

2014

Corporate Inversions and the Unbundling of Regulatory Competition

Eric L. Talley
Columbia Law School, etalley@law.columbia.edu

Follow this and additional works at: https://scholarship.law.columbia.edu/faculty_scholarship



Part of the [Securities Law Commons](#), and the [Tax Law Commons](#)

Recommended Citation

Eric L. Talley, *Corporate Inversions and the Unbundling of Regulatory Competition*, VIRGINIA LAW REVIEW, VOL. 101, P. 1649, 2015; UC BERKELEY PUBLIC LAW RESEARCH PAPER NO. 2511723; USC CLASS RESEARCH PAPER NO. CLASS14-32; COLUMBIA PUBLIC LAW RESEARCH PAPER NO. 14-475 (2014).
Available at: https://scholarship.law.columbia.edu/faculty_scholarship/1888

This Working Paper is brought to you for free and open access by the Faculty Publications at Scholarship Archive. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of Scholarship Archive. For more information, please contact scholarshiparchive@law.columbia.edu.

CORPORATE INVERSIONS AND THE UNBUNDLING OF
REGULATORY COMPETITION

*Eric L. Talley**

INTRODUCTION.....	1650
I. FEDERAL TAXATION OF MULTINATIONAL ENTITIES: A HIGH- LEVEL PRIMER	1658
A. <i>Nominal Tax Rates</i>	1659
B. <i>Residency Rules</i>	1661
C. <i>Worldwide Income</i>	1661
D. <i>Repatriation Reckoning</i>	1663
II. CORPORATE INVERSIONS: THE NEW, NEW (OLD) MATH.....	1672
A. <i>Overview and Regulatory Evolution</i>	1673
B. <i>You Get an Inversion; YOU Get an Inversion; EVERYBODY Gets an Inversion?</i>	1685
C. <i>Internal Affairs, Corporate Governance, and the Loss of Delaware Jurisprudence</i>	1689
III. INVERSIONS THROUGH THE LENS OF REGULATORY- COMPETITION THEORY.....	1700
A. <i>Framework and Preliminaries</i>	1702
B. <i>Solving the Game (Equilibrium)</i>	1705
C. <i>Variations and Robustness</i>	1713
1. <i>Greater Dimensionality of Governance</i>	1714
2. <i>More Competing Jurisdictions</i>	1714
3. <i>Non-Revenue-Maximizing Competitors and Tax “Havens”</i>	1716
4. <i>Multinational Earnings and Territorial Taxation</i>	1718
5. <i>Unbundled Regulatory Instruments</i>	1721

* Isidor and Seville Sulzbacher Professor of Law, Columbia Law School. Email: etalley@law.columbia.edu. Thanks to Scott Altman, John Armour, Alan Auerbach, Joe Bankman, Bobby Bartlett, Peter Canellos, Albert Choi, Mihir Desai, Dhammika Dharmapala, Victor Fleischer, Julian Franks, Nathan Giesselman, Vic Goldberg, Victor Goldfeld, Jeff Gordon, Andrew Hayashi, William Jordan, Kenton King, Ed Kleinbard, Julia Mahoney, Ruth Mason, Alex Raskolnikov, Edward Rock, Roberta Romano, Maribel Saez, Michael Simkovic, Steven Davidoff Solomon, Leo Strine, and seminar participants at USC, Columbia, Virginia, Yale, London School of Economics, Universidad de Chile, the Chinese University of Hong Kong, the 2015 American Law and Economics Association annual meeting, and Davis Polk & Wardwell LLP for helpful comments and discussions. Yvonne Ng and Samantha Strimling provided excellent research assistance. All errors are mine.

6. <i>Does Governance Really Matter?</i>	1722
IV. SYNTHESIS AND SOME TENTATIVE REFORM PROPOSALS.....	1725
A. <i>Pricing Federal Governance</i>	1726
B. <i>Rolling Back Federal Corporate Governance</i>	1728
CONCLUSION.....	1731
APPENDIX A.....	1733
APPENDIX B.....	1748

“Even as corporate profits are as high as ever, a small but growing group of big corporations are fleeing the country to get out of paying taxes. They’re keeping most of their business inside the United States, but they’re basically renouncing their citizenship and declaring that they’re based somewhere else, just to avoid paying their fair share.

... [W]hen some companies cherry-pick their taxes, it damages the country’s finances. It adds to the deficit. It makes it harder to invest in the things that will keep America strong, and it sticks you with the tab for what they stash offshore. Right now, a loophole in our tax laws makes this totally legal—and I think that’s totally wrong. You don’t get to pick which rules you play by, or which tax rate you pay, and neither should these companies.

... [S]topping companies from renouncing their citizenship just to get out of paying their fair share of taxes is something that cannot wait.”

-Barack Obama, President of the United States¹

INTRODUCTION

SEVERAL prominent public corporations have recently embraced a noteworthy (and newsworthy) type of transaction known as a “tax inversion.” In a typical inversion, a U.S. multinational corporation (“MNC”) merges with a foreign company. The entity that ultimately emerges from this transactional cocoon is invariably incorporated abroad, yet typically remains listed in U.S. securities markets under the erstwhile domestic issuer’s name. When structured to satisfy applicable tax requirements, corporate inversions permit domestic MNCs eventual-

¹ President Barack Obama, Weekly Presidential Address: Closing Corporate Tax Loopholes (July 26, 2014) (transcript available at <http://www.whitehouse.gov/the-press-office/2014/07/26/weekly-address-closing-corporate-tax-loopholes>).

ly to replace U.S. with foreign tax treatment of their extraterritorial earnings—ostensibly at far lower effective rates.

Most regulators and politicians have reacted to the inversion invasion with alarm and indignation, no doubt fearing the trend is but a harbinger of an immense offshore exodus by U.S. multinationals. This reaction, in turn, has catalyzed myriad calls for tax reform from a variety of quarters, ranging from the targeted tightening of tax eligibility criteria,² to moving the United States to a territorial tax system,³ to declaring (yet another) tax “holiday” for corporate repatriations,⁴ to reducing significantly (if not entirely) American corporate tax rates.⁵ Like many debates in tax policy, there remains little consensus about what to do (or whether to do anything at all).

