The transactions involved in an inversion vary but usually involve M&A and an exchange by shareholders of the U.S. corporation of their shares in the existing U.S. firm for shares of a firm (the new parent) located in a low tax location, usually employing a

territorial tax system. Given the data restrictions we impose, relatively few (if any) of the transactions in our sample are inversions.<sup>5</sup> Given the political scrutiny around inversions, commentators have noted the appeal of a foreign takeover as an alternative (Goldfarb 2014). Further, following the federal government's attempt to shut down inversions through regulatory changes in 2014, several companies that had already completed an inversion have done follow-on acquisitions of other U.S. targets (Mattioli 2014).

In this study, we present evidence consistent with the existence of a significant indirect cost of having a tax and financial reporting system that encourage multinational firms to retain earnings abroad, locking out those earnings from being reinvested domestically, or returned to shareholders. Our findings suggest that U.S. based potential acquirers for U.S. targets are losing out to foreign acquirers. In recent years, the issue of repatriation taxes and the relative merits of a territorial versus worldwide system of taxation have been publicly questioned and debated. Commentators have lobbied both for and against a reduction in U.S. repatriation taxes and legislators have proposed bills including repatriation tax holidays.<sup>6</sup> More directly related to this study, the House Committee on Ways and Means released a discussion draft on October 26, 2011, that would move the U.S. towards a territorial tax system by providing a deduction from

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<sup>5</sup> First, we restrict our sample to acquisitions where the acquirer obtains at least 50% of the target. Second, of the acquisitions by foreign firms in our sample where we have data on the total assets of the acquirer, in only 5% of cases is the target larger than the acquirer. Additionally, 85% of the foreign acquisitions in our sample involve cash consideration. These features are less likely in inversions. Finally, we compare our sample to the inversions identified in Seida and Wempe (2004) and Desai and Hines (2002) and find little overlap.

<sup>6</sup> For an example of an argument in favor of reducing repatriation taxes, at least temporarily, see Drucker (2010). For an example of an argument opposed see the editorial in the October 30, 2011 edition of the Washington Post (Washington Post 2011). In 2011, three bills were introduced that included a repatriation tax holiday. Senators Wyden and Coats introduced the *Bipartisan Tax Fairness and Simplification Act of 2011*, Representatives Brady and Matheson introduced the *Freedom to Invest Act of 2011*, and Senators Hagan and McCain introduced the *Foreign Earnings and Reinvestment Act*.

income equal to 95% of foreign-source dividends received by U.S. parent companies (U.S. Government 2011). In other jurisdictions the issue has been debated and tax laws around the taxation of foreign subsidiary profits have been amended. Over the last decade a number of countries that had previously utilized a worldwide system for taxing foreign earnings have moved to a territorial system, most notably the United Kingdom and Japan, as of 2009. Our findings should be of interest and informative in the context of a decision to move to a territorial tax system as we document a consequence of worldwide international tax systems to U.S. firms.

The remainder of this paper is organized as follows. In Section 2, we discuss institutional background information on the taxation and financial accounting rules related to the foreign earnings of U.S. multinational firms. Section 3 motivates and develops the hypotheses. Section 4 details the sample selection and describes the research methodology design. Section 5 presents results and discusses the significance of our findings. Finally, Section 6 concludes.

## **2. Institutional Background and Prior Literature**

### *2.1 U.S. Tax Treatment of Foreign Earnings*

Broadly speaking, the U.S. uses a worldwide tax system. For a single legal entity, earnings are taxed immediately in the period earned, whether foreign or domestic. However, for a corporate group involving multiple entities, income earned at foreign subsidiaries is typically not taxed in the U.S. until those profits are repatriated to the U.S., which is referred to as “deferral.” This U.S. domestic tax is reduced by foreign tax credits associated with foreign income taxes paid on foreign earnings. The actual calculation is complicated by the presence of foreign operations in multiple jurisdictions with different



statutory tax rates, but the residual tax due is approximately equal to any excess of the U.S. tax rate over the weighted average tax rate of the relevant foreign jurisdictions. Given the existence of deferral and the high corporate tax rate in the U.S. relative to most other countries, there is a potential policy concern that foreign investment by U.S. multinationals is inefficiently subsidized, so that firms are induced to reinvest their earnings abroad even when the potential returns are lower than those available domestically. This remains an area of current debate, however, as Desai et al. (2011) document that the flow of repatriated earnings has historically exceeded new foreign investment, and is not necessarily inefficient.

## *2.2 U.S. Accounting Treatment of Foreign Earnings*

In principle, under U.S. Generally Accepted Accounting Principles, the expectation of a future U.S. tax payment associated with foreign earnings requires firms to record a deferred tax expense and the associated deferred tax liability. However, Accounting Standards Codification 740 allows an exception to this rule, called the Indefinite Reversal Exception, under certain circumstances. If management has the intent and ability to indefinitely reinvest the earnings of a foreign subsidiary, the permanently reinvested earnings, or "PRE", designation can be invoked, whereby the company can avoid recognizing the deferred tax expense. This designation must either be backed up by specific plans in terms of future financing and investment or else accompanied by an assertion that the earnings are intended to be distributed in a tax-free liquidation. The Financial Accounting Standards Board (FASB) revisited this exception in 2004, and decided to retain it due to the significant incremental complexity associated with the calculation of the relevant deferred tax liabilities. This complexity involves the

interaction of multiple tax jurisdictions with different tax rates and tax bases, the possibility of permanent or temporary tax holidays and the effects of fluctuating exchange rates, among other issues.

### *2.3 Prior Literature*

The impact of U.S. tax and accounting treatment of foreign earnings is of paramount importance in understanding how a U.S. multinational makes its decisions on when and how to repatriate these earnings. Theoretical models such as those in Hartman (1985) and Scholes et al. (2014) show that when making this decision, the key consideration is the difference in after-tax rates of return, on the margin, in the foreign jurisdiction relative to what could be earned at home. Strikingly, in these simple models, the tax associated with repatriation itself is irrelevant, because at the time of the hypothetical decision, the foreign earnings are already "trapped" in the foreign jurisdiction, and so must eventually face the tax. This argument also implies that whether the multinational can benefit from deferral of this tax burden does not matter - the present value of taxes due remains the same whether paid immediately or in a future period. Of course, these results might not obtain in a richer model. Most importantly, if the repatriation tax is not constant over time, then a firm will want to time its repatriations for periods with particularly low tax rates; consequently, it may delay repatriation to wait for such a period, even if this comes at the cost of relatively lower after-tax foreign returns (see De Waegenaere and Sansing 2008). This delay results in a lock-out effect as discussed above, and is relevant to the current U.S. policy environment. The U.S. has addressed this issue in the past through a repatriation tax holiday enacted in the American Jobs Creation Act of 2004 which effectively lowered the U.S. tax rate on repatriations

during 2004 or 2005. In addition, there have been calls for another repatriation tax holiday and/or reform of the tax system for taxing multinationals. In recent years firms seem to have retained significantly higher foreign earnings in anticipation of a similar policy being enacted in the future (Brennan, 2010).

The tax-induced lock-out effect appears to be an important consequence of the U.S. international tax system. Additionally, the prevalence of the designation of foreign earnings as PRE and U.S. multinationals' desire to maintain higher book income by avoiding the deferred tax expense associated with unrepatriated foreign earnings reinforces the lock-out effect. This result arises because an actual repatriation would force the immediate recognition of the associated domestic tax expense, which in the case of PRE, by definition, had not already been recognized. In fact, Graham et al. (2011) find, based on a survey of 600 tax executives, that these two parallel effects are equally important in driving firms' initial foreign location and subsequent repatriation/reinvestment decisions.

This study contributes to the literature on cross border mergers and acquisitions. The majority of prior empirical studies examining cross-border acquisitions do not consider the effect of U.S. international tax rules on merger and acquisition decisions (e.g., Doukas and Travlos 1988; Moeller and Schlingemann 2005; Black et al. 2007; Dos Santos et al. 2008; Ellis et al. 2011; Erel et al. 2012). A notable exception is Huizinga and Voget (2009) who examine the impact of international cross-border double taxation on the parent-subsidiary structure of multinational firms created following cross-border mergers and acquisitions. They find that the likelihood of the new parent firm locating in a country following the cross-border takeover is reduced by high international double

taxation of foreign source income under that country's system; this means that countries with high international double taxation attract smaller numbers of parent firms, and the valuable headquarters activities that come with them. Huizinga and Voget (2009) take the firms and locations of the firms involved in a merger or acquisition as given. In this study, we extend this line of research by examining how the parties are paired up in the first place and document a positive relation between the likelihood of the acquirer being domiciled in a foreign country and locked-out earnings of the target.

In another stream of related research, Edwards et al. (2014) and Hanlon et al. (2014) examine the relation between U.S. tax rules and the outbound mergers and acquisitions by U.S. multinationals. These studies investigate the effect of cash trapped overseas on U.S. multinational corporations' foreign acquisitions and find that firms with high levels of trapped cash make less profitable acquisitions of foreign target firms using cash consideration. Our study differs from the Edwards et al. (2014) and Hanlon et al. (2014) studies in that it examines the impact of the U.S. tax system of foreign earnings on the merger and acquisitions of U.S. target firms whereas the aforementioned studies examine mergers and acquisitions of foreign targets by U.S. firms. Bird (2014) also investigates the relation between taxes and cross-border mergers and acquisitions by looking at the association between target firm characteristics and the tax status of acquirers. Specifically, he finds that low-tax foreign bidders are more likely to acquire more profitable target firms than are high-tax domestic bidders, and that exogenous increases in a target firm's tax shields lead to decreases in the probability of foreign acquisition. Our study differs from Bird (2014) in that he examines the impact of target profitability and existing tax deductions on inbound foreign merger and acquisition

activity; we examine the impact of the U.S. worldwide system of taxing foreign subsidiary profits on inbound mergers and acquisitions. Finally, Feld et al. (2014) examine the effect of the home country system of taxation (worldwide versus territorial) on outbound mergers and acquisitions. They find that a worldwide system disadvantages multinational firms when bidding for targets in low tax countries and reduces the volume of outbound mergers and acquisitions. Our study differs from Feld et al. (2014) as we examine the impact of the worldwide system of taxing multinationals on inbound mergers and acquisitions.

### **3. Hypothesis Development**

#### *3.1. Worldwide Taxation and Inbound Mergers and Acquisitions*

Given that the worldwide tax system and related financial reporting rules lead U.S. firms to hold more earnings overseas, these firms can become attractive, that is, tax-favored, targets for foreign buyers. First, the past locked-out earnings of U.S. multinationals should be attractive to foreign acquirers because the takeover could help free the multinational's foreign subsidiaries' past earnings from the U.S. worldwide tax system. Following an acquisition by a foreign acquirer, it is possible for the acquirer to access the existing stock of unrepatriated foreign earnings in the foreign subsidiary. "Freeing" unrepatriated foreign earnings can be done through what are known as "out-from-under" or "hopscotching" transactions. Out-from-under planning is highly fact specific and different strategies are used depending on the attributes of the firms involved. Kleinbard (2014) presents an example of this type of transaction. A subsidiary with assets, such as cash, that the firm wishes to "free" can lend the assets to the foreign parent and "hop" over the U.S. The parent company is then able to use the assets as they wish

(invest in other assets, repay debt, distribute to shareholders, etc.). A similar transaction was possible prior to 2010 using an exchange of assets of the U.S. firm's foreign subsidiary for shares in the new foreign parent instead of a loan. The transfer could be treated as a dividend from the foreign subsidiary to the foreign parent to the extent of the existing earnings and profits. The dividend could avoid U.S. tax as it was from one foreign corporation (the subsidiary) to another foreign corporation (the new parent) and did not involve a U.S. entity.<sup>7</sup>

A second tax benefit to a foreign buyer of acquiring a U.S. multinational with locked-out earnings could occur on a go forward basis. The foreign acquirer could achieve this benefit through a reorganization so that the future foreign earnings of the pre-existing U.S. foreign subsidiaries are no longer subject to U.S. tax as the new parent firm is not domiciled in the U.S. For example, following an acquisition the acquiring foreign parent can "freeze" the value of the target foreign subsidiaries by exchanging the existing common stock of the subsidiaries held by the U.S. corporation for preferred shares of the subsidiaries while issuing new common shares to a related entity within the multinational that is domiciled outside of the U.S. Under this post-acquisition structure, the new combined entity could also benefit from additional tax savings. For example, the new foreign parent could lend to the U.S. subsidiary (the former U.S. based parent), thereby increasing interest deductions in the U.S.<sup>8</sup> The new structure could also allow for increased tax planning opportunities through transfer pricing, shifting profits out of the

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<sup>7</sup> In 2010 this strategy was shut down following the creation of section 304(b)(5)(B). Following the enactment of section 304(b)(5)(B), the earnings and profits of the foreign subsidiary are excluded from the calculation and instead the earnings and profits of the U.S. target are used, generally reducing the tax benefits of the transaction.

<sup>8</sup> This is referred to as income stripping. Tax planning in this area needs to be structured to avoid triggering thin capitalization rules.

former U.S. based parent into a lower tax jurisdiction. Accordingly, we predict that firms with more locked-out earnings are more likely to be acquired by foreign firms because of their tax-favored status.<sup>9</sup> Stated formally, we propose the following hypothesis:

*H1: The likelihood of an acquirer being foreign is increasing in a target's level of locked-out earnings.*

### 3.2. The acquirer tax system

As discussed above, how countries tax the profits of foreign subsidiaries can be grouped into two broad categories: worldwide systems and territorial systems. While most large developed economies utilize territorial tax systems, some jurisdictions still use worldwide systems (e.g. for example as of 2010, 7 of the 34 OECD countries continue to use a worldwide system: the U.S., Chile, Greece, Ireland, Israel, Mexico and South Korea). Foreign bidders from countries under a territorial tax system may be able to free the acquired multinational's foreign subsidiaries' past and future earnings from the U.S. worldwide tax system and not face incremental parent country level tax on those earnings (as they would fall under the territorial regime). Foreign bidders from countries under a worldwide tax system could also have a tax advantage compared to U.S. bidders but only to the extent that the statutory rate in the foreign jurisdiction is lower than in the U.S. This is due to the fact that even if the foreign acquirer is able to repatriate past and future foreign subsidiary earnings around the U.S., those earnings will face repatriation taxes

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<sup>9</sup> We examine the identity of the winning bidder rather than using bid premia because the latter faces several empirical difficulties. For example, we do not know what process determines acquisition prices, which is key to understanding how valuations feed into the observed price. We are also unable to observe the other bidders and bids for the target company, preventing us from directly examining how much more foreign bidders, compared to U.S. bidders, are willing to pay. That being said, our tests examining differences in the country of residence for different bidders will reveal valuation differences as long as the market for corporate control has some element of efficiency - the probability of a bidder winning must be increasing in its valuation.

under the new parent's worldwide regime. Alternatively stated, the tax advantages to acquiring a U.S. firm with locked-out earnings are likely greater for foreign acquirers from territorial countries, but the incentives to acquire a U.S. target with locked-out earnings could still exist for a foreign acquirer in a worldwide country.

In addition, multinational firms facing worldwide vs. territorial tax systems shift income to varying extents. Markle (2013) examines differences in the tax-motivated income shifting of firms facing worldwide versus territorial tax systems and documents that firms facing territorial tax systems shift more income than those facing worldwide tax systems. If firms facing territorial tax systems are able to shift income to a greater extent, the advantages for a foreign firm acquiring a U.S. target with locked-out earnings are greater when the foreign firm operates in a territorial tax system. Accordingly, we predict that foreign acquirers of U.S. target firms with locked-out earnings are more likely residents of countries that use territorial tax systems. Stated formally, we propose the following hypothesis:

*H2: The association between the likelihood of an acquirer being foreign and a target's level of locked-out earnings is concentrated in acquiring firms located in territorial tax systems.*

The second hypothesis follows directly from hypothesis 1 and has the added benefit of improving identification of our main hypothesized effect. More specifically, in one of our tests of the second hypothesis we are able to exploit an exogenous change in the tax system faced by a subset of acquiring firms. Since we expect our hypothesized relation to exist primarily in settings where the foreign firms face a territorial system, the change from a worldwide to territorial system of a number of countries during our sample period provides much better causal identification and substantial comfort that our



hypothesized effect is driving differences in foreign versus domestic acquirers, as opposed to some other unobservable country specific effect.<sup>10</sup>

## **4. Research Design**

### *4.1. Sample*

To test our hypotheses, we examine acquisitions of publicly traded U.S. target firms. Focusing our analysis on target firms in one specific country has the added advantage of ensuring that all the sample mergers and acquisitions take place under a similar regulatory and institutional environment. The acquisition sample comes from Thomson SDC Platinum. We begin with all majority transactions (where the acquirer ends up with > 50% of the target) that involved a publicly-traded U.S. target from 1995 to 2010. For a transaction to be included in the sample, the target company must have nonmissing values of total assets (at), profits (ebitda), debt (dltt), and intangibles (intan) available in COMPUSTAT. We exclude all mergers and acquisitions that are valued at less than one million dollars and where the target firm had less than ten million dollars in total assets. We also exclude acquisitions by private equity and non-taxable entities as the hypothesized tax motivated effect should not impact these acquirers. Using this base sample, next we use a Python script to extract PRE disclosures from the most recent 10K filed by the target company prior to the deal and hand collect the firm's reported level of PRE. Appendix A provides a more complete discussion of the PRE data collection process. The above methodology yields a sample of 4,611 unique acquisitions.

### *4.2. Acquirer location and earnings lockout*

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<sup>10</sup> The United Kingdom and Japan both switched from worldwide tax systems to territorial tax systems during our sample period.

We examine the association between the probability of a U.S. target firm being acquired by a foreign firm versus a domestic firm and earnings lockout using the following probit model:<sup>11</sup>

$$Prob(ForeignAcq) = \beta_0 + \beta_1 LOCKOUT + \sum \beta_k Controls_k + \varepsilon \quad (1)$$

where *ForeignAcq* is an indicator variable equal to one if the acquirer was a foreign firm and zero otherwise. The residence of the acquirer is obtained from the Thomson SDC Platinum database. The independent variable of interest, *LOCKOUT*, is our proxy for the target firm's locked-out earnings. Defining and thus identifying exactly what earnings are locked out is debatable – one could argue that all unremitted foreign earnings are locked-out but this would obviously be an upper bound estimate. However, these data are not publicly available for all firms. As a result, we use three separate proxies; *PRE*, *PRE Indicator*, and *Repatriation Cost*. The first measure, *PRE*, is a measure of the reported permanently reinvested earnings of the firm calculated as the total dollar amount of PRE disclosed in the tax footnote scaled by total assets. *PRE* captures the cumulative amount of foreign earnings a target firm has declared it has or will indefinitely reinvest abroad and captures a subset of past foreign earnings. Graham et al. (2010) document that 75% of firms classify all their unremitted foreign earnings as PRE.

Ayers et al. (2014) document annual noncompliance with required PRE disclosures ranging from 10 percent to 17 percent for S&P 500 firms.<sup>12</sup> To address this concern we next create an indicator variable, *PRE Indicator*, set equal to one for any

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<sup>11</sup> Standard errors are calculated using the Huber-White adjustment to account for heteroscedasticity.

<sup>12</sup> Ayers et al. (2014) identify “non-disclosers” using the effective tax rate reconciliation in the footnotes and note that over 85% of their “non-disclosers” provide an acknowledgement of the existence of some PRE.

positive value of PRE or a general disclosure of the existence of PRE without a specific dollar amount. Finally, in robustness tests we use a measure of repatriation tax costs based on Foley et al. (2007), *Repatriation Cost*, which is calculated using past foreign income and tax expense, rather than the hand collected financial statement PRE disclosures. Specifically, this measure is calculated as pre-tax foreign income multiplied by the U.S. corporate statutory tax rate less any foreign taxes paid, normalized by total assets. The prior three year average is used to compute these variables if it is available; if not, the prior two years; if not, the prior year.<sup>13</sup> The *Repatriation Cost* measure has several limitations. It is based on the assumptions that reported foreign earnings in the financial statements equate to foreign taxable income, and although intended as a cumulative measure, the incremental U.S. taxes due upon repatriation are calculated based on annual foreign income.

Our three *LOCKOUT* proxies, the two *PRE* based measures and the *Repatriation Cost* measure, are used to provide robustness to our results and triangulate our findings. The measures are not perfect substitutes. PRE is an accounting designation and should capture the cumulative earnings that management intends to keep aboard. *Repatriation Cost* is an estimate of the cost of repatriating foreign earnings based on recent years' reported data that should be correlated with the amount of earnings held abroad because of a lockout effect. Our proxies for locked-out earnings are measured based on past foreign earnings of the target firms. However, past profitability predicts future profitability and thus these measures also proxy for future profits and future tax benefits to foreign acquirers.

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<sup>13</sup> If the prior year is missing, a zero is imputed to represent the lack of repatriation costs.