This Article analyzes the current inversion wave (and reactions to it) from both practical and theoretical perspectives. From a practical vantage point, I will argue that while the inversion invasion is certainly a cause for concern, aspiring inverters already face several constraints that may decelerate the trend naturally, without significant regulatory intervention. For example, inversions are but one of several alternative tax avoidance strategies available to MNCs—strategies whose relative merits differ widely by firm and by industry. Inversions, moreover, are invariably dilutive and usually taxable to the inverter’s U.S. shareholders, auguring potential resistance to the deals. They virtually require “strategic” (as opposed to financial) mergers between comparably sized companies, making for increasingly slim pickings when searching for a dancing partner, and a danger of overpaying simply to meet the compa-

² E.g., Stop Corporate Inversions Act of 2014, S. 2360, 113th Cong. (as proposed by Sen. Carl Levin (D-MI) and introduced, May 20, 2014).

³ Mihir A. Desai, A Better Way to Tax U.S. Businesses, *Harv. Bus. Rev.*, July–Aug. 2012, at 135, 135, 137–38; Economic Growth and Family Fairness Tax Reform Plan, United States Senate Office of Marco Rubio 1, 12 (n.d.), available at http://www.rubio.senate.gov/public/index.cfm/files/serve/?File_id=2d839ff1-f995-427a-86e9-267365609942.

⁴ James Hohmann, Rand Paul Seeks Corporate Tax Deal with Obama, *Politico* (Jan. 20, 2015, 7:59 PM), <http://www.politico.com/story/2015/01/rand-paul-corporate-tax-deal-obama-114413.html>.

⁵ E.g., N. Gregory Mankiw, How to Fix the Corporate Tax? Repeal It, *N.Y. Times*, Aug. 24, 2014, at BU7 (advocating a 0% rate). The Obama administration’s 2016 Budget, in contrast, proposes a more modest reduction (to 28%), paired with a flat tax on all offshore income, as well as a transition tax for previously earned offshore income. See Office of Mgmt. & Budget, Exec. Office of the President, Budget of the United States Government, Fiscal Year 2016, at 56–57 (2015), available at <https://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/budget.pdf>.

rable size requirements. They involve regulatory risk from competition authorities, foreign-direct-investment boards and takeover panels (not to mention from tax regulators themselves). They frequently provide only partial relief from extraterritorial application of U.S. taxes, especially for well-established U.S. multinationals. And finally, tax inversions can introduce material downstream legal risk, since they move the locus of corporate internal affairs out of conventional jurisprudential terrain and into the domain of a foreign jurisdiction whose law is—by comparison—recondite and unfamiliar.

Moving beyond these practical considerations, I will also consider the inversion wave through a theoretical lens, drawing insights from regulatory competition theories in public finance. Specifically, I will advance the notion that regulatory competition among jurisdictions can play out *not only* through tax policy, but also simultaneously through other non-tax channels, such as corporate law and governance rules. Applying this framework, I will show that a strong domestic corporate governance regime can provide a plausible buffer against a tax-induced incorporation exodus: Although U.S. multinationals clearly dislike high tax rates, they have traditionally valued the strength of U.S. corporate law and governance, particularly within Delaware. And, since U.S. tax policy explicitly ties tax residence to the state of incorporation, domestic tax authorities have enjoyed market power in keeping rates comparatively high while attracting and retaining domestic incorporations. In other words, the United States has for a long time remained somewhat insulated from ruinous tax competition because tax residency was “bundled” with corporate law in a unitary regulatory package. Viewed from this perspective, the most radical tax reform proposals currently being championed seem overzealous at best, and may even prove counterproductive.

Nonetheless, the recent pace of inversion activity plausibly suggests that America’s traditional market power in regulatory competition has begun to slip. Although there are likely many contributing causes for this slippage, I will argue that a seemingly inconspicuous institution has played an under-acknowledged role: securities law. During the last fifteen years, a series of significant regulatory reforms—such as the Sarbanes-Oxley Act of 2002⁶ and the Dodd-Frank Act of 2010⁷—have suffused U.S. securities regulations with an unprecedented array of

⁶ Pub. L. No. 107–204, 116 Stat. 745 (enacted July 30, 2002).

⁷ Pub. L. No. 111–203, 124 Stat. 1376 (enacted July 21, 2010).

corporate governance mandates, ranging from board independence requirements to compensation reforms to internal financial controls to proxy access. Historically, state law served as the dominant (if not sole) arbiter of corporate governance. Federal law's creeping displacement of state law has consequently "unbundled" domestic tax law from domestic corporate governance regulation, since most U.S. securities regulations apply to *all* listed companies, irrespective of their tax residence.⁸ Hence, regardless of whether recent securities law reforms have been prudent or misguided, I argue that federalization has effectively (if unwittingly) undermined the United States' ability to withstand tax competition from abroad.

If securities market regulation helped dig this hole, then might it also provide the needed tools to refill it? My analysis will suggest that it does, and that we should consider altering the regulatory landscape in two possible ways: either (1) the United States should begin to tax listed companies (regardless of residence) for their consumption of federal corporate governance law, granting allowances for U.S. corporate income taxes paid; and/or (2) federal law should cede corporate governance back to the states by rolling back the federal governance mandates of the last fifteen years. Which of these alternatives (or combination of them) is most attractive turns on several factors, including practical implementation constraints, the value (if any) created by recent federal governance mandates, and the difficulty of coordinating governmental actors at the state and federal level.

Moreover, to the extent my unbundling hypothesis is valid, it suggests that tax reform responses to "inversionitis" must also anticipate downstream implications for corporate governance. Although some modest tax reforms may be warranted (for example, measured reductions in headline tax rates), the most radical tax reform proposals currently on the table (such as moving to a territorial system, or eliminating U.S. corporate income taxes altogether) are unlikely to help, and could well prove deleterious: Not only do such radical reforms seem likely to cost the U.S. Treasury sizable future tax revenues, but they respond to the unbundling phenomenon not by rebundling tax and governance, but rather by severing the link completely. A plausible long-term effect of

⁸ While certain U.S.-traded foreign companies can obtain "Foreign Private Issuer" ("FPI") status—exempting them from various U.S. securities law mandates—the structure of most U.S. inversions makes FPI status an unrealistic option for the surviving entity. See *infra* note 165 and accompanying text.

such radical reform strategies is that the variety and quality of corporate governance regimes worldwide will atrophy—an outcome that is as undesirable for the global economy as it is for the United States.⁹

Several caveats deserve explicit attention before proceeding. First, this is by no means the lone article to note the simultaneous operation of tax and corporate law within a setting of international regulatory competition.¹⁰ Although most prior contributions compare tax competition and corporate chartering competition in relative isolation, a handful also explicitly consider their mutual interaction. Notable among them is an article by Mitchell Kane and Edward Rock, who observe that the marriage of tax residency rules with corporate law in regulatory competition can have distortive effects, inducing corporations to make inferior jurisdictional choices when incorporating in order to reduce tax liability. Concluding that such distortions undermine a competitive chartering market, they propose “severing” tax residence rules from corporate law regimes, hinging the former on the locus of firms’ real economic activity and the latter on the place of incorporation.¹¹ Although I commence from a similar motivation as do Kane and Rock, my analysis will depart from theirs in several ways. They do not, for example, consider how the steady encroachment of securities law has materially altered the tax/governance competitive landscape. More significantly, my analysis will suggest that regulatory competitive forces actually push in the opposite direction

⁹ My argument shares certain commonalities with the familiar “Tiebout” model in public finance, where local communities offer differentiated packages of public goods and taxes, and heterogeneous individuals self-sort by migrating to the site offering the package most suited to their preferences. See generally Wallace Oates, *The Many Faces of the Tiebout Model*, in *The Tiebout Model at Fifty* 21, 22, 27 (William A. Fischel ed., 2006) (explaining and offering an overview of the Tiebout framework, as well as contributions to it in recent economic literature). In the canonical Tiebout framework, local public goods and taxes are naturally bundled for geographical reasons. With regulatory competition, in contrast, bundling can be a design feature. See Suzanne Scotchmer, *Local Public Goods and Clubs*, in *4 Handbook of Public Economics*, at 1997, 2030–31 (Alan J. Auerbach & Martin Feldstein eds., 2002).

¹⁰ See, e.g., William W. Bratton & Joseph A. McCahery, *Tax Coordination and Tax Competition in the European Union: Evaluating the Code of Conduct on Business Taxation*, 38 *Common Mkt. L. Rev.* 677, 677–79 (2001); Jens Dammann, *A New Approach to Corporate Choice of Law*, 38 *Vand. J. Transnat’l L.* 51, 77–79 (2005); Mitchell A. Kane & Edward B. Rock, *Corporate Taxation and International Charter Competition*, 106 *Mich. L. Rev.* 1229, 1229–34 (2008); Wolfgang Schön, *Playing Different Games? Regulatory Competition in Tax and Company Law Compared*, 42 *Common Mkt. L. Rev.* 331, 359–60 (2005); Joel P. Trachtman, *International Regulatory Competition, Externalization, and Jurisdiction*, 34 *Harv. Int’l L.J.* 47, 50, 59 (1993).

¹¹ Kane & Rock, *supra* note 10, at 1232, 1283.

from the Kane/Rock proposal. In other words, even if differential tax levies “distort” incorporation choices, the bundling of corporate governance and tax regimes can make chartering competition *more* (not less) robust, affording jurisdictions a means by which to appropriate some of the social value created by their investments in legal/regulatory infrastructure—incentivizing them in the process to differentiate their governance/tax offerings, thereby enriching the portfolio of choices available to companies and adding to overall economic welfare.¹²

Second, as noted above, this Article uses a regulatory competition framework to analyze how tax and corporate law may evolve simultaneously. That framework allows for the possibility that such competition can motivate at least some jurisdictions to “race to the top” by installing and maintaining governance regimes that increase firm value and attract incorporations. While some version of this view is common within the academic literature,¹³ others are more pessimistic about the merits of jurisdictional competition in corporate law, arguing, for instance, that because managers steer incorporation decisions, competition will tend to “race to the bottom,” catering to managerial preferences, not overall company value (or even share value).¹⁴ Still others have expressed ambivalence about whether either extreme account tends to prevail categorically.¹⁵ The analytical framework developed below is broad enough to allow for any of these possibilities, including settings where agency costs dominate incorporation choices for some firms, inducing some jurisdictions to use their bundled taxing authority to extract a portion of the *managerial* value they create. Indeed, at its most general level, my

¹² It is worth observing that in *any* market (incorporation markets included), differential prices technically “distort” consumer choice. Many consumers, for instance, purchase Chevrolets even though they would prefer Bentleys (but for the price difference). Such price rationing can be perfectly consistent with robust competition. More to the point, my analysis will suggest that even when competing jurisdictions’ *marginal cost* of corporate law provision is approximately zero (as is plausibly the case here), differential prices—and the distortions they induce—may still be worth bearing when such prices enable providers to capture their quasi-fixed investments in regulatory quality.

¹³ See, e.g., Kane & Rock, *supra* note 10, at 1239; Roberta Romano, Law as a Product: Some Pieces of the Incorporation Puzzle, 1 J.L. Econ. & Org. 225, 280–81 (1985); Ralph K. Winter, Jr., State Law, Shareholder Protection, and the Theory of the Corporation, 6 J. Legal Stud. 251, 254–56 (1977).

¹⁴ E.g., Lucian Arye Bebchuk, Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law, 105 Harv. L. Rev. 1435, 1441 (1992).

¹⁵ See Gillian K. Hadfield & Eric L. Talley, On Public Versus Private Provision of Corporate Law, 22 J.L. Econ. & Org. 414, 415–16 (2006).

analysis presumes a type of hybrid setting where some companies are attracted to corporate governance regimes that maximize overall company value, while others prefer systems that cosset managerial interests.¹⁶

Third, my analysis will generally presume that jurisdictions set policies noncooperatively, so as to serve their individual jurisdictional interests. While such an approach is a serviceable description of the status quo,¹⁷ it downplays the possibility of *cooperative* accords struck between otherwise competing jurisdictions that would effectively neutralize—or at least dampen—the oppositional landscape (for example, international accords among OECD countries setting uniform policies on tax rates or profit shifting).¹⁸ Such cooperative approaches could have desirable characteristics (at least in some circumstances),¹⁹ and they are certainly worth considering. It nevertheless remains an open question whether such accords are attainable in the short term and durable over the medium to long term. In any event, my analysis is perhaps better viewed as assessing an appropriate response for the United States in the absence of (or as a backstop to) such international accords.²⁰

¹⁶ Specifically, the framework I develop below presumes firms to be heterogeneous in how they value governance, with some being more attracted than others to governance regimes that increase overall company value; this heterogeneity plausibly reflects varying degrees of agency costs across firms. Consequently, jurisdictions within this setting also tend to behave heterogeneously, differentiating their regulatory offerings from one another, thereby making the “race” (to the extent one exists) more multi-faceted than either extreme account allows. That said, for those jurisdictions catering to firms dominated by agency costs, the governance systems that emerge need not be socially desirable in a larger sense.