Following hypothesis 1, we expect a positive significant coefficient for  $\beta_1$ , consistent with PRE/locked-out earnings helping explain which target firms in the U.S. market end up purchased by foreign as opposed to domestic acquirers. Note that to be included in the estimation sample for this test, the target firm must have been successfully taken over. In theory, we would expect a similar lockout effect to drive selection into the takeover sample as well – a firm which has a high level of locked-out earnings may not only be more likely to be acquired by a foreign firm, but could also be more likely to be taken over at all. We focus on the sample conditional on takeover in order to limit the hand collection of PRE data.<sup>14</sup>

The hypothesized relation between locked-out earnings and the domicile of acquirers should exist for all forms of locked-out earnings no matter in which form the underlying assets are held. The locked-out earnings could be held as financial assets (i.e., what is commonly referred to as “trapped cash”) or reinvested in operating - non-financial - assets. Our hypothesis and tests are broader as we view the motivating factor in these acquisitions as the tax-favored treatment to foreign acquirers of both *past* and *future* foreign earnings lockout which latter arise from reinvestment of past locked out earnings in operating assets. While we do not examine a preference by foreign acquirers for tax-induced trapped cash specifically, our findings are consistent with this trapped cash story. Further, foreign cash holdings are not a required disclosure and until the SEC began requesting this information in recent years, few firms provided the public with this information. Even if the amount of foreign cash was disclosed, disentangling the amount

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<sup>14</sup> Examining the selection of targets would require collecting PRE data for not just the sample firms actually acquired, but also all firm-year observations that did not result in an acquisition but would need to be included in the sample as possible targets.

that is trapped or tax induced would be difficult. Prior studies suggest that our *LOCKOUT* measures can also be interpreted as proxies for foreign cash and/or trapped cash. For example Harford et al. (2014) document a correlation of 0.81 between PRE and foreign cash in a sample of 657 firm-years with disclosure of foreign cash holdings. Hanlon et al. (2014) estimate tax-induced foreign cash (their variable *Predicted Foreign Cash-REPAT*) using the estimated coefficient on the Foley et al. repatriation tax cost variable from a regression of foreign cash on the repatriation tax cost measure and controls. Multiplying our *Repatriation Cost* measure by their estimated coefficient, 45.29, could be interpreted as tax-induced foreign cash holdings.<sup>15</sup> Inferences from our regression results would remain the same as this transformation would simply be multiplying all our observations by a constant.

The clearest alternative hypothesis to hypothesis 1 would be a direct preference by foreign acquirers for U.S. target firms with foreign activities; that is, a foreign acquirer could prefer a U.S. target firm with locked-out earnings simply because the target firm, like the acquirer, also operates outside of the U.S. As a result, it is important to control for the foreign activities of the target firms. Because of the difficulty in measuring U.S. multinationals' foreign activity using publicly available data, we attempt to accomplish this in two different ways (Donohoe, McGill, and Outslay 2012). First, we include a control variable that is an indicator variable equal to one when the target firm has any foreign earnings and zero otherwise. We also include an additional control variable for the fraction of total earnings that are foreign. Second, alternatively we include a control

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<sup>15</sup> This coefficient is from column 1 of Table B1 in Hanlon et al. (2014).

variable for the total foreign sales of the target, from the Compustat segment data, relative to total assets of the target firm.

In addition to the control variables designed to capture the extent of foreign operations of the U.S. target firms, we include control variables for measures of target profitability (earnings before interest, taxes, depreciation and amortization) scaled by total assets, intangible assets scaled by total assets, and leverage (debt over total assets). The inclusion of the first two of these variables controls for the fact that foreign and domestic acquirers could have differential access to income shifting strategies, which themselves are more valuable if the target firm has more profits to shift, and potentially easier to implement if the target has more intangible assets. We control for target firm leverage as the capital structure of the firm could be used in order to decrease/increase reported taxable income in a specific jurisdiction using interest payments. In addition, we include a control variable for net operating loss carryforwards relative to total assets, as well as an indicator variable for current period losses, since these reflect differences in future tax rates faced by the target firms that could affect foreign and domestic takeovers in different ways, given different home country tax rates and business strategies.<sup>16</sup>

A number of the control variables can also be interpreted as proxies for the future taxable profits of the target firm overall, and of the foreign subsidiaries of the target in particular. The control variables for “foreign-ness,” profitability, and intangibility will

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<sup>16</sup> We do not explicitly control for, or test for differences in, the type of consideration given as payment. Prior research has documented substantial cross border differences in consideration. For example, Faccio and Masulis (2005) document most European M&A is financed with cash (80% pure cash plus 8% partially cash) with country variation from 100% in Austria to 66% in Finland. Conversely, Andrade et al. (2001) document that 70% (58%) of M&A by U.S. firms involve stock (all stock). Faccio and Masulis (2005) document that these differences are driven by numerous factors, including a higher propensity for firms to use cash in cross-border acquisitions. In untabulated tests we control for consideration type; inferences remain similar.

also capture the tax-favored effect of future profits and positive coefficients on these variables would also be consistent with foreign acquirers being tax-favored acquirers.

#### *4.3. Acquirer location, tax system, and earnings lockout*

The main test of the second hypothesis involves distinguishing the foreign acquirers in the sample by whether they are located in a country that uses a worldwide or a territorial system. If the second hypothesis is descriptive, the increased propensity to acquire firms with locked-out earnings by foreign over domestic firms should be greater when the foreign component of the acquirer sample consists of territorial tax system country acquirers as opposed to when it is made up of worldwide tax system country acquirers. To test hypothesis 2, we rerun the analysis from subsection 4.2 on four separate subsamples of acquisitions. In the first subsample, we include all domestic acquisitions and only those foreign acquisitions that are made by acquirers from territorial countries. In the second subsample, we include all domestic acquisitions and only those foreign acquisitions that are made by acquirers from worldwide countries. In the third subsample, we include only acquisitions by foreign firms and code the dependant variable as one when the acquirer is from a territorial country, and zero if from a worldwide country. Finally, in the fourth subsample, we include acquisitions from territorial countries coded as one and include both U.S. domestic acquisitions and foreign acquisitions from worldwide countries in the zero group. Consistent with hypothesis 2, the association between the likelihood of an acquirer being foreign and a target's level of locked-out earnings is concentrated in acquiring firms located in territorial countries, we expect positive significant coefficients on the measure of earnings lockout for the first, third, and fourth specification. A coefficient on the measure of earnings lockout not

statistically different from zero is expected in the second specification because all acquirers are from worldwide tax systems, thus these foreign acquirers are not expected to be tax-favored over U.S. domestic acquirers except to the extent that the foreign corporate statutory tax rate is much lower than the U.S. corporate statutory tax rate.

A remaining empirical concern with these tests is that acquirers from some countries could have a particular preference for U.S. target firms with locked-out earnings, either for correlated non-tax reasons, or because other features of their tax codes could facilitate accessing the foreign earnings of the target firm at a lower tax cost. To account for this possibility, in the final set of tests, we include acquirer country fixed effects in the regression models. For many of the acquirer countries in the sample, these fixed effects would be perfectly predictive of territorial or worldwide tax systems, as many countries did not change their systems of international taxation over the course of the sample period. As a result, in fixed effects models we only include acquisitions in our sample from acquirers located in countries that satisfy two criteria. First, during our sample period the country must have switched tax systems from a worldwide system to a territorial system, or vice versa. Second, at least one firm from the acquiring country must have made an acquisition during the sample period before the reform and at least one firm from that country must have made an acquisition following the reform.<sup>17</sup>

The resulting sample consists primarily of acquisitions by acquiring firms located in the United Kingdom and Japan, which both switched from a worldwide to a territorial

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<sup>17</sup> A logical potential alternative research design would be to implement a difference-in-difference test with the foreign indicator variable as the dependent variable and the territorial indicator as the test variable on the right hand side of the equation. However, this research design is not feasible as the territorial indicator would be perfectly collinear with the dependent foreign indicator. Some other alternative difference-in-difference research designs, such as comparing acquisitions by foreign acquirers in countries that switched tax systems of both U.S. targets and *non-U.S.* targets before and after the switch are also not feasible as our test variables, *LOCKOUT*, will only be non-zero for the U.S. targets.



system in 2008. A positive coefficient on the lockout variable in this sample would be consistent with the preference of foreign acquirers from a particular country for targets with locked-out earnings increasing after a switch from a worldwide system of taxation to a territorial system. This tax system switching empirical strategy reduces concerns that the results observed in the earlier tests are being driven by fixed country-specific variables and allows better causal identification.

## **5. Empirical Findings**

### *5.1. Descriptive Statistics*

The sample includes 4,611 unique acquisitions, of which 791 have positive values of PRE. There are 3,812 deals with domestic acquirers (15% have PRE with a median value of \$37 million, or 4.7% of target firm assets) and 799 deals with foreign acquirers (24% have PRE with median value of \$38 million, or 5.3% of target assets).<sup>18</sup> In an additional test, we use an alternative measure of earnings lock-out based on a firm's potential repatriation costs, as inferred from previous years' foreign earnings and taxes paid based on Foley et al. (2007). Using this alternative proxy in lieu of the hand collected PRE data yields a sample of 5,243 unique acquisitions.

Table 1 panel A provides details of the sample composition. The number of acquisitions per year is relatively constant, with a small peak in activity around the turn of the century and a valley in activity during the financial crisis of the late 2000's. The annual percentage of acquisitions by foreign acquirers ranges from 10 percent to 27 percent with a peak around the financial crisis. Table 1 panel B provides a breakdown of the acquisitions by country of the acquirer. No single country accounts for more than 20

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<sup>18</sup> Of those 2 groups, 151 and 50 targets, respectively, have some PRE but do not report a specific amount.

percent of the acquisitions. Acquirers from the major western economies of the United Kingdom, Canada, France, and Germany account for just over half of the foreign observations.

In untabulated analysis we examine a number of additional characteristics of the acquisitions. For transactions where the acquirer's industry is known, a similar portion of domestic and cross-border transactions involve a target and acquirer within the same industry. More specifically, for both cross-border and domestic acquisitions both parties involved in the transaction are within the same 1-digit NAICS industry in 74 percent of transactions. When industry is measured using 2-digit NAICS, 62 percent of domestic transactions and 63 percent of cross-border transactions involve parties within the same industry. These data provide some comfort that our findings are not driven by differences in the desire to diversify for foreign versus domestic acquirers. We also observe that targets of both foreign and domestic acquirers have similar asset tangibility (mean of 22 percent for targets of domestic acquirers and 23 percent for targets of foreign acquirers).<sup>19</sup> Targets of both groups also have similar cash holdings. Cash and cash equivalents account for 17 percent of assets in the targets of domestic acquirers and 18 percent of assets in the targets of foreign acquirers. These data provide further comfort that the targets of domestic and foreign acquirers are similar in non-tax attributes.

Table 2 panel A provides summary statistics for the PRE and tax cost of repatriation earnings lockout measures as well as the control variables. Appendix B provides detailed variable definitions for the test variables and controls. All continuous variables are winsorized at the 1% and 99% levels to reduce the influence of outliers. The

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<sup>19</sup> Where asset tangibility is defined as net property, plant, and equipment over total assets.

descriptive statistics indicate that acquirers are foreign for 17% of the deals in our sample and 16% of target firms report positive values of PRE. Approximately a third of target firms have foreign activities (that is foreign earnings) and firms on average report 10% of their earnings as coming from foreign sources.

Table 2 panel B provides a matrix of the sample by acquirer type (foreign or domestic) and target type (domestic operations only or multinational). Foreigners acquire 477 domestic only firms, 14 percent of the 3,529 targets that have only U.S. domestic operations. Foreigners acquire 399 multinationals, 23 percent of the 1,714 targets that are U.S. based multinationals: a substantially larger percentage of the multinational acquisitions than the domestic only acquisitions, consistent with a preference of foreign firms for U.S. targets with foreign operations. A chi-squared test for independence is highly significant (p-value <0.001).

Table 2 panel C provides the correlations of our test and control variables. One notable observation from this table is the strong positive correlation between the proxies for earnings lockout. Both of the PRE measures and also the tax repatriation cost variable are highly correlated, ranging from 0.236 to 0.699, providing some comfort that they are capturing the same underlying construct of earnings lockout. The correlations between the measures of earnings lockout and the indicator for acquirers being located in a foreign jurisdiction are positive and significant and provide suggestive evidence for our first hypothesis. It is also of note that our three different measures of the target firm's foreign activities: the foreign earnings fraction, the indicator variable for any foreign earnings or taxes, and the amount of foreign sales relative to total assets, are also each positively correlated with the probability that the acquirer will be foreign. This highlights the

importance of controlling for the extent of foreign activities in order to disentangle the effect of locked-out foreign earnings from foreign activities of the target firm in general.

### 5.2. *Acquirer location and earnings lockout*

Table 3 presents the results of estimating equation (1) where the target firm's level of PRE divided by total assets is used as the measure of locked-out earnings. The estimated marginal effect of this measure is 0.581 (standard error of 0.136) and is statistically significant at the 1% level. This effect corresponds to an increase in the probability that the acquirer will be foreign of 0.581 percentage points for a one percentage point increase in the *PRE* measure, or a 2.3 percentage point increase for a one standard deviation increase in the measure. This effect size can be compared to the average foreign acquirer probability in the sample of 17% and represents a 14% (2.3%/17%) relative increase in the likelihood that the acquirer is foreign.

The estimated marginal effects for the control variables in column 1, when significant, are generally consistent with expectations. Profitability loads positively, consistent with foreign acquirers placing a higher value on pre-tax earnings due to their potential tax savings on future profits. The intangibility ratio loads positively, consistent with the notion that more intangible assets make income shifting less costly and more tax advantageous to foreign acquirers. Somewhat surprisingly the loss indicator loads positively. Bird (2014) documents a similar preference by foreign acquirers for loss firms and attributes the result to a non-tax preference. He documents the preference for loss firms exists in minority transactions as well, a setting where the acquirer is unlikely to be able to exert influence on the target to extract tax benefits.

In column 2 of Table 3, we add the first set of control variables for the “foreignness” of the target firm, an indicator variable equal to one for any foreign earnings, and the fraction of target firm earnings that are foreign, to the probit model. The marginal effect declines to 0.357 (standard error of 0.157) but remains statistically significant. The fact that the effect declines after adding controls for foreign activity, combined with the positive marginal effect estimated for these variables, suggests that foreign acquirers do in fact prefer target firms with more foreign activities, and that this preference explains about half of the effect of PRE seen in the first column. In column 3, we use an alternative variable to control for foreignness. We include a variable measuring the level of foreign sales relative to total assets of the target firm. This change yields a marginal effect of the *PRE* measure of 0.280 (standard error of 0.154), which is significant at the 10% level. The positive and significant coefficients on some of the “foreignness,” profitability, and intangibility control variables is also consistent with foreign acquirers being tax-favored acquirers because these variables also will capture the tax-favored benefits of future profits. Foreign acquirers could realize additional tax benefits related to future profits by rerouting future profits around the U.S. through a reorganization or shifting future income using transfer pricing and income stripping via loans to the U.S. subsidiary from the foreign parent company.

Table 4 reports results using *PRE Indicator*, an indicator variable equal to one for any positive value of PRE as the measure of locked-out earnings, and investigate the same three specifications, observing similar results and inferences. In particular, in the specification in column 1 that includes the primary set of control variables, we observe an estimated marginal effect of 0.093 (standard error of 0.018), which is significant at the 1%

level. This estimate corresponds to a 9.3 percentage point increase in the probability that the acquirer will be foreign for a target that has any PRE, relative to a target that does not. The effect of the PRE indicator variable declines to 4.4 percentage points when the first set of foreign activity control variables is included in the model, but is still significant at the 5% level. Using the alternative control variable, the total target foreign sales scaled by target total assets, for foreign activity yields a slightly larger effect on the PRE indicator with a similar standard error and significance level.

In Table 5 we repeat this analysis using *Repatriation Cost*, the repatriation tax cost measure based on past foreign income and tax expenses, rather than the hand collected financial statement PRE disclosures. Across the three main specifications, we observe similar results. These results provide reassuring evidence that the results obtained using the PRE based measures are indeed capturing meaningful tax-related lockout effects. Specifically, for the sample with the primary control variables, the estimated marginal effect of the repatriation cost variable is 0.021 (standard error of 0.007) and is significant at the 1% level. This corresponds to a 1.4 percentage point higher likelihood of the acquirer being foreign for a one standard deviation increase in the repatriation cost variable. When adding the first two control variables for the foreign activities of the target, the effect declines to 0.012 (standard error of 0.007), which is significant at the 10% level. In column 3, controlling for foreign activity using the level of foreign sales yields similar results.

### 5.3. Acquirer location, tax system, and earnings lockout

As discussed in section 4, we investigate hypothesis 2 by splitting the sample used in the above tests depending on whether the acquirer, if foreign, is resident in a country

that employs a territorial or a worldwide tax system. For parsimony here, we report results measuring earnings lockout using PRE scaled by total assets. Results using the PRE indicator and repatriation cost measure are broadly consistent and result in similar inferences.

In the first two columns of Table 6 we analyse two different subsamples. In the first column, observations with domestic acquirers and only foreign acquirers from territorial countries are included. In the second column, observations with domestic acquirers are again included but are instead compared to acquisitions made by only foreign acquirers from worldwide tax system countries. This is a falsification test. As articulated in hypothesis 2, the tax advantage to foreign acquirers will primarily exist for foreign acquirers that are located in countries that utilize territorial tax systems. The tax advantage to foreign acquirers facing worldwide tax systems will be lower as any freed past profits, as well as future profits, will face eventual home country taxation as a result of the worldwide system. As a result, we do not expect to observe a significant coefficient on *LOCKOUT* in column 2. Consistent with hypothesis 2, the effect of the PRE measures is positive and statistically significant at the 5% level for the foreign territorial vs. domestic comparison and not significantly different from zero for the foreign worldwide vs. domestic comparison. These findings imply that the results from the foreign vs. domestic models used to test hypothesis 1 are driven primarily by the acquisitions by firms resident in territorial tax system countries. Note that the control variables load similarly across both subsamples, implying that both types of foreign acquirers have similar non-tax preferences over target characteristics. This evidence is suggestive of our hypothesized relation.

In column 3 of Table 6, we remove domestic acquisitions of U.S. firms from the sample, and redefine the dependent variable to be one if the foreign acquirer comes from a territorial country and zero if it comes from a worldwide country. If the hypothesized tax mechanism is driving the above results, we would expect to see positive sorting of territorial country acquirers towards targets with high levels of PRE. We observe a positive marginal effect, though due to large standard errors, the effect is not statistically significant at traditional levels. With the relatively small number of foreign acquirers in the sample, the test could lack the statistical power to identify a differential effect between territorial and worldwide systems in this particular specification.

Domestic acquisitions are fundamentally similar to acquisitions originating from worldwide countries as both the U.S. and these foreign acquirers share the same kind of worldwide tax system. We exploit this similarity and implement an alternative approach to testing the territorial versus worldwide tax system distinction by including domestic acquisitions with the foreign worldwide acquirers in the worldwide system category. A desirable feature of this approach is the direct comparability with the earlier findings since this specification remains a two alternative empirical model.<sup>20</sup> In addition, this methodology greatly increases the sample size and power of the test.

The results observed from this empirical specification are presented in column 4. The estimated effect of the PRE measure suggests a clear difference between acquirers from worldwide and territorial tax systems in the hypothesized direction. In particular, the marginal effect is 0.316 (standard error of 0.126), which is significant at the 5% level.

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<sup>20</sup> Estimating multinomial logit models, with domestic, foreign credit and foreign exemption as the three possible options yields substantially similar results – marginal effects are in the predicted direction, but fall short of statistical significance at traditional levels.



The observed effect corresponds to an increase in the probability of a territorial, relative to a worldwide, acquirer of 1.3 percentage points for a one standard deviation increase in the level of PRE relative to total assets. This effect size can be compared with the average likelihood of a territorial acquirer of 11%. Overall, the results in Table 6 provide evidence consistent with hypothesis 2. Acquirers resident in territorial country exhibit a stronger preference for U.S. target firms with locked-out earnings than acquirers from worldwide tax system countries (including domestic acquirers).

In Table 7, the sample is again restricted to only acquisitions by foreign firms to investigate whether the sorting evident in the above results can be explained by other differences across foreign countries that are correlated with the type of international tax system in use. As a baseline, column 1 presents the results from estimating the same models as in Table 6 for the sample of countries that switched their international tax system from a worldwide to territorial system during the sample period (Japan, UK, and New Zealand in 2009; Italy and Finland in 2004). The dependent variable is coded 1 (0) for acquisitions occurring after (before) the switch to territorial from worldwide in the foreign acquirers country. The regression yields evidence consistent with the second hypothesis, as the loading on PRE is positive and significant. As above, this implies that territorial country acquirers are more likely to be the acquirer of U.S. target firms with high levels of locked-out earnings or targets with any locked-out earnings at all.

In column 2 of Table 7, country fixed effects are added for each of the five acquirer countries in the tax system switching sample. The loading on PRE relative to total assets falls from 1.312 to 0.960 but remains significant at the 1% level. This result is suggestive of an unobserved, time constant variable that explains both a country's having

a territorial tax system as well as having acquirers that prefer target firms with locked-out earnings. However, this omitted variable does not completely explain the previously observed results. When a country switches from a worldwide tax system to a territorial system, its acquirers increase their preference for targets with PRE, which is consistent with tax differences across acquirers as the mechanism underlying the sorting hypothesized and identified in the earlier tests and not just a preference by foreign firms for acquiring foreign or U.S. domestic assets of the US multinationals. That is, the results in Table 7 provide strong evidence of a causal association between the tax benefits of locked out earnings to foreign acquirers from territorial tax systems.

## **6. Conclusion**

In this study, we document a significant indirect cost of having both tax and financial reporting systems that encourage multinational firms to retain earnings abroad, locking out those earnings from being reinvested domestically, or returned to shareholders. Our findings, based on variation in locked-out earnings across U.S. target firms, suggest that U.S. based potential acquirers for U.S. targets are losing out to foreign acquirers who are tax-favored. This result is confirmed in cross-sectional tests. We exploit the fact that some foreign acquirers are resident in countries with a territorial system and others with a worldwide system as an additional source of identification and document that the increased propensity of an acquirer to be foreign is concentrated in territorial systems. We also examine country specific changes in worldwide versus territorial international tax systems and document that the relative preference of foreign acquirers for locked-out earnings holds even using a within-country specification.

The findings of this study should be informative in the context of a discussion of the relative merits of territorial versus worldwide systems of taxation. This issue has been publicly debated in several other jurisdictions and tax laws around the taxation of foreign subsidiary profits have been changed in recent years. Most notably the United Kingdom and Japan have both abolished their worldwide tax systems and have adopted territorial systems. Our findings should be of interest and informative in the context of the current debate over the taxation of the foreign profits of U.S. multinationals in that U.S. firms are tax-disfavored acquirers of U.S. multinational firms with locked out earnings. The findings of this study are also informative in the current debate over corporate inversions. If Congress or the administration introduce additional tax law changes targeted specifically at inversions, U.S. firms will continue to be attractive targets to foreign acquirers, especially those from territorial systems. Legislation that only targets inversions will not stop tax-favored foreign acquisitions of U.S. multinational firms. A broader overhaul of the U.S. corporate tax system, such as a territorial system with lower statutory tax rates, would be needed to remove the tax favored status of foreign acquirers.

## **Appendix A – Data Collection Methodology**

PRE data were collected from financial statements using the following methodology:

*Step 1* We identified all mergers and acquisitions of U.S. targets during the period from 1995 to 2010 in the SDC database with Compustat data and a 10K available through EDGAR.<sup>21</sup>

*Step 2* A computerized search of all the 10Ks of acquired firms was performed to determine if the acquired firm had PRE.

The following terms (presented alphabetically) were used in a python script to identify PRE balances reported in the 10K. The search was performed as to allow for different types of whitespace or hyphenation in the terms:

accumulated earnings of foreign subsid  
earnings indefinite  
estimate the amount of additional income tax  
estimate the amount of additional tax  
foreign subsidiaries have accumulated  
indefinitely invest  
indefinitely reinvest  
indefinitely reinvested  
permanently reinvested  
reinvest indefinite  
reinvested for an indefinite period  
reinvested indefinitely  
reinvested permanently  
repatriate  
retained indefinitely  
undistributed earnings  
undistributed foreign earnings  
unremitted earnings  
unremitted foreign earnings

*Step 3* If none of these terms appeared in the 10K, PRE was set equal to zero. If any of these terms appeared, the surrounding text was extracted and the PRE balance was hand collected.

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<sup>21</sup> Matching done by CIK

### Appendix B – Variable Definitions

<i>Foreign Acquirer Indicator</i>	An indicator variable set equal to one if the parent of the acquirer is not a U.S. resident; equal to zero otherwise.
<i>Territorial Acquirer Indicator</i>	An indicator variable set equal to one if the parent of the acquirer is located in a country with a territorial tax system; equal to zero otherwise.
<i>PRE</i>	Stock of permanently reinvested earnings collected from tax footnote, scaled by total assets ( $AT_t$ ).
<i>PRE Indicator</i>	An indicator variable set equal to one if any positive value of permanently reinvested earnings is disclosed in the tax footnote or the firm provides a general disclosure of the existence of PRE without a specific dollar amount; equal to zero otherwise.
<i>Repatriation Cost</i>	Pre-tax foreign income ( $PIFO_t$ ) multiplied by the U.S. statutory corporate tax rate (35%) less any foreign taxes ( $TXFO_t$ ), scaled by total assets ( $AT_t$ ). The three year average is used to compute these variables if it is available; if not, the two year measure; then the one year measure; if all of these are missing, a zero is imputed to represent the lack of any repatriation cost. This variable is multiplied by 100 for ease of interpretation.
<i>Foreign Earnings Fraction</i>	Pre-tax foreign earnings ( $PIFO_t$ ) divided by total pre-tax earnings ( $PI_t$ ). Values are restricted to a minimum (maximum) of zero (one).
<i>Any Foreign Earnings Indicator</i>	An indicator variable set equal to one if foreign earnings ( $PIFO_t$ ) are nonzero or foreign taxes ( $TXFO_t$ ) are nonzero; equal to zero otherwise.
<i>Foreign Sales</i>	Equal to foreign sales from Compustat segment data (the sum of SALES for each nondomestic geographic segment), scaled by total assets ( $AT_t$ ).
<i>NOL Carryforwards</i>	Tax loss carryforwards ( $TLCF_t$ ), scaled by total assets ( $AT_t$ ).
<i>Loss Indicator</i>	An indicator variable set equal to one if earnings before interest, taxes, depreciation and amortization ( $EBITDA_t$ ) is negative; equal to zero otherwise.
<i>Profitability</i>	Earnings before interest, taxes, depreciation and amortization ( $EBITDA_t$ ), scaled by total assets ( $AT_t$ )
<i>Log Total Assets</i>	Logarithm of total assets ( $AT_t$ ).

<i>Intangibles</i>	Intangible assets ( $INTAN_t$ ), scaled by total assets ( $AT_t$ ).
<i>Leverage</i>	Total long term debt ( $DLTT_t$ ), scaled by total assets ( $AT_t$ ).

## References

- Andrade, G., M. Mitchell, and E. Stafford. 2001. New evidence and perspectives on mergers. *Journal of Economic Perspective*. 15(2): 103-120.
- Ayers, B., C. Schwab, and S. Utke. 2014. Noncompliance with mandatory disclosure requirements: the magnitude and determinants of undisclosed permanently reinvested earnings. *The Accounting Review*. Forthcoming.
- Bird, A. 2014. The effects of taxes on the market for corporate control. Carnegie Mellon University working paper.
- Black, E., T. Carnes, T. Jandik, and B. Henderson. 2007. The relevance of target accounting quality to the long-term success of cross-border mergers. *Journal of Business Finance & Accounting* 34(1-2): 139-168.
- Blouin, J., L. Krull, and L. Robinsion. 2012. Is U.S. multinational intra-firm dividend policy influenced by capital market incentives? *The Accounting Review*. 87(5): 1-29.
- Blouin, J., L. Krull, and L. Robinsion. 2013. The location, composition, and investment implications of permanently reinvested earnings. University of Pennsylvania, University of Oregon, and Dartmouth College working paper.
- Brennan, T. 2010. What happens after a holiday? Long-term effects of the repatriation provision of the AJCA. *Northwestern Journal of Law and Social Policy*. 5: 1-18.
- De Waegenare, A. and R. Sansing. 2008. Taxation of international investment and accounting valuation. *Contemporary Accounting Research*. 25(4): 1045-1066.
- Desai, M., and J. Hines. 2002. Expectations and expatriations: Tracing the causes and consequences of corporate inversions. *National Tax Journal*. 55(3): 409-440.
- Desai, M., C. Foley, and J. Hines. 2011. Tax policy and the efficiency of U.S. direct investment abroad. *National Tax Journal*. 64(4): 1055-1082.
- Donohoe, M., G. McGill, and E. Outslay. 2012. Through a glass darkly: what can we learn about a U.S. multinational corporation's international operations from its financial statement disclosures? *National Tax Journal*. 65(4): 961-984.
- Dos Santos, M., V. Errunza, and D. Miller. 2008. Does corporate international diversification destroy value? Evidence from cross-border mergers and acquisitions. *Journal of Banking and Finance* 32: 2716-2724.

- Doukas, J., and N. Travlos. 1988. The effect of corporate multinationalism on shareholders' wealth: Evidence from international acquisitions. *The Journal of Finance* 43(5): 1161-1175.
- Drucker, J. 2010. Dodging repatriation tax lets U.S. companies bring home cash. *Bloomberg.com* December 29, 2010. Available at <http://www.bloomberg.com/news/2010-12-29/dodging-repatriation-tax-lets-u-s-companies-bring-home-cash.html>.
- Edwards, A., T. Kravet, and R. Wilson. 2014. Trapped cash and the profitability of foreign acquisitions. Forthcoming *Contemporary Accounting Research*.
- Ellis, J. S. Moeller, F. Schlingemann, and R. Stulz. 2011. Globalization, governance, and the returns to cross-border acquisitions. University of Pittsburgh and The Ohio State University working paper.
- Erel, I., R. Liao, and M. Weisbach. 2012. Determinants of cross-border mergers and acquisitions. *Journal of Finance* 67(3): 1045-1082.
- Faccio, M. and R. Masulis. 2005. The choice of payment method in European mergers and acquisitions. *Journal of Finance* 60(3): 1345- 1388.
- Feld., L., M. Ruf, U. Scheuering, U. Schreiber, and J. Voget. 2014. Effects of territorial and worldwide corporation tax systems on outbound M&As. Walter Euchken Institute working paper.
- Financial Accounting Standards Board. *Accounting Standards Codification 740 – Income Taxes*. Norwalk, CT.
- Foley, F., J. Hartzell, S. Titman, and G. Twite. 2007. Why do firms hold so much cash? A tax-based explanation. *Journal of Financial Economics*, 86: 579-607.
- Goldfarb, J. 2014 A tax inversion in all but name. *The New York Times*. August 8, 2014.
- Graham, J., M. Hanlon, and T. Shevlin. 2010. Barriers to mobility: the lockout effect of U.S. taxation of worldwide corporate profits. *National Tax Journal*. 63(2): 1111-1144.
- Graham, J., M. Hanlon, and T. Shevlin. 2011. Real effects of accounting rules: Evidence from Multinational Firms' Investment Location and Profit Repatriation Decisions. *Journal of Accounting Research*, 49(1): 137–185.
- Hatch, O. 2014. How to deal with corporate inversions – without the politics. *The Washington Post*. August 7, 2014.



- Hanlon, M., R. Lester, and R. Verdi. 2014. The effect of repatriation tax costs on U.S. multinational investment. Forthcoming *Journal of Financial Economics*.
- Harford, J., C. Wang, and K. Zhang. 2014. Foreign cash: Taxes, internal capital markets and agency problems. University of Washington working paper.
- Hartman, D. 1985. Tax policy and foreign direct investment. *Journal of Public Economics*. 26(1):107-121.
- Huizinga, H. and J. Voget. 2009. International taxation and the direction and volume of cross-border M&As. *The Journal of Finance*. 64(3): 1217-1249.
- Kleinbard, E. 2014. "Competitiveness" has nothing to do with it. Forthcoming *Tax Notes*.
- Markle, K. 2013. Shift happens: A comparison of the tax-motivated income shifting of multinationals in territorial and worldwide countries. University of Waterloo working paper.
- Mattioli, D. 2014. Tax-inversion players swoop in for seconds. *Wall Street Journal*. October 9, 2014.
- Moeller, S.B., and F.P. Schlingemann. 2005. Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. *Journal of Banking and Finance*. 29: 533-564.
- Scholes, M., M. Wolfson, M. Erickson, M. Hanlon, E. Maydew, and T. Shevlin. 2014. *Taxes and Business Strategy A Planning Approach*. Upper Saddle River, NJ: Prentice Hall.
- Seida, J. and W. Wempe. 2004. Effective tax rate changes and earnings stripping following corporate inversion. *National Tax Journal*. 57(4): 805-828.
- United States Government. 2011. Ways and Means Discussion Draft. Partial Exemption (Territorial) System. October 26, 2011.
- Washington Post. 2011. No time for a corporate tax 'holiday.' October 30, 2011.
- White, M. 2014. Ignoring the facts on corporate inversions. *Wall Street Journal*. July 18, 2014.

**Table 1: Sample Composition**  
**Panel A: The number of acquisitions, and type of acquirer, by year**

<b>Year</b>	<b>Total Acquisitions</b>	<b>Portion of Sample in Year</b>	<b>Domestic Acquirer</b>	<b>Foreign Acquirer</b>	<b>Percentage Foreign</b>
1995	371	7%	332	39	11%
1996	371	7%	334	37	10%
1997	472	9%	414	58	12%
1998	517	10%	441	76	15%
1999	542	10%	433	109	20%
2000	488	9%	386	102	21%
2001	389	7%	323	66	17%
2002	265	5%	228	37	14%
2003	283	5%	253	30	11%
2004	239	5%	207	32	13%
2005	245	5%	198	47	19%
2006	239	5%	188	51	21%
2007	259	5%	188	71	27%
2008	181	3%	134	47	26%
2009	182	3%	152	30	16%
2010	200	4%	156	44	22%
<b>Total</b>	<b>5243</b>		<b>4367</b>	<b>876</b>	<b>17%</b>

**Table 1 continued**  
**Panel B: The number of foreign acquisitions by acquirer country**

<b>Country</b>	<b>Number of Acquisitions</b>	<b>Portion of Foreign Acquisitions</b>
United Kingdom	176	20%
Canada	153	17%
France	74	8%
Germany	68	8%
Netherlands	53	6%
Switzerland	41	5%
Japan	39	4%
Bermuda	33	4%
Sweden	27	3%
Australia	21	2%
Italy	20	2%
Israel	19	2%
Spain	15	2%
India	13	1%
Ireland-Rep	11	1%
Belgium	10	1%
Denmark	10	1%
Finland	9	1%
Bahrain	8	1%
Russian Fed	8	1%
Singapore	8	1%
Mexico	7	1%
Hong Kong	6	1%
Norway	6	1%
Various <sup>#</sup>	41	5%
<b>Total</b>	<b>876</b>	<b>100%</b>

This table presents details about the composition of the main sample. Panel A provides the number of acquisitions, and type of acquirer, by year. Panel B provides the number of foreign acquisitions by acquirer country.

<sup>#</sup>21 countries with less than 5 acquisitions each have been combined for brevity.

**Table 2: Sample Characteristics**  
**Panel A: Descriptive statistics**

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
Foreign Acquirer Indicator	5,243	0.17	0.37	0.00	1.00
PRE	4,383	0.01	0.04	0.00	0.25
PRE Indicator	4,611	0.16	0.37	0.00	1.00
Repatriation Cost	5,243	0.12	0.68	0.00	8.51
Foreign Earnings Fraction	5,243	0.10	0.26	0.00	1.00
Any Foreign Earnings Indicator	5,243	0.33	0.47	0.00	1.00
Foreign Sales	5,243	0.10	0.21	0.00	1.07
NOL Carryforwards	5,243	0.22	0.71	0.00	4.47
Loss Indicator	5,243	0.21	0.40	0.00	1.00
Profitability	5,243	0.04	0.19	-0.86	0.37
Log Total Assets	5,243	5.57	1.79	2.41	10.83
Intangibles	5,243	0.10	0.17	0.00	0.70
Leverage	5,243	0.17	0.22	0.00	1.00

**Panel B: Acquirer target pairings**

		<b>Acquirer</b>		
		<b>Foreign</b>	<b>Domestic</b>	<b>Total</b>
<b>T a r g e t</b>	<b>Domestic Only</b>	477 14%	3,052 86%	3,529 100%
	<b>U.S. Multinational</b>	399 23%	1,315 77%	1,714 100%
<b>Total</b>		<b>876</b>	<b>4,367</b>	

**Table 2 continued**  
**Panel C: Correlation matrix (Pearson)**

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Foreign Acquirer Indicator	(1) 1												
PRE	(2) 0.073	1											
PRE Indicator	(3) 0.095	0.699	1										
Repatriation Cost	(4) 0.034	0.37	0.236	1									
Foreign Earnings Fraction	(5) 0.053	0.446	0.424	0.412	1								
Any Foreign Earnings Indicator	(6) 0.128	0.358	0.499	0.257	0.547	1							
Foreign Sales	(7) 0.102	0.42	0.408	0.272	0.481	0.533	1						
NOL Carryforwards	(8) 0.003	-0.045	-0.064	-0.021	0.014	-0.015	0.051	1					
Loss Indicator	(9) 0.02	-0.1	-0.12	-0.049	-0.005	-0.041	0.021	0.397	1				
Profitability	(10) 0.022	0.122	0.141	0.085	0.04	0.123	0.043	-0.472	-0.724	1			
Log Total Assets	(11) 0.017	0.135	0.208	0.06	0.072	0.108	-0.025	-0.281	-0.364	0.28	1		
Intangibles	(12) 0.037	0.054	0.122	0.013	0.07	0.112	0.034	0.017	-0.022	0.075	0.052	1	
Leverage	(13) -0.002	-0.028	0.007	-0.006	-0.021	-0.007	-0.074	-0.046	-0.113	0.143	0.186	0.152	1

This table presents summary statistics for the main sample. Panel A provides descriptive statistics for the variables included in the probit models. Note that the two measures of PRE have smaller N because this measure is missing for some targets, due to failure in the 10-K matching process and text search algorithm. Panel B presents a matrix of the sample by acquirer (foreign and domestic) and target (U.S. operations only or multinational, defined as having any foreign earnings) type. A chi-squared test for independence is highly significant (p-value <0.001). Panel C presents Pearson correlations among the variables.

**Table 3: PRE and Acquirer Location**

Variable	(1)	(2)	(3)
PRE	0.581***	0.357**	0.280*
	(0.14)	(0.16)	(0.15)
NOL Carryforwards	0.007	0.005	0.005
	(0.01)	(0.01)	(0.01)
Loss Indicator	0.078***	0.065***	0.071***
	(0.02)	(0.02)	(0.02)
Profitability	0.138***	0.099**	0.120***
	(0.05)	(0.05)	(0.05)
Log Total Assets	0.004	0.003	0.005
	(0.00)	(0.00)	(0.00)
Intangibles	0.068**	0.05	0.066**
	(0.03)	(0.03)	(0.03)
Leverage	-0.018	-0.013	-0.009
	(0.03)	(0.03)	(0.03)
Foreign Earnings Fraction		-0.051*	
		(0.03)	
Any Foreign Earnings Indicator		0.103***	
		(0.02)	
Foreign Sales/Total Assets			0.134***
			(0.03)
Pseudo R-squared	0.010	0.022	0.015
N	4,383	4,383	4,383

This table presents marginal effects (with Huber-White robust standard errors reported in parentheses) from estimating probit models with an indicator variable for ‘foreign-ness’ of the acquirer as the dependent variable (an indicator variable set equal to one if the acquirer is foreign and zero otherwise). The independent variable of interest is the stock of permanently reinvested earnings divided by total target assets. Note that all non-indicator variables are winsorized at 1% and 99%. Detailed variable definitions provided in Appendix B. Column (1) includes only target firm-level accounting controls, while the second and third columns include different sets of controls (again at the target level) to measure the importance of foreign activities to the domestic target firm. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels (two-sided test).

**Table 4: PRE Indicator and Acquirer Location**

Variable	(1)	(2)	(3)
PRE Indicator	0.093***	0.044**	0.060***
	(0.02)	(0.02)	(0.02)
NOL Carryforwards	0.004	0.003	0.002
	(0.01)	(0.01)	(0.01)
Loss Indicator	0.079***	0.069***	0.075***
	(0.02)	(0.02)	(0.02)
Profitability	0.127***	0.097**	0.113**
	(0.05)	(0.05)	(0.05)
Log Total Assets	0.004	0.003	0.005
	(0.00)	(0.00)	(0.00)
Intangibles	0.059*	0.049	0.063*
	(0.03)	(0.03)	(0.03)
Leverage	-0.022	-0.018	-0.014
	(0.03)	(0.03)	(0.03)
Foreign Earnings Fraction		-0.044*	
		(0.02)	
Any Foreign Earnings Indicator		0.091***	
		(0.02)	
Foreign Sales/Total Assets			0.108***
			(0.03)
Pseudo R-squared	0.014	0.022	0.018
N	4,611	4,611	4,611

This table presents marginal effects (with Huber-White robust standard errors reported in parentheses) from estimating probit models with an indicator variable for ‘foreign-ness’ of the acquirer as the dependent variable (an indicator variable set equal to one if the acquirer is foreign and zero otherwise). The independent variable of interest is an indicator variable set to one if the target has any PRE. Note that all non-indicator variables are winsorized at 1% and 99%. Detailed variable definitions are provided in Appendix B. Column (1) includes only target firm-level accounting controls, while the second and third columns include different sets of controls (again at the target level) to measure the importance of foreign activities to the domestic target firm. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels (two-sided test). Note also that the sample size increases from Table 3 to Table 4 because some firms report only the presence of PRE and not the actual amount.

**Table 5: Estimated Repatriation Tax Cost and Acquirer Location**

Variable	(1)	(2)	(3)
Repatriation Cost	0.021*** (0.01)	0.012* (0.01)	0.012* (0.01)
NOL Carryforwards	0.007 (0.01)	0.003 (0.01)	0.004 (0.01)
Loss Indicator	0.081*** (0.02)	0.068*** (0.02)	0.076*** (0.02)
Profitability	0.120*** (0.04)	0.075* (0.04)	0.100** (0.04)
Log Total Assets	0.007** (0.00)	0.005 (0.00)	0.007** (0.00)
Intangibles	0.104*** (0.03)	0.079*** (0.03)	0.099*** (0.03)
Leverage	-0.014 (0.02)	-0.008 (0.02)	-0.005 (0.02)
Foreign Earnings Fraction		-0.034 (0.02)	
Any Foreign Earnings Indicator		0.096*** (0.01)	
Foreign Sales/Total Assets			0.119*** (0.02)
Pseudo R-squared	0.009	0.021	0.014
N	5,243	5,243	5,243

This table presents marginal effects (with Huber-White robust standard errors reported in parentheses) from estimating probit models with an indicator variable for ‘foreign-ness’ of the acquirer as the dependent variable (an indicator variable set equal to one if the acquirer is foreign and zero otherwise). The independent variable of interest is based on the Foley et al. (2007) measure of the target firm’s potential tax-related repatriation costs (specifically, the three year measure if it is available; if not, the two year measure; then the one year measure; if all of these are missing, a zero is imputed). Note that all non-indicator variables are winsorized at 1% and 99%. Detailed variable definitions are provided in Appendix B. Column (1) includes only target firm-level accounting controls, column (2) and (3) include additional controls to measure the importance of foreign activities to the domestic target firm. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels (two-sided test).