¹⁷ See Eric Toder & Alan D. Viard, Major Surgery Needed: A Call for Structural Reform of the U.S. Corporate Income Tax 19–20 (Apr. 2014) (unpublished manuscript, available at <http://www.taxpolicycenter.org/publications/url.cfm?ID=413090>).

¹⁸ See Action Plan on Base Erosion and Profit Shifting 9–13 (2013), OECD, www.oecd.org/ctp/BEPSActionPlan.pdf; Dhammika Dharmapala, Base Erosion and Profit Shifting: A Simple Conceptual Framework 3 (U. of Chi. Coase-Sandor Inst. for Law & Econ., Working Paper No. 703, 2014), available at <http://ssrn.com/abstract=2497770>.

¹⁹ A potential downside of cooperative accords is that they provide a platform for inefficient price fixing in tax levies, converting regulatory competition into de facto monopoly. See Andrew P. Morriss & Lotta Moberg, Cartelizing Taxes: Understanding the OECD’s Campaign Against “Harmful Tax Competition,” 4 Colum. J. Tax L. 1, 33–34 (2012).

²⁰ It bears noting that many observers remain skeptical that the OECD’s ongoing attempt to craft a Base Erosion and Profit Shifting (“BEPS”) protocol will ever prove successful. See Mike Godfrey, Business Leaders Doubt Global Agreement on BEPS, Tax-News.com (August 11, 2015), http://www.tax-news.com/news/Business_Leaders_Doubt_Global_Agreement_On_BEPS___68830.html.

Finally, it is important to note that the progressive federalization of corporate law chronicled here has not taken place in isolation. Rather, it is one of several pertinent changes to the strategic landscape surrounding comparative corporate governance and tax over the last decade and a half. Most conspicuously, several developed countries outside the United States have progressively walked down their own headline tax rates during this time, gradually enlarging the evident “gap” between American tax rates and those of its closest international comparators.²¹ Along with the stockpile of retained foreign earnings that American MNCs have steadily built up, this widening gap in headline rates has no doubt altered the economic calculus that underlies inversion decisions. My argument is not that the federalization of governance has been more important than these tax changes in driving inversions per se, but rather that it has greatly facilitated and simplified that calculus: Governance federalization has materially reduced the incremental *costs* of inverting, just as comparative tax changes have gradually enhanced the corresponding *benefits*. These simultaneous forces, I argue, have reinforced one another (perhaps unwittingly and unnecessarily).²² An appropriate regulatory response, therefore, should be mindful of both of them as well.²³

The remainder of this Article will proceed as follows: Part I will provide a high-level overview of how the corporate tax system in the United States interacts with the structuring of both foreign and domestic MNCs. Of particular interest here are the creative (yet fragile) ways that domestic MNCs utilize special ownership structures and intercompany transactions—short of an inversion—to minimize and/or defer tax liabilities. While such strategies can be effective, they can also impose risks and costs. In Part II, I will add inversion calculus to the mix, documenting the advantages such transactions can sometimes have over more traditional tax management techniques. At the same time, however, the relative advantages of inversions simply do not translate to all firms and all settings. The Part will close by describing how securities law has, over

²¹ See *infra* Figure 1.

²² In Part III, I will provide empirical evidence that governance considerations and tax concerns both warrant consideration in assessing the attractiveness of inverting.

²³ In contrast, a regulatory change concentrating solely on taxes—such as a transition to a territorial tax regime—would do nothing to address the unbundling phenomenon. As I show below, such reform myopia could plausibly prove destructive of economic welfare over the long term.

the last fifteen years, incrementally displaced and preempted state corporate law through a series of federal corporate governance mandates. Notably, these mandates apply to all public companies, whether incorporated/taxed in the United States or not. Part III will turn to my core conceptual arguments, presenting and analyzing a simple, game-theoretic framework for analyzing multi-attribute regulatory competition in tax and corporate governance offerings. Here I will demonstrate how a leader in providing strong corporate law and governance rules (such as the United States) may be able to withstand even substantial international tax competition without being drawn into a ruinous arms race in setting tax rates. Significantly, however, my analytic framework will expose a key necessary condition for the United States to enjoy such competitive insulation: It must be able to bundle tax and nontax regulatory attributes into a single, conjoined regulatory package. Troublingly, many of the most radical reform efforts recently proposed lose sight of this point, and they would ultimately have the effect of unbundling tax and governance even further. Myopic attention to tax competition, while eschewing its interaction with other regulatory dimensions, is both shortsighted and misguided. Part IV then applies the insights of this framework, considering two plausible reform approaches from a securities market perspective.²⁴

I. FEDERAL TAXATION OF MULTINATIONAL ENTITIES: A HIGH-LEVEL PRIMER

In order to appreciate the role that inversions play in multinational corporate structuring—as well as to assess the prospects of success for proposed reforms—one must first understand some of the basic contours of U.S. tax law, specifically as applied to U.S. and foreign multinationals. These basic characteristics animate myriad corporate tax minimization and avoidance strategies—ones that include (but are hardly limited to) inversions. This Part endeavors to provide this overview at a high level, focusing on the details that are most central to the enterprise in

²⁴ A technical appendix following Part IV provides some of the more general arguments underlying the regulatory competition model developed in the text. See *infra* Appendix A.

this Article. (I do not endeavor to provide a comprehensive roadmap to all relevant dimensions of international corporate tax.²⁵)

Although all international tax regimes necessarily share some similarities, a great part of unlocking the inversions puzzle hinges on differences—and particularly those differences that distinguish the domestic U.S. approach from those of most other jurisdictions. In relation to its comparators, the American regime is relatively unique in its combination of three central traits: (1) relatively high “headline” tax rates; (2) incorporation-based tax residency rules; and (3) worldwide (rather than territorial) reach. These three traits conspire to create significant returns for effective tax avoidance strategies. I discuss each of these considerations (and their joint consequences) below.