**Table 6: Acquirer Location and Worldwide vs. Territorial Tax Systems**

<b>Variable</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>
Subsample composition/Dependent variable coding:				
<i>US acquirers</i>	0	0		0
<i>Foreign acquirers - WW</i>		1	0	0
<i>Foreign acquirers - territorial</i>	1		1	1
<i>Variable</i>				
PRE	0.333** (0.13)	0.044 (0.11)	0.488 (0.44)	0.316** (0.13)
Foreign Earnings Fraction	-0.021 (0.02)	-0.039** (0.02)	0.105 (0.08)	-0.013 (0.02)
Any Foreign Earnings Indicator	0.063*** (0.01)	0.063*** (0.01)	-0.083** (0.04)	0.051*** (0.01)
NOL Carryforwards	0.003 (0.01)	0.003 (0.01)	-0.008 (0.03)	0.003 (0.01)
Loss Indicator	0.038* (0.02)	0.040** (0.02)	-0.067 (0.06)	0.031 (0.02)
Profitability	0.058 (0.04)	0.055* (0.03)	-0.111 (0.14)	0.049 (0.04)
Log Total Assets	0.003 (0.00)	0.000 (0.00)	0.009 (0.01)	0.003 (0.00)
Intangibles	0.021 (0.03)	0.036* (0.02)	-0.084 (0.10)	0.017 (0.03)
Leverage	-0.023 (0.02)	0.012 (0.02)	-0.078 (0.09)	-0.023 (0.02)
Pseudo R-squared	0.017	0.029	0.012	0.015
N	4,132	3,889	745	4,383

This table presents marginal effects (with Huber-White robust standard errors reported in parentheses) from estimating probit models with various indicator variables as the dependent variable (an indicator variable set equal to one if the acquirer is foreign and zero otherwise). The independent variable of interest is the stock of permanently reinvested earnings divided by total target assets. Note that all non-indicator variables are winsorized at 1% and 99%. Detailed variable definitions are provided in Appendix B. Both column (1) and (2) include acquisitions with U.S. acquirers, with column (1) adding foreign acquirers from territorial countries and column (2) instead adding those from worldwide countries. Column (3) removes the domestic acquirer observations and redefines the dependent variable to equal to one if the foreign acquirer comes from a territorial country, and zero if from a worldwide country. The column (4) includes both U.S. acquirers and acquirers from other worldwide countries in the zero group and set the dependant indicator variable equal to one for acquisition by territorial country acquirers. \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels (two-sided test).

**Table 7: Acquirer Location and Switches in Tax Systems**

Variable	(1)	(2)
PRE	1.312***	0.960***
	(0.42)	(0.37)
Foreign Earnings Fraction	0.029	0.035
	(0.09)	(0.08)
Any Foreign Earnings Indicator	0.052	0.046
	(0.04)	(0.04)
NOL Carryforwards	0.043*	0.034*
	(0.02)	(0.02)
Loss Indicator	0.073	0.051
	(0.09)	(0.07)
Profitability	-0.005	-0.039
	(0.17)	(0.15)
Log Total Assets	-0.006	-0.004
	(0.01)	(0.01)
Intangibles	0.191**	0.156*
	(0.09)	(0.09)
Leverage	-0.009	-0.003
	(0.10)	(0.08)
Country Fixed Effects	No	Yes
Pseudo R-squared	0.173	0.294
N	214	212

This table presents marginal effects (with Huber-White robust standard errors reported in parentheses) from estimating probit models with an indicator variable for type of tax system as the dependent variable (an indicator variable set equal to one if the acquirer faces a territorial system and zero if the acquirer faces a worldwide system). The independent variable of interest is the stock of permanently reinvested earnings divided by total target assets. Note that all non-indicator variables are winsorized at 1% and 99%. Detailed variable definitions are provided in Appendix B. This table restricts the sample to targets of foreign acquisitions where the acquirer is resident in a country that changed from a worldwide to a territorial tax system between 1995 and 2010. The majority of the sample consists of acquirers from the U.K. (164 deals) and Japan (38 deals), which both reformed their systems from worldwide to territorial as of 2009. The remaining 25 observations are from Italy, New Zealand, and Finland. Country fixed effects (for the 5 countries in the above sample) are included in columns (2) and (4). \*\*\*, \*\*, and \* indicate significance at the 1%, 5% and 10% levels (two-sided test).

## Inverted Thinking on Corporate Taxes

Instead of trying to bar U.S. companies from going overseas, why not make America more hospitable?

By

Michael J. Graetz

July 16, 2014 7:46 p.m. ET

Treasury Secretary Jack Lew must have loved the children's classic "Hans Brinker, or the Silver Skates"—and perhaps even believed it, especially the story of a Dutch boy who saves his nation by putting his finger in a leaking dike. That appears to be the Obama administration's approach to tax policy.

In a letter to Congress on Tuesday, Mr. Lew called on lawmakers to stop U.S. corporations from merging with foreign corporations and locating the parent company abroad to reduce their taxes. He also asked Congress to make the new law to combat such "inversions" retroactive to May. That was the month when Pfizer's attempt to merge with AstraZeneca in the U.K. produced front-page headlines. Mr. Lew's letter was apparently provoked by the similarly high-profile news in recent days that AbbVie, a U.S. biopharmaceutical company, is seeking to buy the Irish drug manufacturer Shire—and to make Ireland the parent company's tax home. Financial analysts have estimated that the move might save AbbVie \$1.3 billion in taxes over the next several years.

The AbbVie news came almost in tandem with reports that the U.S.-based generic drug maker Mylan is buying the generic-drugs business of Abbot Laboratories in a \$5.3 billion deal, with a plan to organize in the Netherlands and cut its tax bill.

In real life, the finger-in-the-dike approach doesn't work. With corporate inversions, there are simply too many companies that have very large incentives for poking more holes. Many more inversions are on the way. Investment bankers have warmed to the potential for this kind of merger business and are competing to be matchmakers for a flood of such deals.

Inversions by U.S. companies to take advantage of more favorable corporate tax laws abroad are nothing new. Of the more than 25 U.S. companies that inverted between 1982 and 2002, more than 20 made Bermuda or the Cayman Islands their home. Others chose Panama. One moved to the Netherlands, another to Canada.

Treasury Secretary Jack Lew in Washington, D.C., June 26. Win McNamee/Getty Images

The first effort to stop this tide was a 1996 Treasury regulation in response to the cosmetic company Helen of Troy's move to Bermuda. That regulation didn't work. So, in 2004, Congress enacted new anti-inversion legislation. That obviously hasn't worked either. Estimates by congressional staff show that inversions will cost the U.S. Treasury \$20 billion in the next decade. Now, despite two decades of failed efforts in this realm, Mr. Lew and many senators and representatives want to tighten the 2004 law. The Treasury secretary calls also for companies to demonstrate "a new sense of economic patriotism."

Make no mistake: Such proposals would do nothing to make the U.S. a more favorable place to locate multinational headquarters or investments. If they succeed—which is unlikely, given the creativity of tax planners and the potential large tax savings at stake—the most likely outcome will be more foreign takeovers of U.S. companies. No anti-inversion legislation will block this route for garnering the large tax savings that U.S. companies are now seeking.

To ask, "How do we stop American companies from leaving for more favorable tax jurisdictions?" is asking the wrong question. The right question is "How do we make the United States a more favorable location for investments, jobs, headquarters, and research and development activities?" That will require genuine tax reform.

Ireland, Canada and the U.K. now have emerged as favored places to locate corporate headquarters. Their treasury officials are thrilled that U.S. companies want to relocate there. These countries have more in common than the English language and well-educated, motivated workers. They have all recently reformed their business income taxes to lower rates. At 35%, we now have the highest statutory corporate rate in the Organization for Economic Cooperation and Development, which has 34 developed countries as members. And, unlike the U.S., the vast majority of OECD countries do not impose taxes when their companies reinvest their foreign earnings at home. When U.K. or Irish treasury officials talk about their low-rate business-tax systems, they don't speak about patriotism; they talk about being "open for business."

The U.S. is the only OECD country that doesn't have a national tax on consumption. Relying, as we do, so heavily on individual and corporate income taxes to pay for federal expenditures hobbles us in today's global economy. Political leaders from both parties should demonstrate their own "economic patriotism." They need to stop just talking about tax reform. The time has come for them to sit down together and enact a tax system that is fair, simple for the vast majority of Americans, and much more conducive to economic growth.

Mr. Graetz, a professor at Columbia Law School, was a tax-policy official in the George H.W. Bush administration and is the author of "100 Million Unnecessary Returns: A Simple, Fair, and Competitive Tax Plan for the United States" (Yale University Press, 2008).

# SPECIAL REPORT

## tax notes™

### 'Competitiveness' Has Nothing to Do With It

By Edward D. Kleinbard



Edward D. Kleinbard

Edward D. Kleinbard is the Ivadelle and Theodore Johnson Professor of Law and Business at the University of Southern California Gould School of Law, a fellow at the Century Foundation, and the author of *We Are Better Than This: How Government Should Spend Our Money* (2014).

The recent wave of corporate inversions has triggered interest in what motivates these tax-driven transactions now. Corporate executives have argued that inversions are explained by an anti-competitive U.S. tax environment, as evidenced by the federal corporate tax statutory rate, which is high by international standards, and by its worldwide tax base. This report explains why that competitiveness narrative is largely fact free, in part by using one recent articulation of it as a case study.

The recent surge in interest in inversion transactions is explained primarily by U.S.-based multinational firms' increasingly desperate efforts to find a use for their stockpiles of offshore cash (now totaling around \$1 trillion) and by a desire to strip income from the U.S. domestic tax base through intragroup interest payments to a new parent company located in a low-tax foreign jurisdiction. These motives play out against a backdrop of corporate existential despair over the political prospects for tax reform, or for a second repatriation tax holiday of the sort offered by Congress in 2004.

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### The Competitiveness Narrative

In the movie *Night After Night*, a young and naive coat check girl admires Mae West's jewelry. "Goodness," says the woman, "what beautiful diamonds!" — to which Mae West replies, "Goodness had nothing to do with it."

And so it is with the recent wave of corporate inversion transactions.<sup>1</sup> Despite the claims of corporate apologists, international business competitiveness has nothing to do with the reasons for these deals.

Inversions are economically rational deals as reimagined by Lewis Carroll's Humpty Dumpty. In economic substance, a large U.S. firm acquires a much smaller target domiciled in a tax-friendly jurisdiction (for example, Ireland), but the deal is structured as the foreign minnow swallowing the domestic whale. (In the U.S. domestic consolidated return context, these would be called "reverse acquisitions.") U.S. shareholders of the U.S. firm must pay immediate capital gains tax for the privilege of this upside-down acquisition structure,<sup>2</sup> and the

<sup>1</sup>For brief summaries of recent deals, see, e.g., Martin A. Sullivan, "Lessons From the Last War on Inversions," *Tax Notes*, May 26, 2014, p. 861; Sullivan, "Short-Term Inversion Fix May Be Necessary," *Tax Notes*, June 9, 2014, p. 1090; Mindy Herzfeld, "What's Really Driving Inversions? Walgreens Revisited," *Tax Notes*, July 28, 2014, p. 393; "Inverse Logic: The Rush of Firms Fleeing America for Tax Reasons Is Set to Continue," *The Economist*, June 21, 2014.

For more detailed descriptions of recent inversion transactions and the underlying issues they raise for the U.S. tax system, see Stephen E. Shay, "Mr. Secretary, Take the Juice Out of Corporate Expatriations," *Tax Notes*, July 28, 2014, p. 473; Bret Wells, "Corporate Inversions and Whack-a-Mole Tax Policy," *Tax Notes*, June 23, 2014, p. 1429; Donald J. Marples and Jane G. Gravelle, "Corporate Expatriation, Inversions, and Mergers: Tax Issues," Congressional Research Service report R43568 (May 27, 2014); and Wells, "Cant and the Inconvenient Truth About Corporate Inversions," *Tax Notes*, July 23, 2012, p. 429.

<sup>2</sup>Laura Saunders, "How a Corporate 'Inversion' Could Raise Your Taxes," *The Wall Street Journal*, Aug. 1, 2014. The technical reason is that reg. section 1.367(a)-3 generally requires shareholders of a U.S. firm who exchange their U.S. target company stock for stock of a foreign acquirer in an otherwise tax-free reorganization to nonetheless recognize gain (but not loss). In turn, the helpful exception to the general rule provided in reg. section 1.367(a)-3(c), which protects U.S. shareholders from current tax in bona fide acquisitive reorganizations by foreign firms, is not available when more than 50 percent of the foreign acquirer's stock is received by U.S. transferors.

U.S. company emerges as the nominal subsidiary of a publicly held foreign corporation.

Current section 7874(b), adopted in 2004, effectively negates so-called self-inversions, in which a foreign shell company is employed as the putative acquirer of a U.S. multinational, by treating the foreign company as a U.S. corporation for U.S. federal income tax purposes. Nonetheless, section 7874(b) characterizes a foreign acquirer in a merger of unequals as a bona fide foreign corporation as long as the former shareholders of the U.S. target own less than 80 percent of the combined firm.<sup>3</sup> This means that a foreign acquirer in a post-2004 inversion transaction can be as small as one-quarter the size of the U.S. target.

U.S.-based multinationals that are pursuing inversion transactions have been quick to wrap themselves in a mantle of simple virtue, forced to take the unpalatable step of inverting into Irish, U.K., or Swiss public companies because their love goes unrequited by a country that cruelly saddles them with both the highest corporate tax rate in the world and a uniquely punitive worldwide tax base. The result, they claim, is that U.S. tax law has rendered them uncompetitive in international business, which in turn explains the sudden wave of inversion transactions.

Heather Bresch, the CEO of Mylan Inc., a pharmaceutical manufacturer that is pursuing an inversion into a Dutch firm, effectively spoke for many other chief executives when she recently gave an interview describing herself as entering into the inversion deal only “reluctantly.”<sup>4</sup> In her telling, she has abandoned hope that Congress will overhaul the code to make U.S. companies “more competitive,” and therefore must pursue a tax-driven redomiciliation in the Netherlands against her patriotic instincts, and even though (and here is a point that Bresch forgot to mention) the merger will subject her firm’s taxable owners to capital gains tax.

But all this is a false narrative: U.S. multinationals’ competitiveness arguments are almost entirely fact free. My reasoning is laid out in painful detail in my article “Stateless Income.”<sup>5</sup> Very briefly, so-

phisticated U.S. firms operate today, not under a worldwide tax system, but rather in an ersatz territorial tax environment, without any of the antiabuse rules that a thoughtful territorial tax system would impose, but subject to a bizarre constraint that they must park their foreign earnings offshore to remain within the ersatz territorial regime. This means that in practice, U.S. firms *do* capture the benefit of operating in lower-tax jurisdictions, both as a cash tax matter and — more importantly — for purposes of U.S. generally accepted accounting principles, which is the lens through which investors and corporate executives measure a firm’s performance.

But the story does not end with U.S. firms simply capturing the benefits of actual business operations in lower-taxed countries. Through large investments in aggressive tax planning technologies, and unencumbered by any of the antiabuse rules to which non-U.S. multinationals domiciled in jurisdictions with better designed territorial systems might be subject, U.S.-domiciled multinational firms have become adroit at moving income that as an economic matter is earned in high-tax foreign countries to very low-taxed ones. (This is the essence of what I mean by “stateless income.”)

Stateless income privileges multinational firms over domestic ones by offering the former the prospect of capturing “tax rents” — low-risk inframarginal returns derived by moving income from high-tax foreign countries to low-tax ones. Other important implications of stateless income include the dissolution of any coherence to the concept of geographic source, the systematic bias toward offshore rather than domestic investment, the more surprising bias in favor of *investment* in high-tax foreign countries to provide the raw feedstock for the generation of low-tax foreign *income* in other countries, the erosion of the U.S. domestic tax base through debt-financed tax arbitrage, many instances of deadweight loss, and — essentially unique to the United States — the exacerbation of the lockout phenomenon, under which the price that U.S. firms pay to enjoy the benefits of extremely low foreign tax rates is the accumulation of

<sup>3</sup>Some corporate apologists have tried to limit the term “inversion” exclusively to describe the initial pre-2004 wave of self-inversions. These individuals prefer to pretend that the current tsunamis of inversions are just ordinary course cross-border mergers, but this is commercially inaccurate.

<sup>4</sup>Andrew Ross Sorkin, “Reluctantly, Patriot Flees Homeland for Greener Tax Pastures,” *The New York Times*, July 14, 2014.

<sup>5</sup>Edward D. Kleinbard, “Stateless Income,” 11 *Fla. Tax Rev.* 699 (2011). This was the first of three articles studying the phenomenon. Kleinbard, “The Lessons of Stateless Income,” 65 *Tax L. Rev.* 99 (2011), extended the analysis to consider the

(Footnote continued in next column.)

economic efficiency consequences of stateless income and possible policy responses. Kleinbard, “Through a Latte Darkly: Starbucks’s Stateless Income Tax Planning,” *Tax Notes*, June 24, 2013, p. 1515, was a case study of one well-known firm; in light of Starbucks’s business model as a high-street face-to-face retailer, the article concluded that if Starbucks can generate stateless income, anyone can. Condensed versions of the first two articles were published as Kleinbard, “Stateless Income’s Challenge to Tax Policy,” *Tax Notes*, Sept. 5, 2011, p. 1021; and Kleinbard, “Stateless Income’s Challenge to Tax Policy, Part 2,” *Tax Notes*, Sept. 17, 2012, p. 1431.

extraordinary amounts of earnings (about \$2 trillion, by the most recent estimates) and cash (about \$1 trillion) outside the United States.

The problem of stateless income planning is not unique to U.S. multinationals, but we can take a perverse pride in the knowledge that U.S. firms have been world leaders in developing the requisite tax technologies. The situation is now so out of control that in 2012 the G-20 group of countries deputized the OECD to propose, on an extremely accelerated timetable, a concrete set of action plans to address what the OECD calls base erosion and profit-shifting problems.

U.S. firms incur costs to operate their stateless income tax machinery, which is wasteful, but at the same time enjoy an essentially unfettered tax planning environment in which to strip income from high-tax foreign jurisdictions to very low-taxed ones. And this sits on top of transfer pricing, selective leverage of group members, and other devices used to move income that economically is earned in the United States to foreign affiliates.

As a result, whether one measures effective marginal or overall tax rates, sophisticated U.S. multinational firms are burdened by tax rates that are the envy of their international peers. And this is true whether one studies cash taxes paid or — more important in the case of public firms — U.S. GAAP accounting for taxes. *Stateless Image* reviews a raft of data on this point, but to take one more recent example, the Government Accountability Office observed in 2013 regarding cash taxes paid:

For tax year 2010 (the most recent information available), profitable U.S. corporations that filed a Schedule M-3 paid U.S. federal income taxes amounting to about 13 percent of the pretax worldwide income that they reported in their financial statements (for those entities included in their tax returns). When foreign and state and local income taxes are included, the ETR [effective tax rate] for profitable filers increases to around 17 percent. The inclusion of unprofitable firms, which pay little if any tax, also raises the ETRs because the losses of unprofitable corporations greatly reduce the denominator of the measures. Even with the inclusion of unprofitable filers, which increased the average worldwide ETR to 22.7 percent, all of the ETRs were well below the top statutory tax rate of 35 percent.<sup>6</sup>

<sup>6</sup>GAO, “Corporate Income Tax: Effective Tax Rates Can Differ Significantly From the Statutory Rate,” GAO-13-520 (May 2013). See also Kleinbard, “Stateless Income,” *supra* note 5, at 722-724, 737-750.

It is true of course that the federal corporate tax rate — nominally, 35 percent — is too high relative to world norms, and that the ersatz territorial system requires firms to waste money in tax planning and structuring, but effective marginal tax rates and overall effective tax rates reach the level of the U.S. headline rate only when firms studiously ignore the feast of tax planning opportunities laid out before them on the groaning board of corporate tax expenditures. Moreover, and contrary to the claims of corporate lobbyists, under the usual water’s-edge principle of state taxation, the foreign income of a U.S. multinational when repatriated usually is taxed by U.S. states either very lightly or not at all (other than a couple of oddball cases involving income booked in certain tax havens).<sup>7</sup> As a result, and without regard to firms’ stateless income tax planning, to claim that U.S. firms face a tax rate approaching 40 percent on their foreign income by virtue of their state tax liabilities is simply false.

To offer just one domestic example, under current U.S. law, the combination of accelerated tax depreciation on new equipment purchases and the deductibility of interest expense on debt incurred to purchase that equipment actually yields a *negative* effective tax rate. This means that we collectively pay companies to make those investments.<sup>8</sup>

In the international arena, U.S. multinational firms have established themselves as world leaders in global tax avoidance strategies, through the generation of stateless income. The result is that many well-known U.S. multinationals today enjoy single-digit effective tax rates on their foreign income, and effective tax rates on their *worldwide* income far below the nominal 35 percent federal corporate tax rate. This is true both as a cash tax and as a GAAP matter.

We can see the payoffs to stateless income tax planning through the evidence presented in a recent study, to the effect that in 2006, controlled foreign corporation subsidiaries of U.S. firms faced a “cash” average (that is, effective) foreign tax rate (foreign taxes paid divided by pretax earnings and profits) of only 15.6 percent. With the exception of mining, the most tax-disadvantaged industry for U.S. firms outside the United States was retail trade, in which CFCs faced an average foreign tax rate of 22.5 percent.<sup>9</sup> Leslie Robinson of Dartmouth’s Tuck

<sup>7</sup>Special state tax rules not considered in the text can apply to banks and other financial services firms.

<sup>8</sup>Congressional Budget Office, “Taxing Capital Income: Effective Rates and Approaches to Reform” (Oct. 1, 2005).

<sup>9</sup>Melissa Costa and Jennifer Gravelle, “Taxing Multinationals: Average Tax Rates,” 65 *Tax L. Rev.* 391, at Table 1 (2012).

## COMMENTARY / SPECIAL REPORT

School of Business recently summarized the academic financial accounting literature in testimony before the Senate Finance Committee as establishing that “there is no evidence that U.S. MNCs face greater tax burdens as a consequence of how foreign profits are taxed, relative to their competitors.”<sup>10</sup>

From a GAAP perspective, the magnitude of the tax discounts to which firms have helped themselves is apparent not only by examining their effective tax rate reconciliations in their financial accounting statements, but also by glancing at firms’ aggregate foreign earnings designated for GAAP purposes as “permanently reinvested” offshore low-taxed earnings (about \$2 trillion), as well as their stockpile of offshore low-taxed cash (about \$1 trillion).<sup>11</sup> (I explain the financial accounting terminology immediately below.) In short, no matter what perspective one adopts, the tax burdens imposed on the foreign operations of U.S. firms are far lower than that implied by the nominal U.S. headline rate.

Investors and managers care about GAAP accounting for taxes. They have no direct access to tax returns, have no reason to believe that tax measures of revenue and expense are superior to GAAP measures or are more consistent over time, and further need to understand how much of a company’s cash tax rate in any given year reflects timing differences that will reverse in subsequent years. It therefore is worth reminding non-accountants of how a U.S. multinational firm’s tax rate looks when viewed through the lens of GAAP.<sup>12</sup>

Financial accounting and tax accounting are quite different, but financial accountants of course think that their worldview is correct, and so differences between actual cash tax liabilities and what the financial accountants would have expected as tax liabilities must be explained. Financial accountants therefore start with the financial accounting measure of earnings before income taxes (EBIT), apply a 35 percent tax rate to it, and then look up and ask, “why isn’t that the firm’s actual tax bill for the year?”

There are several answers that explain the difference in outcomes, but putting aside audits and

potential disagreements as to the interpretation of the law between the firm and the IRS, the answers basically fall into two groups. First, there are temporary differences, for example when the tax rules for depreciation are different from the financial accounting rules for depreciation. These differences theoretically reverse themselves over time.

The financial accountants deal with these timing differences through the deferred tax assets/liabilities accounts. These accounts keep track of all the individual timing differences between when cash taxes actually are due and when under financial accounting principles those taxes would have been due. (Of course, if the firm stays in business, the aggregate balance may never change, as depreciation on new assets replaces reversal of depreciation on old assets, and so on.) Because future cash tax bills will reflect the reversal of these timing differences, the balance of the deferred tax liability (more cash taxes to be paid in the future because “too little” is due this year) or deferred tax asset (“too much” tax actually paid this year relative to what financial accountants believe is the firm’s income this year) is shown on the consolidated balance sheet. Temporary differences thus affect cash flow, but not GAAP effective tax rates or financial accounting net income (and therefore earnings per share).

The other accounting differences are “permanent.” Interest on tax-exempt bonds is the simplest example. The financial accountants see tax-exempt bond coupons as income and therefore would expect a 35 percent tax bill, but of course no tax will ever be due. So the financial accountants create a second category of book-tax differences that does not appear labeled as such on the face of the balance sheet or income statement, but that is shown in the tax footnote to all GAAP financials. This is the effective tax rate reconciliation table, which lists those items that permanently reduce (or increase) a firm’s tax rate from the statutory 35 percent tax rate.

Permanent differences are not liabilities or assets, but they do affect net effective tax rates shown on the face of the firm’s income statement (financial accounting tax expense divided by EBIT). This means that for all practical purposes — because GAAP is the lens through which all relevant private parties view a company — a permanent tax difference simply negates the nominal statutory rate. Firms yearn for permanent differences; at healthy firms with strong cash flows, only the corporate treasurer gets very excited about timing differences.

Savvy U.S.-based multinational firms show very low GAAP effective tax rates because they do some actual business in low-taxed jurisdictions and engage in aggressive stateless income tax planning, and because they record the resulting low foreign

<sup>10</sup>Testimony of Leslie Robinson, associate professor, Tuck School of Business at Dartmouth University, before the Senate Finance Committee’s hearing titled, “The U.S. Tax Code: Love It, Leave It or Reform It!” (July 22, 2014).

<sup>11</sup>Richard Rubin, “Cash Abroad Rises \$206 Billion as Apple to IBM Avoid U.S. Taxes,” Bloomberg Business News, Mar. 12, 2014.

<sup>12</sup>Kleinbard, “Stateless Income,” *supra* note 5, at 744-750, covers this ground in a slightly more formal fashion than do the next few paragraphs.



tax rates that they pay as a permanent difference between the GAAP measure of tax expense and the nominal 35 percent tax rate. How is this possible, given that corporate apologists keep reminding us that the United States imposes worldwide tax on U.S. corporations?

Under GAAP accounting, a firm presents a worldwide consolidated picture of its operations and results, which therefore includes all of its foreign operations. But the income of foreign subsidiaries of a U.S. firm that are derived from active business operations are not subject to actual tax in the United States until those earnings are returned to the United States as actual dividends or as constructive dividends under section 956 (for example, when a foreign subsidiary lends money to its U.S. parent). This leaves financial accountants in a quandary — U.S. federal income tax will be due only when the active earnings of foreign subsidiaries are repatriated as dividends, but that tax trigger is under the control of the parent company. This fact pattern therefore is not a clear timing difference that will automatically reverse, and it is not a purely permanent difference like tax-exempt bond interest income.

Financial accountants resolve this conundrum by requiring a U.S. firm to record as a liability the U.S. tax bill on the ultimate repatriation to the United States of its foreign earnings, *unless* the firm demonstrates to the satisfaction of its accountants that it has no present intention to repatriate the money and incur the tax.<sup>13</sup> Readers who are financial accountants will, I hope, forgive me when I suggest that the financial accounting profession has not been the sternest of taskmasters when it comes to reviewing a client's claims regarding its plans to redeploy its foreign cash hoard offshore.

Amounts so designated are colloquially referred to as “permanently reinvested earnings.” In reality, there is nothing permanent about the designation: Firms do sometimes change their minds, with the permission of their accountants. When eBay Inc. made news recently about repatriating its foreign cash, that is what happened — it changed its mind and told its accountants that perhaps it would repatriate its foreign cash hoard after all; as a result, it was required to provide immediately for the U.S. tax cost for doing so, even though it had not yet actually triggered the tax bill by moving the money.

The reduction from the 35 percent statutory tax rate in a firm's effective tax rate reconciliation in the tax footnote for “the effect of foreign operations” or words to that effect thus signals to investors that the company will not in fact pay 35 percent tax on all of

its earnings. It is a discount from the U.S. tax that would have been paid if the United States in fact taxed the worldwide income of the firm, attributable to the fact that (1) the overall group's foreign earnings are not currently taxed in the United States (because the earnings are derived by foreign subsidiaries engaged in active business operations), *and* (2) the firm represents to the accountants that its intentions are to permanently reinvest the earnings outside the United States. As far as investors and management alike are concerned, because this item is a “permanent” difference for GAAP purposes, it serves as a final discount to the nominal U.S. federal corporate tax rate.

Under U.S. GAAP, a firm's net effective tax rate is presented as a single worldwide rate. If one makes some plausible assumptions about the geographic mix of a company's business, this means that the tax rate actually imposed on a U.S. multinational's non-U.S. income can be much lower than that imposed on the non-U.S. business of a foreign multinational that appears on its face to have the same effective tax rate. In such cases, the competitiveness argument immediately collapses.

For example, imagine that all firms wherever domiciled pay a 35 percent effective tax rate on their U.S. income and lower rates on their non-U.S. income. A U.S. multinational firm earns \$1 billion in EBIT, does 60 percent of its business in the United States, and 40 percent abroad. It reports to investors that its effective tax rate is 25 percent. Its tax expense therefore is \$250 million. A Freedonian enterprise has exactly the same profile in all respects, except that it earns 40 percent of its income in the United States and the rest abroad.

The U.S. firm's tax expense for its U.S. operations alone would be \$210 million ( $0.35 \times \$600$  million). For the U.S. firm to record a \$250 million worldwide tax expense, it must therefore have incurred a \$40 million tax expense for its non-U.S. income, which is a 10 percent effective tax rate on its \$400 million of non-U.S. income. The Freedonian firm, by contrast, will have an implicit U.S. tax expense of \$140 million ( $0.35 \times \$400$  million), and \$110 million of tax expense attributable to its non-U.S. operations, which is an 18.3 percent effective rate. The U.S. firm completely dominates the Freedonian enterprise along the standard competitiveness yardstick.

This example is not entirely fanciful. Consider the February 2014 Form 10-K of Bresch's firm, Mylan. The Form 10-K informed investors and other interested stakeholders that Mylan's *worldwide* GAAP effective tax rate — the taxes it paid or set aside a provision to pay, divided by its worldwide GAAP income — was not 35 percent (the U.S.

<sup>13</sup>*Id.* at 745-746.

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statutory corporate tax rate) or some greater rate, but 16.2 percent in 2013, 20 percent in 2012, and 17.7 percent in 2011.<sup>14</sup>

The firm's tax footnote showed a permanent discount for 2013 from the 35 percent statutory tax rate as applied to worldwide income of 13 percentage points, attributable to Mylan's "foreign [tax] rate differential." (The reduction was smaller in 2012 but about the same in 2011.) In other words, Mylan told its shareholders and other stakeholders that, without regard to any other "permanent" differences, the benefit Mylan captured by paying low foreign taxes by itself garnered Mylan a 13 percentage point discount from its nominal worldwide income tax bill (not just for its foreign income — its *worldwide* income) from an "uncompetitive" 35 percent tax rate to 22 percent.

In 2013 Mylan derived about 57 percent of its worldwide revenues (essentially, gross receipts) from the United States; yet, as just noted, told investors that its worldwide effective tax rate was 16.2 percent.<sup>15</sup> Assume, just by way of illustration, that Mylan's taxable profits followed its revenues as allocated for financial accounting (and presumptively, management) purposes — admittedly, a heroic assumption, thanks to stateless income planning internationally, and tax expenditures domestically — and that Mylan, through adroit domestic tax planning, incurred a 25 percent effective tax rate on its U.S. income (federal and state taxes combined). This would imply that Mylan's tax expense for its foreign profits was roughly 4.5 percent.<sup>16</sup>

We would have a clearer window into Mylan's actual foreign effective tax rate if it more faithfully complied with the SEC requirement that it identify in its tax footnote the U.S. tax cost of repatriating its offshore cash (from which one can deduce the quantum of foreign tax credits that would come along with the repatriation), but like the vast ma-

jority of companies in this situation, Mylan modestly avers that calculating this number is "not practicable."

AbbVie Inc., another inverting firm, reported in its 2013 annual report's tax footnote an 11.5 percent reduction for 2013 in its global statutory tax rate for "the effect of foreign operations." (The effect of foreign operations was a much greater number in 2011 and 2012.) Again, this means that AbbVie is telling investors and its own managers that it does not operate in a 35 percent tax rate environment at all; to the contrary, AbbVie's effective *global* tax rate for 2013 (again, including U.S. taxes on its U.S. domestic income, where permanently reinvested earnings are irrelevant), after some smaller permanent differences in both directions, was 22.6 percent. This is a permanent tax discount of about one-third off the headline federal rate insofar as AbbVie's investors and management are concerned.

But what about the anti-competitive effects of U.S. domiciled multinationals' "trapped cash?" As readers know, U.S. tax law (but not that of most other countries) effectively induces U.S. multinational firms to keep their surplus low-taxed foreign profits in their foreign subsidiaries because the U.S. parent would be required to pay full U.S. tax on the repatriation of those earnings (less a credit for any foreign income taxes already paid). As a result, U.S. firms now hold about \$1 trillion of "permanently reinvested" earnings in cash (usually, U.S.-dollar-denominated short-term debt instruments, like Treasury bills, bank deposits, commercial paper, and money market funds).<sup>17</sup> As explained above, by doing so firms not only minimize their cash tax liabilities but also help themselves to a permanent discount on their GAAP financials from the statutory corporate tax rate charge that would otherwise apply to their pretax GAAP earnings.

It is a great overstatement, popular in the business press, to claim that the cash "trapped" by this rule has large businesses, competitive implications, or that the repeal of current law would lead to a wave of business reinvestment in the United States. This is a vast overstatement. First, a U.S. multinational's offshore cash hoard invariably is invested in the U.S. economy, in the form of investments in dollar assets.

Second, as Apple Inc. demonstrated in 2013, large multinational firms often can access their offshore earnings without incurring a tax cost, simply by borrowing in the United States and using the earnings on the offshore cash to pay the interest costs. (The interest earned on a firm's offshore cash hoard is includable in the U.S. parent's income as subpart

<sup>14</sup>The *New York Times* article cited in note 4, *supra*, appears to have accepted at face value Bresch's recollection that her firm's effective tax rate was "about 25 percent." The February 2014 Form 10-K summarized in the text contains the most recent data released to investors, because quarterly condensed financial statements do not contain an effective tax rate reconciliation. It is a pity that Bresch did not remember with greater clarity the information her firm provided to its owners and the interested public in its audited financial statements.

<sup>15</sup>Mylan Inc. Form 10-K (filed Feb. 27, 2014), note 13 to audited financial statements.

<sup>16</sup>That is,  $0.25$  (assumed domestic effective tax rate)  $\times 0.57$  (presumptive fraction of profits attributable to the United States) = 14.25 percent effective tax rate on global profits attributable to U.S. federal and state taxes. On the foreign side,  $0.045 \times 0.43 = 1.95$  percent additional effective tax on global profits, for a total of 16.2 percent effective tax rate on global income.

<sup>17</sup>See *supra* note 11.

F income, and therefore can be repatriated free of any additional tax cost.) The U.S. parent's income inclusion of the interest earned on its offshore cash offsets the tax deduction for the interest expense on the firm's U.S. borrowing, and the firm is left in the same economic position as if it had simply repatriated the cash tax free (plus or minus a spread for differences in interest rates between the two streams).

Third, we conducted a natural experiment, in the form of a corporate offshore cash tax amnesty in 2004; more than \$300 billion over and above the usual level came back to the United States from foreign subsidiaries of U.S. firms. Most studies, however, have concluded that the cash went to prop up stock prices through stock buybacks or dividends, not to invest in productive capacity (as the law nominally required).<sup>18</sup>

If large U.S. multinationals were credit constrained (as is true for many small wholly domestic enterprises), the "trapped cash" story might have some modest traction to it, but almost all these firms are not: Their domestic cash flow and their ability to borrow in the U.S. capital markets (economically but not technically secured by their offshore cash) are more than sufficient to fund any domestic investments they wish to make. The meager earnings on the trapped cash are dilutive of earnings per share, but this is not a business competitiveness crisis.

In sum, there is no credible evidence as a matter of cash taxes or as a matter of GAAP accounting that U.S. firms are at a fundamental international business competitive disadvantage under current law. Again, this is not to excuse current law or to hold it up as an exemplar; it is highly distortive and inefficient.<sup>19</sup> But one of the few deficiencies it has avoided is imposing an unfair international business tax competitive burden on sophisticated U.S. multinationals.

If this conclusion seems incredible, ask yourself this: Why is it that following the first rush of self-inversions more than a decade ago, inversions have been so infrequent relative to cross-border mergers and acquisitions activity generally over the last decade (that is, since the introduction of section 7874), until this year?<sup>20</sup> How have most U.S. multi-

nationals managed to compete for the last decade if inversions alone are the economically compelled self-help route to a competitive tax environment? Something else must be going on to explain why U.S. firms believed themselves to be competitive from 2004 to 2013, and only now are scouring the earth for suitable bite-sized merger partners to use as inversion vehicles.

### A Competitiveness Fable

Notwithstanding the contrary evidence from their tax returns and GAAP financial statements, U.S. multinationals and their apologists continue to hammer the international business competitiveness narrative to justify inversion transactions. One leading example of this is a recent op-ed published in *The Wall Street Journal* by Walter Galvin, the retired vice chair and CFO of Emerson Electric Co., in which he presents his story of how the U.S. tax system conspired to help Emerson's French arch rival, Schneider Electric, steal American Power Conversion Corp. (APC) from Emerson's grasp.<sup>21</sup> Galvin has offered the same story in testimony before the House Ways and Means Committee, and it has figured prominently in papers authored by the Alliance for Competitive Taxation, a lobbying organization.

As related in a corporate autobiography, *Performance Without Compromise: How Emerson Consistently Achieves Winning Results*,<sup>22</sup> Galvin is a talented financial executive of great personal probity. A close reading of the public record surrounding the APC deal, however, leads to the conclusion that this gripping tale represents a corporate false memory, like the adult recollection of a childhood trauma that never took place.

Here in Galvin's words is the indignity worked on Emerson by the U.S. corporate tax system:

In 2006, Emerson sought to acquire a company called American Power Conversion (APC). This was a Rhode Island-based company that made more than half of its earnings outside the U.S. Unfortunately, Emerson competed against Schneider Electric, a French company, to acquire APC. Emerson offered more than \$5

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transactions. Neither are redomiciliations of firms from one foreign domicile (e.g., the Caymans) to another (e.g., Ireland) to lock in tax treaty benefits. Of the relative handful that remain on the list, most were small firms by multinational standards; Eaton Corp. was probably the biggest exception to that.

<sup>21</sup>Walter Galvin, "Why Corporate Inversions Are All the Rage," *The Wall Street Journal*, July 27, 2014.

<sup>22</sup>Charles F. Knight (with Davis Dyer), *Performance Without Compromise: How Emerson Consistently Achieves Winning Results* (2005). The author was at the time of publication the chair emeritus of Emerson.

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<sup>18</sup>Dharmika Dharmapala et al., "Watch What I Do, Not What I Say: The Unintended Consequences of the Homeland Investment Act," 66 *J. Fin.* 753 (2011).

<sup>19</sup>These inefficiencies in fact are the true competitiveness costs of the current U.S. tax system, but these costs must be netted against the savings conferred by the unconstrained de facto territorial regime in which U.S. companies operate.

<sup>20</sup>Some summaries overcount here. Bona fide acquisitions by larger foreign firms of smaller U.S. firms are not inversion

(Footnote continued in next column.)

billion, but ultimately Schneider acquired APC by offering a bid in excess of \$6 billion.

Why was Schneider willing to offer more? Schneider outbid us because France's tax code — typical of most OECD countries — exempts 95 percent of foreign-source income from taxation, while the U.S. tax code fully taxes such income. APC's profits were worth more to Schneider because, once absorbed, APC's global profits (net of the taxes paid in the countries where those profits were earned) could be repatriated to Schneider's headquarters in France, where they would be taxed at less than 2 percent.

In contrast, earnings repatriated to the U.S. are subject to a tax rate of nearly 40 percent, with a credit for taxes paid abroad on that income. That dramatic difference made it possible for Schneider to offer more for APC. So what had once been an American company became French.

APC was a U.S. firm with extensive low-cost manufacturing operations outside the United States. APC specialized in manufacturing uninterruptible power supplies (UPS) and other critical power systems, predominantly for smaller commercial customers, and had by far the largest global market share by dollar volume in the UPS markets.<sup>23</sup> Schneider (through its MGE subsidiary) was a major player in the market for larger-scale UPS systems, particularly in Europe. Emerson also had a substantial UPS business through its subsidiary Liebert Corp.; it had about the same share of the global market as did Schneider, but was stronger in North America.

At the time it was acquired, APC had enjoyed strong top-line revenue growth but had struggled to generate comparable net income growth; in fact, its profits for the six-month accounting period ending before the acquisition were down sharply on a year-over-year basis. Compared with industrial giants Schneider and Emerson, APC was a smaller and more specialized company, probably with capital constraints that did not apply to the other two. At the time of the Schneider deal, the *Financial Times* cattily observed that "APC is one of the most shorted stocks, and the least liked by analysts, in the S&P 500."<sup>24</sup>

<sup>23</sup>Frost & Sullivan, *World UPS Markets*, Figure 2-19 (2006); Jennifer Levitz, "APC Deal Reflects Demand for Data Protection; France's Schneider Electric Agrees to Pay \$6.1 Billion for Emerging U.S. Rival," *The Wall Street Journal*, Oct. 31, 2006.

<sup>24</sup>Lex column, *Financial Times*, Oct. 30, 2006. A parallel story helpfully observed that "margins at APC are under pressure, (Footnote continued in next column.)

Schneider paid a 30 percent premium over APC's stock price (which had been performing poorly) to acquire APC. This valuation was universally criticized in the financial press as extremely aggressive, but within a year APC's performance within the Schneider group took some of the pressure off the earlier criticism.<sup>25</sup>

No doubt in response to the blistering criticism among financial analysts and the financial press, Schneider prepared a 49-page slide show to justify the APC acquisition. The word "tax" appears nowhere in the document. The same is true of the unusually long and defensive press release that Schneider prepared that covered much of the same ground.

Schneider's CEO, Jean-Pascal Tricoire, was brand new to the job at the time, and very young by French CEO standards (43). The press described him as eager to make his mark by reorienting Schneider's business to critical power supplies and other "smart" products.<sup>26</sup>

For its part, Emerson had a legendary corporate culture (as reflected in the corporate autobiography referenced above). A 2006 *Financial Times* profile, published shortly before the APC takeover battle, described the firm as highly disciplined and "relentlessly profitable," with a "near-unbroken run of earnings increases stretching back 50 years."<sup>27</sup> The article emphasized that Emerson believed its central tasks lay in developing its technology and in grooming its senior executives to take on new responsibilities. The CEO of Emerson closed the profile by saying, "People may call us boring — but if we are, then boring is OK."<sup>28</sup> Emerson had throughout this period a very high GAAP global effective tax rate, close to the statutory 35 percent rate.

APC enjoyed tax holidays in China and India, and booked a large effective tax rate benefit for "foreign earnings taxed at rates lower than the U.S. statutory rate," attributable primarily to its operations in Ireland and the Philippines.<sup>29</sup> (As is typically the case, the annual financial statement does not give sufficient detail to offer any independent judgment on APC's transfer pricing practices or the

cash conversion is poor, rising raw material costs pose an ongoing threat, while projected cost synergies [in the Schneider deal] look aggressive."

<sup>25</sup>Lex column, *Financial Times*, Oct. 23, 2007.

<sup>26</sup>Pan Kwan Yuk, "Schneider Chief Makes His Power Plays Abroad," *Financial Times*, Nov. 21, 2007.

<sup>27</sup>Peter Marsh, "When Boring Beats Buccaneering," *Financial Times*, June 7, 2006.