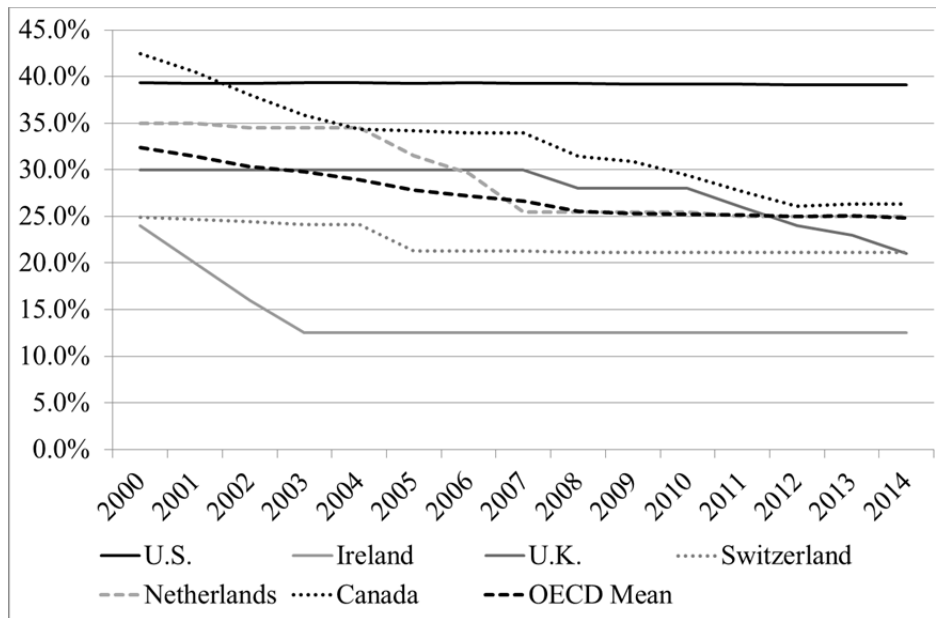
A. Nominal Tax Rates

Consider first the nominal corporate tax rates imposed by the United States. For ordinary “C” corporations, the United States imposes entity-level taxation on the net earnings a corporation generates prior to distributions to shareholders (such as through dividends or share repurchases). The imposition of entity-level tax itself does not make the United States unique. What does, however, is the significant heft of the rate that U.S. corporations must pay on such earnings. Although federal corporate income tax rates vary according to pre-tax corporate earnings from a low of 15% to a high of 39% , the dominant tax bracket for most moderate-sized (or larger) corporations is 35%, which takes effect once the corporation’s taxable net earnings exceed approximately \$18.3 million per year.²⁶ This figure, moreover, excludes state corporate tax, which itself ranges between 0% and 9%. All told, most U.S. corporations of any material size face a marginal “headline” tax rate (state and federal combined) hovering around 40%.²⁷

²⁵ Those seeking more in-depth overviews should consult detailed corporate structuring treatises, such as Martin D. Ginsburg, Jack S. Levin & Donald E. Rocap, *Mergers, Acquisitions, and Buyouts* (Feb. 2012).

²⁶ See I.R.S. Instructions for Form 1120, at 17 (2014), available at <http://www.irs.gov/pub/irs-pdf/i1120.pdf>.

²⁷ See Corporate Tax Rates Table, KPMG, <http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/corporate-tax-rates-table.aspx> (last visited Mar. 26, 2015).

Figure 1: Headline Marginal Tax Rate (Selected Countries)

Headline tax rates in the United States have always been high relative to other jurisdictions, but in recent years the gap has widened. As Figure 1 illustrates, the combined headline rate in the United States far exceeds that in a host of other comparator jurisdictions, a list that significantly includes the destinations of several recent inversion transactions (such as Ireland at 12.5%, the UK at 21% and falling, and Canada at 26.5%).²⁸ Moreover, as illustrated in the figure, many of these comparator jurisdictions have been progressively reducing their headline tax rates over the last fifteen years. And, unlike individual taxation, where income may be taxed at different rates depending on its source (for example, ordinary income versus short-term dividends versus capital gains and long-term dividends), corporate income tax rates generally apply to all sources of income. Although a variety of accounting and financing strategies exist to reduce U.S. corporations' *effective* taxes well below the headline rate (described at greater length below), U.S. corporations still bear a significant tax bill for any remaining net taxable earnings they recognize.

²⁸ See *id.*

B. Residency Rules

In addition to its high rates, the United States explicitly links a corporation's "residency" for tax purposes to its jurisdiction of incorporation.²⁹ Delaware-incorporated entities, for instance, are treated as United States residents for tax purposes, even if they have very little operational or managerial activity in the United States. Here the United States appears to be in a slight minority, although some other countries also mandate an "incorporation" rule to determine tax residency.³⁰ Several other variations appear to be slightly more common, such as pegging a corporation's tax residency on the location of its corporate "headquarters." This latter inquiry tends to focus on where "central management and control" rest, which often coincides with the place the board generally meets and (possibly) where central management's offices are located.³¹ In yet other jurisdictions hybrid approaches prevail, where corporations can be deemed residents if either they are incorporated there or their headquarters are located there.³²

C. Worldwide Income

Finally, U.S. tax rates have historically applied to a corporation's *worldwide* income, not just that portion that is generated within domestic borders. Hence, it matters not whether most of the profits of a U.S. corporation are generated from its activities here or abroad—the U.S. tax code will eventually attempt to reach and tax all its earnings (subject to some important caveats, discussed below).³³ Although the United States is not unique in taxing worldwide corporate income, it is in a distinct minority. Most other states in the developed world utilize a "territorial" approach to taxing MNCs, in which they tax only that portion of the corporation's net income deemed to be generated within the relevant tax jurisdiction, substantially exempting distributions from controlled foreign subsidiaries.³⁴

²⁹ I.R.C. § 7701(a)(4) (2012).

³⁰ Donald J. Marples & Jane G. Gravelle, Cong. Research Serv., R43568, *Corporate Expatriation, Inversions, and Mergers: Tax Issues* 12 (2014).

³¹ See, e.g., Robert Couzin, *Corporate Residence and International Taxation* 25 (2002).

³² *Id.* The U.K. and Ireland, while traditionally embracing a hybrid rule, are trending prospectively towards a place of incorporation rule. See *infra* note 59 and accompanying text.

³³ See I.R.C. § 951 (2012) (discussed *infra* notes 37–40 and accompanying text).

³⁴ Beyond the United States, the only other OECD countries that utilize a worldwide tax regime are Chile, Greece, Ireland, Israel, Korea, Poland, and Mexico. All others are general-

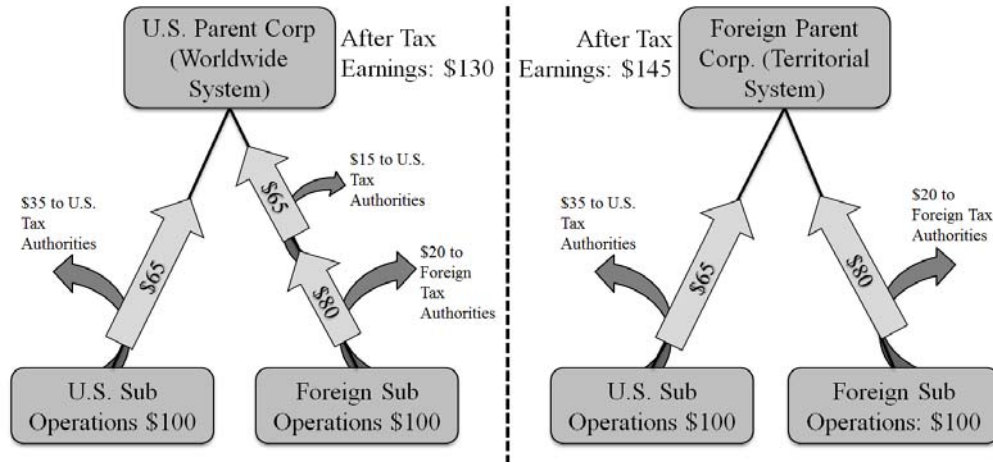
Over the years, the heterogeneity of worldwide and territorial tax rules (as well as residency tests) has necessitated several compromises within many jurisdictions' codes. For example, for countries using a territorial regime, it is critical to determine exactly which revenues and costs are generated within each relevant territory. Elaborate rules that endeavor to prevent "base shifting" to low-tax locations have attracted (and continue to attract) significant attention among reformers. Although the worldwide income taxation approach in the United States does not have to contend as centrally with base-shifting problems, it necessarily confronts the fact that controlled foreign companies ("CFCs") are themselves generally subject to the tax codes of their foreign domiciles, paying taxes on that basis. Accordingly, the U.S. tax code (as well as other worldwide tax regimes) grants a credit for foreign taxes already paid, and the foreign operations are liable only to the extent that tax liability under U.S. law would exceed that amount. (Given the high marginal rates in the United States—see above—that is frequently the case.) Second, income recognition rules within the U.S. tax code tend to permit American multinationals to defer U.S. recognition of earnings in their CFCs, so long as those earnings remain within the foreign subsidiary's coffers and are not "repatriated" to the U.S. parent (through, for example, a dividend or share repurchase).

ly classified as territorial systems. Thornton Matheson, Victoria Perry, & Chandara Veung, *Territorial vs. Worldwide Corporate Taxation: Implications for Developing Countries* 4 tbl.1 (Int'l Monetary Fund, Working Paper No. WP/13/205, 2013). It is worth noting that many territorial systems do not fully exempt 100% of repatriated foreign earnings from domestic taxation (usually exempting around 95%), and thus the distinction between territorial and worldwide taxation systems is less one of kind than of degree of exemption. *Id.* at 8. Moreover, when a country's headline tax rate is relatively low (such as Ireland's at 12.5%), the distinction between worldwide and territorial treatment ceases to be important, since such systems routinely grant an offset for foreign taxes paid (at the presumably higher foreign rates). See Rosanne Altshuler, Stephen Shay & Eric Toder, Tax Policy Ctr., *Lessons the United States Can Learn From Other Countries' Territorial Systems for Taxing Income of Multinational Corporations* 15–16 (Jan. 21, 2015), available at <http://www.taxpolicycenter.org/publications/url.cfm?ID=2000077>.

2015]

Corporate Inversions

1663

Figure 2: U.S. Tax System compared to Foreign Territorial Tax Systems³⁵*D. Repatriation Reckoning*

The intersection of high headline tax rates, residency rules, and the global reach of U.S. tax law makes it clear why incorporation in the United States can (all else constant) be disadvantageous to MNCs. Figure 2 illustrates this point conceptually, comparing two hypothetical multinational parents. The first (depicted on the left) is incorporated in the United States, and the second (depicted on the right) is incorporated abroad. Assume that the applicable corporate tax rate in the United States is 35% (applied on a worldwide basis), compared to 20% in the foreign jurisdiction (which is applied only territorially). Each company has two multinational subsidiaries—one doing business in the United States and the other doing business in the foreign jurisdiction—and each subsidiary generates \$100 in pre-tax earnings.³⁶ The foreign-incorporated multinational will generally be required to pay the applicable jurisdictional rate for each of its subsidiaries based on their locus of operation. Thus, it will pay \$35 (35%) in tax to U.S. tax authorities and \$20 (20%) to foreign tax authorities, leaving it with a total of \$145 in

³⁵ The figure assumes—for illustration's sake—a U.S. rate of 35% and a foreign rate of 20%.

³⁶ The numerical values are simplified for illustrative purposes. I also assume for illustration that a territorial system grants a full exemption for foreign earnings, even though (as noted above) most territorial systems fall slightly short of that.

post-tax income (which may then be distributed upstream to the foreign parent tax-free under the foreign jurisdiction's tax rules). The U.S. corporation looks similar at first—it, too, owes \$35 to U.S. tax authorities and \$20 to foreign tax authorities based on each subsidiary's earnings. And, just as before, it may effectively transfer the U.S. subsidiary's post-tax earnings (\$65) to the parent on a tax-free basis as a consolidated entity. However, should the U.S. parent receive a distribution of the foreign subsidiary's post-tax earnings (\$80), the dividend will be taxable and the U.S. parent will owe domestic authorities an additional tax to “level up” the foreign sub's tax bill to U.S. rates of 35% (or a total of \$35). After crediting the \$20 worth of foreign tax paid by the subsidiary,³⁷ U.S. tax authorities would collect \$15 in additional tax when the dividend is paid and the earnings repatriated. The net result for the U.S. multinational is \$130 in post-tax earnings, falling far short of the \$145 enjoyed by its overseas comparator. Such margins are significant, particularly in highly competitive global industries.

What (if anything) can a U.S.-incorporated parent do to avoid U.S. tax liability on its extraterritorial earnings? Not a lot, it turns out, so long as the parent insists on “upstreaming” the earnings of its CFCs.³⁸ However, so long as a foreign subsidiary retains its earnings without distributing them to the parent, those earnings will (mostly) remain nontaxable in the United States.³⁹ Moreover, the parent may not even have to recog-

³⁷ See I.R.C. §§ 901–03 (2012).