<sup>28</sup>*Id.*

<sup>29</sup>APC 2005 Form 10-K, at 55. Because APC was acquired in 2006, this is the last annual report that APC filed with the SEC.

like.) APC's GAAP effective tax rates (after removing some extraordinary items) were 26 percent, 25 percent, and 22 percent in 2003, 2004, and 2005, respectively. Schneider's French GAAP effective tax rates for the same period (other than 2003) were a bit higher, in the 28 to 29 percent range. (The French statutory corporate tax rate at this time was essentially identical to the U.S. federal statutory rate.) So to investors, the addition of APC, a U.S. company, to the mix of Schneider businesses might be expected to reduce Schneider's effective tax rate modestly, not because of French tax shenanigans, but because APC's effective tax rate was already somewhat lower than Schneider's. By 2009, by which time APC had been fully digested, Schneider's global effective tax rate was 24.3 percent.

Now we can begin to dissect Galvin's claim that the advantages afforded by France's territorial tax system explained why Schneider outbid Emerson by 20 percent in their battle to take over APC. On its face, this 20 percent price difference in the offers that the two firms made is an implausibly large premium to attribute to tax rate differentials. And in fact, when you think about it for a minute, you realize that the story is precisely backwards.

The key fact is that APC was a U.S. company with some foreign subsidiaries. Schneider's purchase did not miraculously spring APC's CFCs out from under APC. Far from helping APC escape U.S. tax, Schneider became enmeshed more deeply in the U.S. tax web because it now owned a major U.S. subsidiary that in turned owned non-French, non-U.S. subsidiaries. APC's foreign earnings remained inside the U.S. tax system.

As a GAAP matter, if Emerson had bought APC, Emerson would presumably have been able to continue APC's practice of classifying its low-taxed foreign earnings as permanently reinvested outside the United States, thereby obtaining a significant GAAP effective tax rate benefit relative to its very high effective tax rate ex-APC.<sup>30</sup> In other words, Emerson would have gained entree into APC's ersatz territorial tax environment by acquiring that firm; Emerson was never precluded from capturing the benefits of lower foreign tax rates.

As a cash tax matter, Galvin observes that the repatriation to France of APC's earnings through dividends would be subject to only a 2 percent French tax. This ignores the full 35 percent U.S. federal income tax that (in Galvin's telling) would be imposed on APC's domestic and foreign earnings, when those foreign earnings were distributed

up the chain, plus a 5 percent U.S. withholding tax on dividends from APC to Schneider (before the 2009 amendment to the France-U.S. tax treaty). It further ignores the fact that dividends from APC to Emerson would have been entirely tax free because APC would have been a member of the Emerson consolidated group.

Where is the tax disadvantage there?

In a March 2014 white paper, the Alliance for Competitive Taxation, a lobbying group, sought to amend and restate Galvin's points here by suggesting that what he meant to have written was that *future* non-U.S. investments relating to the APC business would be structured directly underneath Schneider and therefore would bear a lighter net tax burden in Schneider's hands than they would in Emerson's, once fully repatriated to the parent company (without actually identifying any underlying income tax rate applicable to these hypothetical future investments).<sup>31</sup> The alliance's suggested corporate structure for future investments by Schneider is a presumptively sensible starting place, but the comparison is not.

First, the purchase price paid for APC related to a large extent to the present and future earnings power of APC and its existing foreign subsidiaries (once the supply chain and similar problems identified below were resolved), all of which remained in the U.S. tax net after the Schneider acquisition. Second, had Emerson bought APC, it would presumably have been savvy enough *not* to repatriate APC's low-taxed foreign earnings; to do so would have been a value-destroying move. By not repatriating low-taxed foreign earnings on a current basis, Emerson would have enjoyed for GAAP and for cash tax purposes a quasi-territorial tax environment outcome indistinguishable from that enjoyed by Schneider. Most U.S. multinationals are able to fund their U.S. cash needs without difficulty out of domestic cash flow, domestic borrowing capacity, and judicious repatriations of a steady stream of foreign earnings that bring with them highly concentrated FTCs sufficient to cover the U.S. repatriation tax.<sup>32</sup>

Third, Schneider, with all the advantages of a territorial tax system, in fact reported a *higher* effective tax rate in the years leading up to the merger than did APC, a company burdened by the allegedly uncompetitive U.S. system. Why is it inevitable then that new investments would be

<sup>31</sup>Alliance for Competitive Taxation, "ACT Tax Facts, U.S. Tax Code Encourages Foreign Takeovers of U.S. Companies" (Mar. 2014).

<sup>32</sup>For a description of a tax department's "tax distillery" in operation, see Kleinbard, "Stateless Income," *supra* note 5, at 725-727.

<sup>30</sup>APC's profits were roughly half the size of Emerson's, so in effect one-third of Emerson's post-acquisition EBIT would have become subject to a tax expense in the low 20s.

subject to light effective tax rates? Emerson's effective tax rate in this period was higher still, but the right question to draw from this is, why was Emerson unable to control its effective tax rate as well as did APC or many other U.S. companies? The U.S. tax system and U.S. GAAP offered discounts of all sorts and sizes from the headline corporate tax rate, and Emerson itself had significant international operations. Emerson's possible frustration with its own tax profile should not be read as proof of a general anti-competitive U.S. tax environment.

If tax differences do not on their face explain the big difference in valuations for APC, what does? One explanation, familiar to anyone who has worked on M&A deals, is the difference in corporate cultures — a very young “outsider” CEO at Schneider, anxious to make his mark, competing against a highly disciplined U.S. firm whose internal financial analysts no doubt shared the view universally expressed on the street that Schneider's valuation was much too high.

But Schneider was not reckless. It had a clear strategy, and one that had nothing to do with taxes. Schneider and Emerson were both on acquisition binges because the electric equipment industry (and in particular, the critical power systems segment) was undergoing rapid consolidation. Schneider wanted to move aggressively into “smarter” product lines like critical power systems. Schneider saw great complementarity in geographic penetration and product lines between its MGE business and APC, and further estimated that, as by far the largest player in the world markets in the UPS space following the acquisition, it would be able to radically cut costs and get control over APC's production chain problems.

Schneider's press release for the deal summed all this up, emphasizing that the valuation was justified, among other reasons, because the deal would “generate significant [operational] synergies (including, among other things, purchasing, R&D, support functions, sales, services) estimated at around US\$220 million, leverage significant R&D programs and APC's innovative architecture,” and “accelerate the profitability improvement of large UPS systems thanks to MGE's strengths in services.”<sup>33</sup>

As it happens, history appears to have proved Schneider's judgment to be correct. By the time

Schneider published its 2006 annual report, filed with its French securities regulators in March 2007, its CEO reported that:

APC is now part of Schneider Electric. It is the global leader in integrated critical power and cooling systems, with 2006 revenue of close to \$2.4 billion — a 20 percent increase from 2005.

This transaction gives Schneider Electric world leadership in one of the fastest growing areas of electrical distribution. . . . We've created a critical power and cooling services business unit that combines APC's resources with those of Schneider Electric subsidiary MGE UPS Systems. Their people have been brought together under a single management team.

We confirm our synergy target of \$220 million. If we meet this target — and we fully intend to do so — the value created will total \$3.3 billion.<sup>34</sup>

In addition to this highly credible business case, there was another fascinating back story at work. According to *The Wall Street Journal*, a few months before the APC deal, Schneider itself had been the object of a \$25.5 billion takeover bid from a consortium of private equity firms. (Had the deal been consummated, it would have been the largest private equity deal in history to that point.) The article explained that “while the APC purchase has strategic merit, it was also a defensive move to help protect Schneider from another such approach, people close to the matter say.”<sup>35</sup>

In short, the tax story on its face is backwards, and the business explanations for Schneider's valuation of APC are plausible and well documented. Yet Galvin's competitiveness narrative reappears whenever corporate apologists are asked to defend inversion transactions, without anyone pausing to ask whether the story possibly makes any sense, or looking at the public record.

But wait, there's more. As Galvin points out, in 2010 Emerson acquired Chloride, a U.K. firm that was arguably the largest remaining independent UPS specialist manufacturer in the world. (It was the fourth largest UPS firm in the world at the time, behind Schneider, Emerson, and Eaton.) Galvin is right that this provided a tax-efficient way to deploy Emerson's offshore cash, but the story is a bit more nuanced than that. Emerson began its takeover attempts in 2008, offering to pay £270 per share for Chloride, which the latter promptly rejected.

<sup>33</sup>Schneider Electric SA press release (Oct. 30, 2006). Unlike documents prepared by tax lobbyists, M&A press releases are not unconstrained puff pieces, since they are filed with securities regulators and relied on by investors.

<sup>34</sup>Schneider Electric SA 2006 Annual Report, at 6.

<sup>35</sup>Jason Singer, “Schneider Got Takeover Approach Before Deciding to Purchase APC,” *The Wall Street Journal*, Nov. 4, 2006.

Two years later Emerson returned, and in a move that bemused the financial press, raised its two-year-old offer by £5 per share, to £275. A bidding war broke out, and in the end Emerson prevailed, paying £375 per share. The ironic part is that the underbidder was ABB, the Swiss electric equipment maker, which was itself desperate to get into the UPS business before the continuing wave of global consolidation locked it out. So the U.S. tax system, which allegedly is punitive in its application to U.S. multinationals, did not stand in the way of Emerson acquiring a *foreign* target (unlike APC) and outbidding a rival domiciled in one of the world's great fiscal paradises.

### What Really Is Going On?

If the competitiveness story is threadbare, what does explain the sudden tsunami of inversions? Here is my narrative, which I believe to be consistent with the public record and reasonable readings of the tax tea leaves.

The short answer is that the current mania for inversions is driven by U.S. firms' increasingly desperate need to do something with their \$1 trillion in offshore cash, and by a desire to reduce U.S. domestic tax burdens on U.S. domestic operating earnings.

The year 2004 is a good place to start, because that year's corporate offshore cash tax amnesty (section 965) had a perfectly predictable knock-on effect, which was to convince corporate America that the one-time never-to-be-repeated tax amnesty would inevitably be followed by additional tax amnesties, if only multinationals would importune their legislators enough.<sup>36</sup> The 2004 law thus created a massive incentive to accumulate as much permanently reinvested earnings in the form of cash as possible.<sup>37</sup> At the same time, the Big Four accounting firms, no doubt chastened by their overzealous selling of risible corporate tax shelter deals, scaled up their educational mission to teach the less savvy U.S.-based multinationals how to generate serious quantities of stateless income.

The convergence of these two phenomena led to an explosion in stateless income strategies and in the total stockpile of U.S. multinationals' permanently reinvested earnings. But U.S. multinationals

are now hoist by their own petard. The best of the stateless income planners are drowning in low-taxed overseas cash, which today earns only negligible rates of interest. The meager earnings on the cash drag down earnings per share, while shareholders focus with laser intensity on that cash as more usefully deployed directly in their hands.

It is less than a secret that firms in this position really have no intention at all of "permanently" reinvesting the cash overseas, but instead are counting the days until the money can be used to goose share prices through stock buybacks and dividends. The Apple solution (domestic leverage) cannot absorb all this cash, as firms other than Apple with existing debt might find themselves overleveraged if they pursued this solution indiscriminately. And in turn, one hears whispers from time to time that the financial accountants to firms sitting on vast hoards of offshore cash are getting more and more uncomfortable accepting representations as to the use of the offshore cash that fly in the face of financial and commercial logic.

The obvious solution from the perspective of the multinationals would have been a second, and then a third and fourth, one-time-only repatriation holiday, but there are still hard feelings in Congress surrounding the differences between the representations made to legislators relating to how the cash from the first holiday would be used, and what in fact happened. The other *deus ex machina* resolution was thought to be fundamental corporate tax reform, because most observers believe that whatever the precise contours of that legislation, one of its key components will be to reset the clock on permanently reinvested earnings by requiring their inclusion in the income of U.S. shareholders at some discounted rate over some reasonable period of time. But congressional paralysis has led to growing existential despair, and multinationals' representatives and earnest policy wonks alike rightly fret that they may never live to see sensible fundamental corporate tax reform legislation.

Against this desperate backdrop, extraordinary measures can seem almost sensible, and so we see the rush by cash-rich firms to impose tax on all their shareholders, and to merge with less than ideal minipartners, in order to set themselves up as foreign public companies. Doing so does not by itself free the U.S. firm's tax haven subsidiary from the strictures of section 956 or permit the distribution of cash up the chain tax free, but it does open up the possibility to orchestrate what I have described as a "hopsotch" transaction.<sup>38</sup>

<sup>36</sup>The JCT staff in fact took this into account in its revenue estimate for the 2004 holiday, although in retrospect the staff perhaps underestimated the enthusiasm that corporate America would bring to the task. Kleinbard and Patrick Driessen, "A Revenue Estimate Case Study: The Repatriation Holiday Revisited," *Tax Notes*, Sept. 22, 2008, p. 1191.

<sup>37</sup>Thomas J. Brennan, "What Happens After a Holiday? Long-Term Effects of the Repatriation Provision of the AJCA," 5 *Nw. J. L. & Soc. Pol'y* 1 (2010).

<sup>38</sup>"Inverse Logic," *supra* note 1.

The idea, which I do not believe can be addressed through regulation or judicial challenge, is that section 956 has a fatal vulnerability in that it applies to loans made by a CFC only to a “United States shareholder” of that CFC. The new foreign public parent is not a U.S. shareholder, and as a result the tax haven subsidiary holding the offshore cash hoard can lend the cash directly to the new foreign parent, thereby skipping over the United States entirely. (Alternatively, the CFC could directly buy new foreign parent stock in the market.) From there, the public foreign company can use the cash to buy back “its” stock (which in an economic sense is just the old U.S. company’s stock by another name), to pay dividends, to invest in real assets in the United States, or to repay the acquisition debt incurred to finance the inversion transaction in the first place. The interest income earned by the tax haven subsidiary is subpart F income, but that also is true today.

Moreover, cash is fungible. The existing cash stockpile alternatively can indirectly fund foreign operations through low-interest loans to foreign affiliates located in the wholly foreign chain, while foreign operations held outside the U.S. chain of companies can fund U.S. domestic operations. The result is to reduce the importance of the offshore cash over time and to hold more and more of the group’s assets and income entirely outside the U.S. tax net.

The other reason for the wave of inversions relates to the same existential despair over the failure of Congress to engage with fundamental corporate tax reform, but this time the focus shifts to the tax imposed on U.S. domestic income. Many domestic-centric U.S. firms, particularly those in the services industries — say, a large chain of retail drugstores — actually pay federal corporate tax at effective rates not that far removed from the statutory rate. Companies in this situation have every reason to feel aggrieved that Congress has not addressed the high U.S. statutory rate, which burdens them disproportionately. An inversion transaction does little for those firms regarding their offshore cash, because they typically have little or none in a tax haven kitty, but the creation of an offshore parent located in a tax treaty jurisdiction does permit easy earnings stripping of the U.S. tax base on domestic operating income through newly created internal leverage, up to the ceiling set by section 163(j). But that ceiling is far too high, because it basically allows firms to strip out 50 percent of their earnings before interest, taxes, de-

preciation, and amortization.<sup>39</sup> After depreciation and amortization reduce what remains, there are slim pickings left for the U.S. Treasury.

These two reasons — hopscotch trades to put offshore cash into the hands of U.S. shareholders, and new avenues for eroding the tax base in respect of U.S. domestic operations — are sufficient to explain the current inversion mania. These motives do not apply with equal force to every firm that has explored an inversion transaction: Walgreens (which has now abandoned its inversion plans) has a large domestic tax base, a 37 percent effective tax rate, and essentially no foreign operations. Other firms have low effective tax rates, and very large stockpiles of offshore cash.

Until very recently, it might have been argued that inversions were naturally limited by the size of interested U.S. firms and the pool of available foreign merger partners. It was generally thought that those foreign merger partners were required to be (1) domiciled in a low-tax jurisdiction with a comprehensive tax treaty with the United States (for example, Ireland, the Netherlands, Switzerland, or the United Kingdom); (2) just the right size relative to an interested U.S. company (not too small to run afoul of section 7874, but no larger than necessary to accomplish the tax agenda that drives the deal); and (3) conducting a business that was at least a reasonably plausible business fit with the U.S. inverting company.

Now, attention has shifted to custom tailoring either a U.S. inverting firm (by spinning out some assets from a much larger U.S. company to a smaller U.S. vehicle suitable for inverting) or its foreign partner.<sup>40</sup> Mylan’s inversion, for example, involves a custom-tailored foreign merger partner;<sup>41</sup> AbbVie is itself a recent spinoff from Abbott Labs, although the spin and the inversion are not part of a single transaction. Through such “spinversions” and similar tactics, the pool of U.S. assets that might be inverted, and the pool of foreign merger partners, have substantially increased.

One additional motivation for inversions, which is not substantive but certainly accords with my own experience working on Wall Street for three decades, is herd behavior. CEOs find it difficult to be the only gazelle on the veldt that remains in place when all the others madly gallop off in one

<sup>39</sup>Sullivan, “The Many Ways to Limit Earnings Stripping,” *Tax Notes*, July 28, 2014, p. 377.

<sup>40</sup>Brooke Sutherland, “Spinversions: How a Mega Co. Can Join In on Tax-Cutting Deals — Real M&A,” *Bloomberg News*, July 10, 2014.

<sup>41</sup>Stephanie Soong Johnston, “Mylan to Acquire Abbott Drug Unit for \$5.3 Billion,” *Tax Notes*, July 21, 2014, p. 221.



direction or another. Because this reason sounds in psychology rather than tax policy, I do not consider it further.

Longer term, inversion transactions may open up additional stateless income planning opportunities, if one believes, for example, that over time Ireland will consistently be a more tax-congenial platform than the United States from which to headquarter one's base erosion strategies. (Interestingly, the Irish government may be a net loser in inversion transactions to date. The reason is that Ireland is not picking up significant new tax revenues from these deals, because in fact nothing changes; for example, senior executives in the United States do not pick up and move to the Emerald Isle. But the larger revenues of the expanded Irish parent company are treated as Irish for gross national product purposes, which has the consequence of increasing Ireland's share of EU budget costs.<sup>42</sup>)

The usual long-term strategy is to allow the foreign subsidiaries of the old U.S. parent to atrophy, at the same time that revenues ramp up in the entirely foreign chain descending from the new foreign public company. If one is patient, this does not require aggressive transfer pricing, exotic tax-free reorganizations, or the like; simply situating every new business opportunity in the wholly foreign chain, combined if needed with some leveraging of any high-taxed CFCs, does the trick. (Neither the United States nor the OECD treats pure business opportunities as subject to transfer pricing analysis.)

This third explanation has some explanatory power to it, but it is often overstated. The argument essentially is the one offered by Bresch of Mylan. Implicit in her competitiveness explanation for inversions is the idea that firms domiciled outside the United States today have an even easier time than do U.S. firms of generating stateless income, and that it is desirable to encourage an ever-accelerating slide down a slippery slope to negligible tax rates on multinational firms. In many cases, however (for example, the Schneider example discussed earlier), the claim that multinationals domiciled in other jurisdictions are making out even better than U.S. firms is not easily demonstrated, and it ignores anti-base-erosion developments like the OECD's BEPS project or the EU's common consolidated corporate tax base. The second leg to Bresch's argument essentially is analogous to claiming that if one country engages in export subsidies, all countries should. We have gotten past that race to the bottom in trade and in explicit subsidies, and it is

time we did so as well for tax mercantilist behaviors by sovereigns. Finally, this argument plainly would lead to economic distortions in markets where multinationals compete with domestic competitors in their own markets, since firms like Mylan already enjoy global effective tax rates lower than those imposed on wholly domestic firms in most of the markets in which these multinationals actually do business.<sup>43</sup>

Regardless of the desirability of export subsidies hidden in the tax code, I view this third reason for inversions as a less powerful motivation than the first two. Savvy U.S. multinational firms already enjoy very low effective tax rates, although of course future U.S. tax regimes are uncertain. Another reason to be skeptical that this reason is a principal motivation is to return to the observation that relatively few genuine U.S. inversion transactions took place in the 2004-2013 period, when measured against the overall volume of cross-border M&A deals. If U.S. firms were running far behind the pack in a race to the bottom, we would have seen many more inversions over this period, but in fact in many cases U.S. firms occupied the pole position.

The final reason to be skeptical is that this sort of strategy requires a long-term perspective. A firm reasonably should be reluctant to impose capital gains tax today on all its taxable owners with unrealized gains against the prospect that its effective tax rates years from now will be materially lower as an Irish rather than as a U.S. company, taking into account the risks that by then the BEPS "actions" may be both delivered and implemented, source countries generally more effective at policing their tax systems against multinational depredations, and the EU's common consolidated corporate tax base may have been implemented.

### What Then Should We Do?

It is very important to remove the false narrative of international business competitiveness from discussions about how policymakers should respond to the current wave of corporate inversions, because its continued presence in debates leads people to believe that allowing inversions to continue might be the lesser evil, if the alternative is to condemn U.S. firms to a punitively burdensome operating environment in which they will lose ground to multinationals domiciled elsewhere. I have limited patience for the idea of corporate national champions, but I recognize the idea's rhetorical power.

<sup>42</sup>Maureen Farrell, "Ireland: U.S. Tax Inversions Aren't Helping Us Much Either," *The Wall Street Journal*, July 8, 2014.

<sup>43</sup>Kleinbard, "The Lessons of Stateless Income," *supra* note 5, discusses these issues in much greater detail.

Once one understands, however, that U.S. multinational firms today operate in a tax environment that essentially is one of ersatz territoriality, with none of the safeguards of a well-designed territorial system, but with an odd balance-sheet-bloating (and admittedly generally stupid and inefficient) rule for where the fruits of offshore base erosion and profit shifting must be stored, the case for inaction essentially dissipates.