³⁸ See I.R.C. §§ 951–52 (2012). A “CFC” is defined under Subpart F of the Code as a foreign corporation with “United States shareholders” (U.S. persons each owning, directly, indirectly, or constructively, at least 10% of the voting stock of the foreign corporation) who together own more than 50% of the voting power or value of the foreign corporation's outstanding shares. (The thresholds are reduced for certain purposes in the case of insurance companies.) See I.R.C. §§ 951(b), 957. Thus, any 100% owned foreign subsidiary of a U.S. parent generally qualifies.

It bears reemphasizing that for all its odd features, a worldwide tax system arguably assuages a thorny practical issue that territorial tax systems invite: strategic profit shifting. Figure 2 has implicitly assumed that each of the U.S. and foreign subsidiaries generates \$100 in pre-tax earnings. However, in many multinationals, subsidiaries may do business with one another through various types of loans, leases, supply contracts, services contracts, and other transfer pricing schemes. The foreign parent in Figure 2 has a strong incentive to set the terms of such transactions so as to shift net income into the foreign sub, which is taxed at a lower rate. Such profit shifting schemes, however, may be less lucrative to the U.S. parent, whose subsidiaries all ultimately receive the same tax rate. (That said, U.S.-parented MNCs still have some incentive to shift profits to the extent they do not intend to repatriate them, as explained below.)

³⁹ See I.R.C. §§ 951–65 (2012). An exception is when a controlled foreign corporation has passive income, say from financial assets of other companies it owns. Here, Subpart F rules

nize a *deferred* tax liability in its financials if such CFC earnings are deemed “permanently reinvested earnings” under Generally Accepted Accounting Principles (“GAAP”).⁴⁰ Consequently, virtually all U.S. multinational parents have come to favor strategies that retain extraterritorial earnings within their overseas CFCs. Such strategies functionally achieve the deferral of domestic tax liabilities, potentially indefinitely.

Nevertheless, the practice of warehousing liquid assets within foreign subsidiaries is not a paragon of good capital budgeting practices for a variety of reasons. First, the parent may have several profitable investments that could utilize the retained earnings, but which cannot be undertaken at the CFC level. While the foreign subsidiary’s retained earnings could be an inexpensive source of funds, the tax cost of repatriating such funds can be prohibitive. More subtly, unrepatriated earnings may be susceptible to any number of risks from exchange rate volatility, interest rate fluctuations, political risk, and the like;⁴¹ and while some of these risks can be hedged, the cost of doing so may be unattractive.⁴² Finally, the overall scale of unrepatriated earnings is appreciable. It is estimated that the aggregate amount of cash held by foreign-incorporated subsidiaries of U.S. multinationals is somewhere in the neighborhood of two *trillion* dollars.⁴³ While much of this sum is not literally “stranded”

generally cause that income to be recognized as accruing to the parent. The standard rationale for this constraint is that passive income streams are highly mobile and U.S. parents would have excessive incentives to move such income streams into the subsidiary to get deferral. Arguably for these same reasons, most international tax regimes have something akin to worldwide reach as to passive income.

⁴⁰ Codification of Accounting Standards and Procedures, Recognition of Income Taxes No. 740, § 30-25 (Fin. Accounting Standards Bd. 2015) [hereinafter C.A.S. § 740-30-25], which requires recognition of deferred taxes from a CFC’s future distributed earnings. Although recognition is a default presumption under C.A.S. § 740-30-25-3, the presumption can be rebutted if the U.S. parent discloses an intent and ability to reinvest the CFC’s undistributed earnings indefinitely. *Id.* at C.A.S. §§ 740-30-25-3, 740-30-25-17.

⁴¹ See, e.g., Jason Shemtob, Interested in Amazon Stock? Don’t Ignore These Overlooked Risks, *DailyFX* (May 3, 2013, 2:08 AM), http://www.dailyfx.com/forex/fundamental/article/special_report/2013/05/03/Interested_In_Amazon_Stock_Dont_Ignore_Earnings_Repatriation_and_Currency_Translation_Risks.html.

⁴² See, e.g., Chana Schoenberger, Exposed! As Currency Volatility Rises, Companies Scramble to Avoid Being Caught with Their Hedges Down, *Wall St. J.*, Mar. 2, 2011, at C10.

⁴³ See Kate Linebaugh, How Firms Tap Overseas Cash: U.S. Companies Can Borrow Millions of ‘Trapped’ Funds from Foreign Units if They Follow the Rules, *Wall St. J.* (Mar. 29, 2013), <http://www.wsj.com/articles/SB10001424127887323361804578388522312624686> (estimating the value at \$1.7 trillion as of early 2013); accord Andrew Bird et al., Does the U.S. System of Taxation on Multinationals Advantage Foreign Acquirers? 2–4 (Rotman Sch.

overseas per se (indeed, many CFCs hold their cash substantially within U.S. bank accounts⁴⁴), the tax-related restrictions on its deployment described above remain intact.

That said, U.S. multinationals have devised—over the course of many decades—admirably conniving strategies to access their CFCs’ marooned monetary morsels. A common tactic for tapping offshore earnings is through intercompany loans from the foreign subsidiary to the parent. While U.S. tax rules often deem such loans to constitute dividends for tax purposes⁴⁵ (and therefore taxable as per Figure 2), there are some limited (but well-trodden) exceptions under Section 956 of the Internal Revenue Code, which spells out criteria under which certain intercompany loans are deemed nontaxable.⁴⁶ When implemented deftly, these exceptions can unlock an enormous source of stranded liquidity. And unlock it they have: In recent congressional testimony, for example, Hewlett Packard executives conceded that they utilize such tax-free intercompany loans routinely, at approximately the same intensity as they access third-party credit through the vast commercial paper market—to the tune of \$1.6 billion in balances on an average day.⁴⁷

Nevertheless, CFC loan loopholes can be temperamental and cantankerous creatures, an artifact of their complicated habitat in the tax code. Most centrally, Section 956 requires any such loans to be short-term in nature, and they generally cannot remain outstanding beyond the end of the subsidiary’s fiscal quarter. Should a CFC loan remain open beyond the quarterly fiscal close, it may still avoid taxation if the debt is satisfied within thirty days of the time it is incurred. However, this thirty-day exception cannot be recycled without bound: if any CFC’s upstream loan is held open for more than sixty days during a tax year, for example, the thirty-day tolling exception is no longer applicable to that CFC, and the loan will be held to constitute an “investment in U.S. property”

of Mgmt., Working Paper No. 2550819), available at <http://ssrn.com/abstract=2550819>; Dhammika Dharmapala et al., *Watch What I Do, not What I Say: The Unintended Consequences of the Homeland Investment Act*, 66 *J. Fin.* 753, 753–54 (2011) (documenting pent-up demand for repatriations at the time of the 2004 federal tax holiday).