From the other direction, the case for action is urgent, both to protect the U.S. domestic tax base and to preserve existing law's premises of how the international tax system is supposed to operate. Inversions are an immediate threat to fiscal stability because they enable inverted firms to strip their U.S. domestic corporate tax base, and to use existing offshore cash to fund dividends or stock buybacks to U.S. shareholders, which today cannot be done without paying U.S. tax. (I briefly discuss the risk of tax revenue hemorrhaging below.) And once a company has inverted, it is gone: The United States will find it difficult to undo the damage to the tax base in subsequent corporate tax reform.

In my view, the necessary responses require legislation rather than Treasury regulations, but the measures that I suggest below rest on firm policy grounds and are properly constrained in their application to address the faults in the code's architecture that inversion transactions have made so salient. While large-scale corporate tax reform is necessary, the legislative solutions offered here do not in any way foreclose the shape of that reform; to the contrary, the more plausible prediction is that they will be integral components of any future tax reform legislation. For this reason, there is no reason to wait until a major tax reform bill can work its way into law, and every reason to act now.

The first component of the necessary legislative package is the most obvious: Revise section 7874 so that it parallels domestic law's consolidated tax return principles, by treating a reverse acquisition of a U.S. firm by a smaller foreign firm as a continuation of the U.S. firm for U.S. tax purposes. All that is required is to drop the operative rule of section 7874(a) as surplusage and to change the specified fraction in section 7874(b) from "80 percent" to "more than 50 percent." This is a simple application of commercial and economic common sense: In a world without tax advantages bestowed for thinking backwards, minnows do not swallow whales, or catfish swallow dolphins. The idea to reorder which is the acquirer and which the target in reverse acquisitions is completely noncontroversial in the domestic context for this reason, and its extension to the international arena not only helps to protect the U.S. tax base but ends a policy that rewards tax perversity over commercial reality.

The second component, which has very recently gained traction among some members of Congress, is to lower the excessively generous ceiling that section 163(j) sets on the quantum of U.S. corporate tax base erosion that we will tolerate regarding U.S. domestic earnings. Martin A. Sullivan recently published a description of 10 different proposals to bolster section 163(j) that have been offered to Congress since 2002.<sup>44</sup> Congress should choose one already and just do it.

A bulked-up section 163(j) would not be limited to inversion cases, nor should it be. It would apply whenever the United States is the source country rather than the residence in a cross-border relationship, and it would ensure that the source country income that economically is generated here is taxed here. For those policymakers who look over their shoulders at international norms, the theme that source countries (in an economic or commercial sense) are systematic losers to stateless income stratagems is the reason behind the OECD's BEPS project, and is a major reason for the thin capitalization statutes that many countries with territorial tax systems have adopted.<sup>45</sup> Protecting one's source country tax base from easy deprecations by foreign investors, where the income side may be taxed nowhere, and certainly not where it economically was earned, is what functional governments do.

Section 163(j) is intended to prohibit easy domestic base erosion through internal leverage. It has been suggested that the same principle should be extended to other deductible payments made by a U.S. company to its foreign parent, such as royalties. The idea is intuitively attractive but conceptually is more difficult than it seems at first blush.<sup>46</sup> Moreover, such an extension is not consistent with world norms (or arguably with some of the positions staked out by Treasury in negotiations over the BEPS action plans), when arm's-length transfer pricing requirements are still the operative instrument for limiting excessive zeal in this area. For both reasons, I would limit our ambitions today to section 163(j) intragroup interest expense cases.

The final necessary component of any legislative response to inversion transactions is an anti-hopscotch rule. Here the idea is to recognize that the existing offshore cash held by CFCs of U.S. firms was accumulated under an explicit premise that it would one day be taxed by the United States, when the cash was directly made available to the U.S. group through a dividend, or indirectly through a

<sup>44</sup>Sullivan, *supra* note 39.

<sup>45</sup>Kleinbard, "The Lessons of Stateless Income," *supra* note 5, at 140-144.

<sup>46</sup>*Id.*

loan to a U.S. affiliate, an investment in U.S. tangible assets, etc. Hopscotch low-interest loans that skip over a CFC's U.S. parent to go directly from the CFC to a new (or old, for that matter) foreign ultimate public company can be used to put value directly into the hands of former shareholders of the U.S. firm, or perhaps even into the CFC's immediate U.S. parent (through a downstream infusion from the new foreign ultimate parent); those loans can also be used to finance the upside-down merger itself. All these fit badly with the larger apparatus of subpart F. (With some care, the hopscotch loan from the CFC to the ultimate foreign parent can in turn be used to fund loans from the foreign parent to the U.S. group, to facilitate earnings stripping as well.) And because under section 482 intragroup loans can bear a low rate of interest, over time the effect is to drain untaxed earnings out from the subpart F net, as higher returns on the cash so lent accumulate outside the U.S. subgroup.

Like earnings stripping, the hopscotch loan phenomenon is not necessarily limited to true inversion cases, and neither should be the response. Again, the idea should be that whenever a U.S. firm has low-taxed offshore earnings, the indirect distribution of those earnings to or for the benefit of U.S. shareholders or the U.S. immediate parent should be tested under section 956 principles.

Section 956 therefore should be extended to address the problem of hopscotch trades. Legislation should include as section 956 income of a U.S. shareholder its CFC's loans to, or purchases of stock from, non-U.S. persons that either (1) control the U.S. shareholder or (2) are not U.S. corporations and are not themselves CFCs as to the U.S. shareholder but are controlled by the controlling non-U.S. shareholder of the U.S. shareholder. The second thought is meant to pick up the new entirely foreign chain of companies that join the U.S. chain in the merger. This rule would apply even to a non-inverted group (that is, a bona fide acquisition by a foreign company of a smaller U.S. target). It also would not change the current reach of section 956 within the U.S. subgroup of CFCs, so that loans from one CFC to another would not trigger 956.

Again, the solution is designed to be surgical, and to address a problem that was brought to the fore by inversions, but which ultimately is a fault in the code's architecture that logically should not be so limited. As a result, and like the bulking up of section 163(j), it is not intended as a punishment for inverting so much as it is the protection of the U.S. tax base through preserving the premises underlying current law.

In May 2014 the Joint Committee on Taxation staff estimated that a bill incorporating only the first of these three suggestions (the revision to section 7874's threshold from 80 percent to 50 percent) would raise about \$19.5 billion in revenues, compared with current law.<sup>47</sup> This estimate was delivered before the pace of inversion transactions intensified even further and variants like "spinversions" were widely discussed. I believe that legislation incorporating not only this proposal but also lowering the section 163(j) ceiling and an anti-hopscotch rule would, if analyzed today, carry with it a much higher revenue estimate.

These three proposals are targeted, economically and commercially neutral, and consistent with both current law and the probable shape of any future reform legislation. I would not go further, as for example by rethinking the definition of corporate residence, because such an initiative is not necessary today, and because the topic more fairly does belong in a larger conversation about a new international corporate tax system (similarly, broaden anti-decontra/legislation in respect of controlled foreign corporations properly belongs in comprehensive reform legislation). I have views as to whether this targeted legislation should be mildly retroactive or fully prospective, and temporary or nominally permanent, but these questions are politically charged, and at this point will be resolved through entirely political negotiations.

<sup>47</sup>Memorandum dated May 23, 2014, from JCT Chief of Staff Thomas Barthold to Karen McAfee.

## Mr. Secretary, Take the Tax Juice Out of Corporate Expatriations

By Stephen E. Shay



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Stephen E. Shay is a professor of practice at Harvard Law School. Shay thanks Nell Geiser and Molly Thomas-Jensen from Change to Win for drawing his attention to the Walgreens transaction and Cliff Fleming, Nell Geiser, Steven Rosenthal, Molly Thomas-Jensen, and others who prefer not to be identified for discussions about market activity and helpful comments on earlier drafts.

In this article, Shay describes the principal tax benefits companies seek from expatriating, and he outlines regulatory actions that can be taken without legislative action to materially reduce the tax incentive to expatriate.

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### A. Introduction

The lack of government response to the current wave of tax-motivated corporate expatriations is disheartening.<sup>1</sup> Senate Finance Committee Chair

<sup>1</sup>President Obama has spoken out against corporate expatriations. Treasury Secretary Jacob Lew has written letters to Senate Finance Committee Chair Ron Wyden, D-Ore., House Ways and Means Committee Chair Dave Camp, R-Mich., and ranking members of the congressional taxwriting committees urging immediate legislative action to stop corporate expatriations and calling for a “new sense of economic patriotism.” Wyden has also written a *Wall Street Journal* op-ed stating that any legislation will have a May 8, 2014, effective date (“We Must Stop Driving Businesses Out of the Country,” *The Wall Street Journal*, May 9, 2014). Sen. Carl Levin, D-Mich., and others have introduced legislation that would make expatriations more difficult to achieve (S. 2360; H.R. 4679). The Obama administration has included a similar proposal in its budget. In a reply to Lew, Finance Committee ranking minority member Orrin G. Hatch, R-Utah, has indicated his willingness to work on a short-term response short of tax reform, while objecting to what he believes are the political overtones of Lew’s call for economic patriotism.

Ron Wyden, D-Ore., Sen. Carl Levin, D-Mich., and Rep. Sander Levin, D-Mich., are to be praised for their leadership on this issue; however, in the current political environment there is little reason to believe that a statutory solution will be enacted. One looks in vain at the tax press each day to see what action is being taken, not just talked about, and as of this writing, nothing has been done. This article demonstrates that it is not necessary for Treasury to wait for Congress to act on corporate expatriations.

This article describes the principal tax benefits companies seek from expatriating and outlines regulatory actions that can be taken without legislative action to materially reduce the tax incentive to expatriate. These proposals for regulations are supported by existing statutory authority. They would be good policy and consistent with, or easily integrated with, publicly proposed tax reform proposals.

One of the Treasury secretary’s most important responsibilities is the health of the tax system under the laws adopted by Congress. Congress has given Treasury broad and in some cases sweeping authority to adopt regulations, including specific grants of authority that bear on issues at the heart of corporate inversions. The proposals here are just one set of alternatives available to Treasury that could powerfully affect the incentive to expatriate. Others no doubt have improvements to these or other alternatives to propose; however, when a material portion of the U.S. corporate tax base is at risk, doing nothing borders on the irresponsible.

### B. Tax Benefits of Corporate Expatriation

Corporate expatriations afford two principal tax benefits. First, the new foreign parent (or one of its non-U.S. subsidiaries) can strip the U.S. tax base (for example, through distribution of a note from the U.S. group) to achieve cash and book tax savings. Second, the untaxed foreign earnings of former U.S. parent company’s controlled foreign corporations can be redeployed for use by non-CFC affiliates, including for group debt reduction and stock buy-backs by the new foreign parent, without causing a taxable deemed repatriation to the former U.S. parent.<sup>2</sup>

<sup>2</sup>In some situations, it may be possible to deny tax benefits from these strategies under existing tax doctrines. I do not  
(Footnote continued on next page.)

## COMMENTARY / VIEWPOINTS

The financial statement and cash tax savings that derive from introducing substantial intercompany debt into the U.S. group to strip the U.S. tax base into a jurisdiction where the interest income will be subject to much lower rates of tax are a major driver of corporate expatriations. In their report on the rumored Walgreens inversion, Barclays Bank PLC research analysts estimated that Walgreens could offset just under half of its earnings before interest, taxes, depreciation, and amortization with intercompany interest and not run afoul of the interest deduction limitation rules of section 163(j).<sup>3</sup> They estimated that the tax savings (for one year) would be \$783 million. It is not surprising that Wall Street investment bankers are pushing these deals and that deal activity is reaching a frenzied level.

Companies involved in expatriations from the early 2000s have filed tax court petitions to protect the fruits of their huge leveraging of U.S. operations.<sup>4</sup> There is reason to suspect that the IRS will have mixed success combating this stripping of the U.S. tax base. In 2012 the IRS lost its debt-equity case against ScottishPower Ltd.'s hybrid instrument.<sup>5</sup> In a 2009 Tax Court case, the IRS conceded 100 percent of a huge GlaxoSmithKline PLC deficiency relating to a \$13.5 billion intercompany obligation to GlaxoSmithKline Investments (Switzerland) GmbH.<sup>6</sup>

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discuss this possibility simply because those risks have not been sufficient to deter corporate expatriations.

<sup>3</sup>Meredith Adler and Eric Percher, "Walgreen Co., Investors in the Driver's Seat; Upgrading to Overweight," Barclays Research, at 36 (June 18, 2014) ("Put another way, as much as 50 percent or more of Walgreen's annual adjusted taxable income (which would otherwise be paid as a taxable dividend to the [new foreign] parent) may be effectively exempted from U.S. income taxes by recapitalizing Walgreens with intercompany debt"). See also Americans for Tax Fairness and Change to Win, "Offshoring America's Drugstore, Walgreens May Move Its Corporate Address to a Tax Haven to Avoid Paying Billions in U.S. Taxes" (June 2014), available at <http://walgreenstrategywatch.org/wp-content/uploads/2014/06/OffshoringAmericasDrugstore.pdf>.

<sup>4</sup>All of the former Tyco International Ltd. companies have filed petitions contesting the disallowance of interest expense on intercompany debt. See Matthew Madara, "Tyco Petition Seeks to Avoid Billions in Adjustments," *Tax Notes*, Sept. 2, 2013, p. 976.

<sup>5</sup>*NA General Partnership v. Commissioner*, T.C. Memo. 2012-172.

<sup>6</sup>*GlaxoSmithKline-Kline Holdings (America) Inc. v. Commissioner*, Nos. 18940-08, 18941-08 (T.C. Nov. 18, 2009). See Jasper L. Cummings, Jr., "Income Stripping by Interest Deductions," *Tax Notes*, Dec. 2, 2013, p. 971 ("The IRS knows that the debt/equity argument is messy and hard to win against a taxpayer that has tried to plan around it. For example, in 2009 the IRS conceded 100 percent of a huge deficiency assessment contested by GlaxoSmithKline Holdings in the Tax Court. The debt and the interest paid on it to the foreign parent were pretty obviously a sort of income stripping, which the IRS effectively blessed").

A second major incentive to invert is to lend untaxed offshore controlled foreign subsidiary (CFC) earnings to non-U.S. affiliates (that are not direct or indirect subsidiaries of the former U.S. parent), to repay debt (including debt incurred to make the acquisition), to fund distributions in respect of stock and, indirectly, to make up for funding of the U.S. group.<sup>7</sup> To achieve these tax savings, it is necessary to avoid constructive dividend foot faults,<sup>8</sup> but the case law is quite favorable for taxpayers. With diligence and planning, the tax risks are manageable. The pressure to be able to use untaxed foreign subsidiary earnings held in cash offshore is evidenced by the lengths that Hewlett-Packard Co. went to in trying to circumvent the investment in U.S. property rules of section 956.<sup>9</sup>

Cross-border, related-party debt equity issues need to be addressed in tax reform and, indeed, have been targeted by Camp's tax reform plan and an administration budget proposal. There is clear regulatory authority, however, to address excessive related-party debt under current law. A second major object of a corporate expatriation is to obtain access to offshore cash, earned while the foreign subsidiary was subject to U.S. taxing jurisdiction, without U.S. taxation of the earnings that gave rise to the cash. Clever tax planners use corporate expatriations to insert a foreign parent and use loans to try to hopscotch over or out of the U.S. tax base.<sup>10</sup> Treasury has both conventional regulatory authority and extraordinary multiparty financial regulatory authority to protect against this latest form of avoidance of these rules.

### C. Reduce Expatriation Tax Incentives

**1. Related-party debt-to-equity limitation.** The explicit language of section 385 gives the Treasury secretary direct and powerful regulatory authority to reclassify debt as equity and thereby transform a deductible interest payment into a nondeductible

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<sup>7</sup>Credit Suisse European Pharma Team, Shire + AbbVie 1 (June 24, 2014) ("Reducing the US tax penalty on repatriation of ABBV's overseas earnings is the key driver of the transaction, in our view").

<sup>8</sup>Under the tax law, generally, a corporate action gives rise to a constructive dividend if it confers a specific economic benefit on its shareholder. See generally Bittker and Eustice, *Federal Income Taxation of Corporations and Shareholders*, para. 8.06.

<sup>9</sup>See Senate Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations Hearing on Offshore Profit Shifting and the U.S. Tax Code, Exhibit 1, "Memorandum From Chairman Carl Levin and Senator Tom Coburn to Subcommittee Members, Offshore Profit Shifting and the Internal Revenue Code," 24-27 (Sept. 20, 2012), available at <http://www.hsgac.senate.gov/subcommittees/investigations/hearings/offshore-profit-shifting-and-the-us-tax-code>.

<sup>10</sup>Edward D. Kleinbard, "Tax Inversions Must Be Stopped Now," *The Wall Street Journal*, July 21, 2014.

dividend.<sup>11</sup> Under section 385, it is possible and appropriate to identify cases in which the use of related-party debt exceeds thresholds that should be acceptable in a particular case.

A variation of Camp's proposal to limit excess domestic indebtedness for U.S. members of a worldwide affiliated group, and the administration's budget proposal to limit earnings stripping, could be implemented as a regulation under section 385. The target is excessive related-party debt. This debt routinely is subordinated to external debt, directly or structurally. Consequently, two or more of the factors in section 385(b) will be relevant to the analysis of excess domestic indebtedness.<sup>12</sup> One proposal would be described roughly as follows:

A U.S. corporation that is an expatriated entity would classify as equity any debt issued to a foreign member of the expanded affiliated group that is not a CFC to the extent that, at the close of the year of issuance, the U.S. corporation otherwise would have excess U.S. indebtedness. Excess U.S. indebtedness would be determined according to the lesser of the following two amounts:

- The amount by which the total indebtedness of the U.S. members of the expanded affiliated group exceeds 110 percent of the debt those members would hold if their aggregate debt-to-equity ratio were equal to the ratio of debt-to-equity of the expatriated entity's affiliated group, averaged

for the three years prior to the expatriation date and determined without regard to intragroup debt.

- The amount of U.S. corporation debt with respect to which net interest expense of the U.S. corporation would exceed 25 percent of the U.S. corporation's average adjusted taxable income for the three years prior to the year of debt issuance.<sup>13</sup>

If this provision were adopted, Barclays' projected benefit of the Walgreens intercompany debt would be reduced by hundreds of millions of dollars. That would change the calculus of a decision to expatriate, even if it would not change the decision in every case.

Section 385 is not normally thought of as an antiabuse provision (indeed, it has hardly been thought of at all since it was amended in 1992) and this proposal is to apply it to only a subset of related party cases — those involving expatriated entities. The plain language of the statutory provision, however, authorizes its application to a particular factual situation and therefore supports a regulation addressing expatriated entities, which is comparable to a group found by Treasury in 2007 to engage in earnings stripping against which section 163(j) was ineffective.<sup>14</sup>

Why limit this proposal to an expatriated entity? Why not apply it to every foreign parent group? Also, why not extend the use of section 385 to pick up base erosion cases in which interest income on

<sup>11</sup>Section 385(a) provides in relevant part: Section 385. Treatment of certain interests in corporations as stock or indebtedness

(a) Authority to prescribe regulations. — The Secretary is authorized to prescribe such regulations as may be necessary or appropriate to determine whether an interest in a corporation is to be treated for purposes of this title as stock or indebtedness (or as in part stock and in part indebtedness).

(b) Factors. — The regulations prescribed under this section shall set forth factors which are to be taken into account in determining *with respect to a particular factual situation* whether a debtor-creditor relationship exists or a corporation-shareholder relationship exists. The factors so set forth in the regulations may include among other factors:

...  
 (2) whether there is subordination to or preference over any indebtedness of the corporation,  
 (3) the ratio of debt to equity of the corporation,  
 ... , and  
 (5) the relationship between holdings of stock in the corporation and holdings of the interest in question.  
 [Emphasis added.]

<sup>12</sup>As a matter of textual statutory interpretation, none of the factors listed in section 385 need to be invoked. The only requirement of the statute is that Treasury set forth factors to take into account a particular factual situation.

<sup>13</sup>Some definitions and rules of application drawn from the various proposals flesh out this approach:

- If the U.S. corporation is a member of a group filing a U.S. consolidated return, the rules would treat the consolidated return participants as a single taxpayer.
- An expanded affiliated group is one or more chains of corporations, connected through stock ownership with a common parent that would qualify as an affiliated group under section 1504, except the ownership threshold of section 1504(a)(2) is applied using 50 percent rather than 80 percent and the restriction on inclusion of a foreign corporation under section 1504(b)(3) is disregarded for purposes of identifying the worldwide affiliated group. This is the definition in section 7874(c)(1).
- Net interest expense is the amount of interest paid or accrued in the tax year in excess of the amount of interest includable in gross income for the same tax year, as defined in section 163(j)(6)(B).
- Adjusted taxable income is taxable income increased by deductible losses, interest, depreciation and amortization, qualified production expenses, and so on as defined in section 163(j)(6)(A).

The regulations would provide antiavoidance rules and rules for the treatment of partnership indebtedness, allocation of partnership debt, interest, or distributive shares.

<sup>14</sup>Treasury, "Earnings Stripping, Transfer Pricing, and U.S. Income Tax Treaties," at 21-31 (Nov. 2007).

## COMMENTARY / VIEWPOINTS

indebtedness is not taxed in the hands of the holder? Both of these ideas, and more, could be adapted to section 385. There is no doubt that a more comprehensive approach to protecting the U.S. tax base would be preferred as a pure policy matter. Since this proposal is intended to be a stopgap measure until the adoption of tax reform, and since rapid adoption is *critical*, I would opt to keep the fix limited to expatriation cases.<sup>15</sup>

**2. Protecting deferred U.S. taxation of CFC earnings.** The U.S. tax rules for deferring U.S. tax on active earnings of CFC subsidiaries generally are conditioned on not using the assets of the foreign subsidiary, directly or indirectly, for the benefit of the U.S. parent.<sup>16</sup> Thus, U.S. rules generally cause foreign subsidiary loans to the U.S. parent, use of foreign subsidiary assets to secure U.S. parent debt, or even foreign subsidiary guarantees of U.S. parent debt as deemed distributions of the untaxed earnings. The policy behind these rules is that CFC earnings that have not been subject to U.S. taxation should not be allowed to be used on a pretax basis for the benefit of the U.S. parent or its U.S. affiliates.

The insertion of a foreign holding company in a corporate expatriation should not allow the use of untaxed foreign subsidiary earnings outside the scope of current or future U.S. corporate tax and circumvent the U.S. tax system. This tax avoidance purportedly is accomplished by lending CFC earnings that have not been taxed by the United States to the new foreign parent or non-CFC members of the group or, over time, by decontrolling the CFC so as to take the CFC outside the scope of the U.S. rules for taxing these earnings.

In a corporate expatriation transaction, shareholders of the former U.S. parent company transfer their shares in exchange for shares of the new foreign parent company.<sup>17</sup> For the transaction to be covered by section 7874, the former shareholders of the expatriated U.S. parent must own between 60 and 80 percent of the new foreign parent.<sup>18</sup> The CFC

subsidiaries of the expatriated U.S. company continue to be subject to the deferred U.S. tax rules (as long as they are not decontrolled). Regulatory authority could be used to ensure that the inversion is not used to gain access to earnings that should be subject to deferred U.S. tax in companies that are not owned by the expatriated U.S. companies. This would protect the deferred U.S. taxation of untaxed CFC earnings and the integrity of section 956 rules for investments in U.S. property.

Multiple sources of regulatory authority may apply, individually or in combination, to support application of section 956 to corporate expatriation tax avoidance schemes. These provisions include sections 956(e), 7701(l), and 7874(g),<sup>19</sup> as well as section 7805.<sup>20</sup>

In the corporate expatriation context, the surrogate foreign corporation is inserted between the former shareholders and former U.S. parent (as part of an acquisition of a foreign target). If (i) a subsidiary of the former U.S. parent makes a loan to the new foreign parent (or a member of its group), and (ii) the new foreign parent (or a member of its group) makes a loan to the former U.S. parent (or any expatriated U.S. entity), the CFC should be considered to be financing, directly or indirectly, the loan to the U.S. person. In this intercompany loan case, the CFC loan should be considered made to an

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Location: An Essay on Mobility's Place in Optimal Taxation," 63 *Nat. Tax J.* 843, 856 (2010). The acquisition of a real asset should not immunize the tax avoidance part of the transaction, which is the use of a new holding company to avoid the use of CFC earnings for the benefit of the former U.S. parent (or its shareholders).

<sup>19</sup>Section 956(e) provides:

(e) Regulations.—The Secretary shall prescribe such regulations as may be necessary to carry out the purposes of this section, including regulations to prevent the avoidance of the provisions of this section *through reorganizations or otherwise*. [Emphasis added.]

Section 7701(l) provides:

(l) Regulations relating to conduit arrangements.—The Secretary may prescribe regulations recharacterizing any multiple-party financing transaction as a transaction directly among any 2 or more of such parties where the Secretary determines that such *recharacterization is appropriate to prevent avoidance of any tax imposed by this title*. [Emphasis added.]

Section 7874(g) provides in part:

(g) Regulations.—The Secretary shall provide such regulations as are necessary to carry out this section, including regulations providing for *such adjustments to the application of this section as are necessary to prevent the avoidance of the purposes of this section*. [Emphasis added.]

<sup>20</sup>The regulatory approaches described in this note do not exhaust the regulatory authority alternatives. Other provisions that could be looked to include sections 7701(o) and 269.

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<sup>15</sup>As a practical matter of political economy, a broader proposal would attract enormous lobbying by foreign parent groups and their trade associations (such as the Organization for International Investment). There will be enough time consumed by lobbyists for representatives of U.S. multinationals.

<sup>16</sup>See generally section 956 and regulations thereunder.

<sup>17</sup>If there is sufficient continuing ownership, the new foreign parent is classified as a "surrogate foreign corporation." The former U.S. parent and some related U.S. persons are the expatriated entities.

<sup>18</sup>In other words, as part of the expatriation transaction, the former U.S. parent acquires a foreign company whose equity value is at least 20 percent of the combined company. This is a meaningful transaction. It nonetheless is an example of what Joel Slemrod dubs the "avoidance-facilitating effect" of real decisions. See Joel Slemrod, "Location, (Real) Location, (Tax)

(Footnote continued in next column.)

expatriated U.S. entity and be analyzed as an investment in U.S. property. This would be a fairly straightforward use of section 7701(l) regulatory authority.

What if a CFC subsidiary lends funds to the new foreign parent and the new foreign parent buys back stock from its shareholders? The loan to the new foreign parent is hopscotching over the former U.S. parent and not returning to the U.S. parent. However, the buyback has the same effect as if the CFC made the loan to the U.S. parent to buy back its stock (before the acquisition) and then distributed the repayment obligation to the new foreign parent (after the acquisition). Alternatively, it has the same effect as a loan to the new foreign parent to acquire shares in the former U.S. parent.<sup>21</sup> In either case, the asset is in the hands of the new foreign parent and not the U.S. parent, but the untaxed earnings are indirectly used to acquire stock in the former U.S. parent. Although not as clear as in the intercompany loan case, the combined authority of sections 956(e) and 7701(l) could support treating the loan as an investment in U.S. property.

The following proposal, again described in rough preliminary language, could be adopted under the regulatory authority of the sections described above:

If the assets of a CFC subsidiary of the former U.S. parent (an expatriated entity) are used to make a loan to the new foreign parent (i.e., the surrogate foreign corporation) or a non-CFC subsidiary thereof, and either (i) the surrogate foreign corporation makes a distribution to its shareholders in redemption of its stock (within a time period to be specified), or (ii) within the applicable period (defined in section 7874(d)(1) as 10 years from the corporate expatriation) the surrogate foreign parent or a member of its expanded affiliated group that is not a CFC holds an obligation of the former U.S. parent or a member of its affiliated group, the loan by the CFC should be treated as U.S. property under section 956(c).

This approach would use the section 956 rules to operate in respect of untaxed CFC earnings and profits hopscotched around the U.S. parent to non-CFC foreign affiliates when loans are made to (U.S.) expatriated entities or stock is bought back from shareholders.

<sup>21</sup>If the loan is used to buy back shares of the foreign parent that were issued to shareholders of the foreign target, there could be a separate question of how those shares should be treated for purposes of section 7874, but that is beyond the scope of this discussion.

## D. Evaluation of Regulatory Action

**1. Overview.** The obvious advantage of taking regulatory action is the ability to act quickly. That is especially important because more and more companies are planning or seeking transactions that take advantage of apparent statutory loopholes. One banker has told me he expects the volume of deals to be announced in September of this year to be double the volume of deals announced in June and July. The alternatives suggested above do not prohibit corporate expatriation transactions, but they would change the tax calculus of having a non-U.S. parent in relation to use of earnings-stripping intercompany debt and CFC earnings.<sup>22</sup>

The exercise of regulatory authority changes the default position. Instead of waiting for Congress to act and relying on the market to deal with the risk of losing the corporate tax base in the meantime (in hopes there would be an inadequate supply of foreign targets<sup>23</sup> or the price or risk of acquiring foreign targets goes too high), adopting regulations first would reduce the risk to the U.S. corporate tax base while Congress considers how to address the problem in legislation as part of tax reform or otherwise.

A second advantage is that regulatory action also may reduce tax benefits to companies that have already undertaken tax-motivated expatriations. It is appropriate to limit, as much as is possible under the rules of section 7805, the fruits of abusive tax-motivated transactions.

**2. Revenue and politics.** The Stop Corporate Inversions Act of 2014 is estimated by the Joint Committee on Taxation to raise \$19.5 billion over 10 years. A regulatory change is not treated as raising revenue until revenue is received (that is, loss of revenue does not occur). It does not have the benefit of making available a revenue offset for Congress to

<sup>22</sup>As discussed above, non-U.S.-parent groups have inappropriate advantages in reducing the U.S. corporate tax base. These proposals should apply to foreign parent groups as well as to expatriation cases; however, for reasons discussed above, more comprehensive proposals could be adopted later or as part of tax reform.

<sup>23</sup>The incentives for managements and bankers are to do deals. Investment bankers have been generating lists of potential foreign targets that suggest the supply is ample for some time. The Abbott Laboratories-Mylan "spinversion" suggests that there are a very large number of potential targets within the portfolio of foreign assets of existing U.S. multinationals. Companies that already have expatriated are begetting additional potential foreign targets. Each of the following inverted companies has engaged in spinoffs of companies at least one of which has become a target: Tyco (split into three companies, including Covidien PLC, a target of Medtronic Inc.), Covidien (a former Tyco company has spun off Mallinckrodt Pharmaceuticals), and Nabors Industries Ltd.



use for an alternative purpose. This is not a principled reason to forgo a regulatory change if a legislative change is unfeasible. For purposes of the country's fiscal health, the prevention of revenue loss by a regulatory change is the same as if implemented by statute.

The politics of a change are speculative. It is hard to find many people outside Wall Street (and Abbott Laboratories<sup>24</sup>) who think tax-motivated corporate expatriations are a good thing, but that's not the end of the political calculus. Some politicians may believe this is a good issue with which to attack their opponents for failing to adopt legislation. Others may believe the administration is the loser if there is a failure to act legislatively. Some may think politicians from both parties are losers if there is a failure to address the issue. The latter group should welcome Treasury action if Congress is incapable of acting. Others may oppose regulatory action for fear that President Obama would get credit. Some might object to any action out of a preference for smaller government (which rests on the heroic assumption that expenditures will be reduced instead of debt financed).

Irrespective of one's political calculus, the policy question is how much risk to U.S. welfare there is from inaction in relation to cost from regulatory action. If the risks outweigh the costs, action is called for. Even acknowledging my revenue loss aversion bias, regulatory action is called for in the current circumstances.

**3. Intercompany debt.** Congress has addressed debt-equity issues in recent years by limiting deductions for interest, rather than classifying an instrument as debt or equity. An advantage of deduction limitation approaches is that they generally have a self-adjustment mechanism so that if circumstances of the debt issuer change, greater or lesser interest deductions are allowed. In contrast, the U.S. practice generally has been to classify a debt instrument on issuance and to retain that classification. This is clunky and generally requires a taxpayer to issue a new instrument in order to change the classification. Classification as equity not only eliminates the interest deduction, it also causes cross-border payments qualifying as dividends to be subject to withholding tax. The proposal described above is limited to intercompany indebtedness within an expanded affiliated group

<sup>24</sup>Myles White, "Ignoring the Facts on Corporate Inversions: Don't Believe Absurd Claims About Companies Abusing the Tax Code or Being Unpatriotic," *The Wall Street Journal*, op-ed (July 17, 2014), available at <http://online.wsj.com/articles/miles-d-white-ignoring-the-facts-on-corporate-inversions-1405638376?KEYWORDS=Miles+White>.

so the taxpayer controls the amount of intercompany debt and its consequences. The clunkiness should be manageable.<sup>25</sup>

It is important to understand that even if the United States were to lower its corporate tax rate and adopt a territorial approach to exempting foreign business income, there would be incentives to strip the U.S. tax base — many of which would be identical to the incentives that exist under the current regime. The structural changes in the proposals described above would remain important after those reforms as well as under current law. Moreover, this brief discussion does not address the use of intangibles and other devices to strip the U.S. tax base. Proposals to address those abuses also are needed, but they simply are not as important in affecting the calculus of boardrooms that are considering corporate expatriations as intercompany debt and use of offshore cash. A person involved in many deals estimates that without these two incentives, 75 percent of the deals in process would not happen.

**4. Combating avoidance of deferred U.S. taxation.** Companies considering expatriating have earned income deferred from U.S. tax and now want to avoid the tax. Congress has accorded Treasury extraordinary authority to pursue complicated international structures that sidestep U.S. tax rules, including the rules under section 956 designed to prevent use of deferred offshore earnings on a pretax basis for the benefit of the U.S. company. This authority has been used numerous times and often aggressively. Congress over the years has clearly indicated that it does not support tax-motivated corporate expatriations. Inserting a new foreign parent company should not be allowed as a means of sidestepping rules that protect the deferred U.S. tax on untaxed earnings.

Failing to act on this dimension will make future tax reform even harder. If corporate expatriations continue at a breakneck pace, there will be further divisions in the business community regarding those who have already avoided U.S. tax on their CFC earnings and those that would have to pay the toll charge that in all of the tax reform proposals is a condition to shifting to a foreign exemption

<sup>25</sup>Indeed, as David Rosenbloom has observed, treating a group member as a creditor for tax purposes is a legal fiction with little substance. H. David Rosenbloom, "Banes of an Income Tax: Legal Fictions, Elections, Hypothetical Determinations, Related Party Debt," 26 *Sydney Law Rev.* 17 (2004) ("There seems to be only one serious problem with related party debt: by most standards of economics, 'substance,' or common sense, it is not debt. That is, related party debt is generally not compensation for money lent by one person to another. Rather, it is a transfer of funds from one incorporated pocket to another, usually for tax-reduction purposes"), available at <http://www.austlii.edu.au/au/journals/SyDLRev/2004/2.html#Heading87>.

system. This is just one reason why Congress should encourage the administration to take the steps outlined above.

### E. Conclusion

The proposed regulatory changes would materially reduce the incentive for a U.S. corporation to expatriate for tax-motivated reasons by reducing the cash and book tax benefits from expatriating. These approaches would not prevent cross-border combinations that are grounded on real business objectives. They are supported by existing statutory authority and integrate well with future tax reform. Most important, they would stanch the rush to the exit that is motivated by loopholes in our existing tax rules and increase the ability to work toward real international tax reform in the future. Without action, there may be little corporate tax base to reform.

The U.S. Treasury raises more revenue than any other institution in the world. The tax system that accomplishes this task requires constant attention and protection — market forces cannot be relied upon to fix problems. Without tax revenue, the public goods the federal government provides cannot be purchased, vital income transfers cannot be made, and individuals suffer as a result. When corporations do not pay their share, other taxpayers have to make up the difference. Failing to address tax-motivated corporate expatriations risks real damage to the U.S. tax structure. The tools are available; it is time to use them.

## ***Petaluma* and the Limits Of Treasury's Authority**

By Andy S. Grewal

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In this article, Grewal examines the fundamental administrative law questions raised in *Petaluma v. Commissioner*, pending before the D.C. Circuit.

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In *United States v. Woods*,<sup>1</sup> the Supreme Court seemingly resolved a jurisdictional issue and a penalty issue regarding son-of-BOSS transactions involving partnerships.<sup>2</sup> On the jurisdictional issue, the Court held that section 6226(f) allows a TEFRA court to consider the application of the gross valuation misstatement penalty to the inflation of outside basis in a sham partnership.<sup>3</sup> The Court also seemingly resolved the substantive penalty issue, concluding that the gross valuation misstatement penalty applies to the inflation of outside basis in a sham partnership.

However, as I have previously explained, the Court's opinion does not definitively resolve either issue.<sup>4</sup> On the jurisdictional issue, the parties failed to present a threshold regulatory question that could preclude a TEFRA court from considering any aspect of a case involving a sham partnership. On the penalty issue, the Court itself doubted the validity of reg. section 1.6662-5(g), which extends the gross valuation misstatement penalty to zero basis circumstances.<sup>5</sup> But because the taxpayers in

<sup>1</sup>134 S. Ct. 557 (2013).

<sup>2</sup>For analysis of the bond and option sales strategy transaction and its variants, see Karen C. Burke and Grayson M.P. McCouch, "COBRA Strikes Back: Anatomy of a Tax Shelter," 62 *Tax Law.* 59 (2008).

<sup>3</sup>"TEFRA court" does not refer to any special type of federal court, but rather to a court that is conducting a partnership-level proceeding under the procedures established by the 1982 Tax Equity and Fiscal Responsibility Act, P.L. 97-248, 96 Stat. 324 (1982).

<sup>4</sup>See Andy S. Grewal, "The Missed Jurisdictional Argument in *United States v. Woods*," 33 *BNA Tax Management Weekly Rpt.* 100 (2014), available at <http://tinyurl.com/WoodsJurisdiction>.

<sup>5</sup>See reg. section 1.6662-5(g) ("The value or adjusted basis claimed on a return of any property with a correct value or adjusted basis of zero is considered to be 400 percent or more of the correct amount. There is a gross valuation misstatement with respect to such property, therefore, and the applicable penalty rate is 40 percent"). For a sham partnership, each partner's outside basis is zero.

## **Eric Toder**

Eric Toder is an Institute Fellow at the Urban Institute and co-director of the Urban-Brookings Tax Policy Center. Dr. Toder's recent work includes papers on what the US can learn for other countries' territorial tax systems, designing a carbon tax, corporate tax reform, net benefits of payroll tax expenditures, who benefits from tax-exemption of municipal bond interest, ways of limiting tax expenditures, using a carbon tax to pay for corporate rate cuts, cutting tax preferences to pay for lower tax rates, tax expenditures and the size of government, tax policy and international competitiveness, value added taxes, the home mortgage interest deduction, trends in tax expenditures, the distributional effects of tax expenditures, charitable tax incentives, taxation of saving, and the tax gap. Dr. Toder previously held a number of positions in tax policy offices in the U.S. government and overseas, including service as Deputy Assistant Secretary for Tax Analysis at the U.S. Treasury Department, Director of Research at the Internal Revenue Service, Deputy Assistant Director for Tax Analysis at the Congressional Budget Office, and consultant to the New Zealand Treasury. He received his Ph.D. in economics from the University of Rochester in 1971.

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He received his B.A. from Brown University and his J.D. Degree from Harvard Law School. After law school he became a Legislation Attorney for the Joint Committee on Taxation, U.S. Congress, and later served as the Committee's Legislation Counsel. He has served as an Adjunct Professor at Georgetown University Law Center, where he taught International Taxation in the Master of Taxation graduate law program.

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## Michael J. Graetz

Michael J. Graetz is the Isidor and Seville Sulzbacher Professor of Law and the Columbia Alumni Professor of Tax Law at Columbia Law School. Before coming to Columbia in 2009, he was the Justus S. Hotchkiss Professor of Law at Yale University, where he had taught since 1983. Before Yale, he was a professor of law at the University of Virginia and the University of Southern California Law Schools and Professor of Law and Social Sciences at the California Institute of Technology. His publications on the subject of Federal taxation include a leading law school text and more than 60 articles on a wide range of tax, international taxation, health policy, and social insurance issues in books and scholarly journals. His most recent book is *100 Million Unnecessary Returns: A Simple, Fair, and Competitive Tax Plan for the United States*, published by Yale University Press, in 2008. His previous books include *Death by a Thousand Cuts: The Fight over Taxing Inherited Wealth* (Princeton University Press; 2005); *True Security: Rethinking Social Insurance* (Yale University Press, 1999); and *The U.S. Income Tax: What It Is, How It Got That Way and Where We go From Here*, (W.W. Norton & Co, 1999) (a paperback edition of the book originally published as *The Decline (and Fall?) of the Income Tax*) and *Foundations of International Income Taxation* (Foundation Press, 2003.) He is also the co-author of a leading law school coursebook, *Federal Income Taxation: Principles and Policies*, (Foundation Press; 2009).

During January-June 1992, Michael Graetz served as Assistant to the Secretary and Special Counsel at the Treasury Department. In 1990 and 1991, he served as Treasury Deputy Assistant Secretary for Tax Policy. Professor Graetz has been a John Simon Guggenheim Memorial Fellow, and he received an award from Esquire Magazine for courses and work in connection with provision of shelter for the homeless. He served on the Commissioner's Advisory Group of the Internal Revenue Service. He served previously in the Treasury Department in the Office of Tax Legislative Counsel during 1969-1972. He is a fellow of the American Academy of Arts and Sciences.

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He has been closely involved in international tax policy issues in Europe and elsewhere. He has worked with the OECD's Committee of Fiscal Affairs and the European Commission, in particular with the Ruding Committee and as part of the panel of experts used by the Commission in developing its 2001 proposals for reform of European corporation taxes. He has been actively involved in tax policy in a number of countries. He is Policy Watch editor of *International Tax and Public Finance*.

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Professor Kleinbard's work focuses on the taxation of capital income, international tax issues, and the political economy of taxation. His recent papers include *Stateless Income* (Florida Tax Review), *The Lessons of Stateless Income* (Tax Law Review), *The Better Base Case* (Tax Notes), *Paul Ryan's Roadmap to Inequality* (Tax Notes), *Herman Cain's 9-9-9 Plan* (Tax Notes), *Tax Expenditure Framework Legislation* (National Tax Journal) and *An American Dual Income Tax: Nordic Precedents* (Northwestern J. of Law and Social Policy). Professor Kleinbard has testified before the Congress on tax policy matters, and has written opinion pieces for the New York Times, the Huffington Post, CNN.com, and other media outlets.

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## **Senator Orrin Hatch**

Now in his seventh term as Utah's senator, Orrin Hatch is the most senior Republican in the Senate. Among his many initiatives are the Balanced Budget Amendment to the Constitution, the Strengthening Our Commitment to Legal Immigration and America's Security Act, the Religious Freedom Restoration Act, the Americans with Disabilities Act, the Antiterrorism and Effective Death Penalty Act, and the Utah School Trust Lands Exchange Act.

Senator Hatch continues to lead in the fight to repeal the unconstitutional individual mandate and other provisions in the \$2.6 trillion health law called ObamaCare. He is on the front lines of legislative battles to secure the nation's borders, stop the forced unionization of American workers and to bring fiscal restraint back to Washington by ending the reckless spending that threatens to bankrupt the nation.

Senator Hatch is Chairman of the Senate Committee on Finance and a member of the Judiciary Committee; the Senate Health, Education, Labor, and Pensions Committee; and the Joint Committee on Taxation. He also has the honor of serving on the Board of Directors for the Holocaust Memorial Museum in Washington, D.C.