⁴⁴ See Rob Garver, *Nearly \$1 Trillion in Off Shore Profits Is in U.S. Banks*, *The Fiscal Times* (Apr. 20, 2015), <http://www.thefiscaltimes.com/2015/04/20/Nearly-1-Trillion-Shore-Profits-US-Banks>.

⁴⁵ See I.R.C. § 956(c)(1)(C) (2012); Treas. Reg. § 1.956-2(a)(1)(iii) (2013).

⁴⁶ See I.R.C. § 956(a).

⁴⁷ Linebaugh, *supra* note 43.

(and therefore taxable).⁴⁸ Consequently, unlike commercial paper, repos, and other short-term borrowing instruments, individual CFC loans cannot “roll over” to remain effectively outstanding on a continual basis. Even here, however, U.S. multinationals have devised some clever adaptation strategies, since Section 956 rules hinge on the identity of the specific CFC extending credit. HP, for example, has established a practice of taking alternating short-term loans from two different controlled foreign subsidiaries, a practice almost certainly designed to avoid the appearance of a continuous long-term loan.⁴⁹ While undeniably creative, such strategies also may tempt fate by triggering anti-abuse rules, which give the IRS some discretion to declare technically or facially compliant intercompany loan schemes abusive, and therefore taxable.⁵⁰ Moreover, such arrangements may still lock up a significant amount of cash, since the participating CFCs are not allowed to pool their cash (or the technique falls apart). Consequently, a parent may need upwards of \$2 billion in cash reserves located at the CFC level in order to make use of \$1 billion in the United States (since each of the CFCs must have their own segregated source of liquidity). Finally, because these intercompany transactions (even the more creative ones) are constrained to be short term, it could remain difficult to hedge various types of exchange-rate, market, and regulatory risks that attend locking up assets in a foreign entity.

One last strategy that can dampen the tax sting from repatriating stranded assets is to embrace a leveraged capital structure at the U.S.-

⁴⁸ See I.R.S. Notice 88-108, 1988-2 C.B. 445 (stating the basic rule); I.R.S. Gen. Couns. Mem. AM 2007-0016 (Sept. 25, 2007) (affirming that, after the Omnibus Budget Reconciliation Act of 1993, the application of § 956’s “30/60” rule now applies to fiscal quarters).

⁴⁹ Linebaugh, *supra* note 43. The HP technique takes advantage of the fact that § 956 pivots off the CFCs’ fiscal quarter ends. Consequently, by setting up CFCs with different taxable years (and hence different quarter end dates), it is possible for one subsidiary to have loans outstanding over the other subsidiary’s fiscal quarter end, and thus neither subsidiary would trigger a tax inclusion.

⁵⁰ Treas. Reg. § 1.956-1T(b)(4)(i) (2013). Indeed, the IRS has successfully challenged some similar intercompany loan strategies that use a series of short-term, one-month loans from the *same* CFC that effectively replicate the cash flow patterns of a continuous long-term loan. See Rev. Rul. 89-73, 1989-1 C.B. 258–59; *Jacobs Eng’g Grp. Inc. v. United States*, 97-1 T.C.M. (CCH) 87,855, 87,756–58 (C.D. Cal. 1997), *aff’d*, 99-1 T.C.M. (CCH) 87,786, 87,787 (9th Cir. 1999) (holding that twelve successive month-long loans made by a U.S. parent company’s Panamanian unit to the U.S. parent amounted to a repatriation of funds). For a detailed analysis of this case, see Lowell D. Yoder & Sandra P. McGill, *Treatment of CFC Loans to U.S. Affiliates: The Sword and Sickle of Subpart F*, 26 *Tax Mgmt Int’l J.* 454 (1997).

parent level. Holding aside any intercompany loans it receives from CFCs, a U.S. parent might engage in long-term borrowing from third parties, possibly distributing such funds to shareholders through a dividend or share repurchase—sometimes known as a *dividend recapitalization*—thereby increasing the parent's overall leverage ratio. Because the interest expense associated with the U.S. parent's third-party debt is deductible to the parent, those debt service payments can help shield CFC cash repatriations from additional U.S. tax liability. Moreover, the value of the assets held in CFCs (reflected through their stock held by the parent) can augur the parent's general credit-worthiness, and can even provide some limited security for third-party lenders (if utilized carefully⁵¹). Several major U.S. MNCs have utilized this leveraging strategy to great effect, most notoriously Apple Inc., which in 2013 executed what was at the time the largest single corporate bond offering in history (over \$17 billion) at effectively triple-A rates.⁵² Although leverage is recognized as having tax advantages generally, its utility for shielding repatriated foreign earnings makes debt financing arguably more attractive to U.S.-based MNCs. At the same time, in the quest to seek tax relief through leverage, a company may invite bankruptcy risks, debt overhang problems, and risky managerial decisions.⁵³

A different dimension of tax avoidance pursued by U.S.-based MNCs concentrates on the tax liabilities of CFCs *prior* to repatriation. Multinationals frequently set up special structures among their affiliated subsidiaries to reduce the foreign tax liabilities of those subsidiaries irrespective of repatriation. Many of these arrangements hinge on a flavor of jurisdictional arbitrage, employing (for example) licenses or leases of

⁵¹ Significant caution is warranted in pledging CFC stock or assets to secure third-party loans to the parent. Under § 956's rules, third party loans may be deemed distributions from the CFC if the CFC acts as a guarantor, or if its assets "indirectly" serve as security for the loan. See Treas. Reg. § 1.956-2(c)(2). A safe harbor defense to this rule is triggered when the domestic parent pledges no more than 67% of the voting stock in the foreign subsidiary. *Id.*

⁵² Katy Burne & Mike Cheney, *Apple's Record Plunge into Debt Pool: Offering Sets Record; Demand Was More Than \$50 Billion*, Wall St. J. (April 30, 2013), <http://www.wsj.com/articles/SB10001424127887324482504578454691936382274>. Five months later, this bond offering was eclipsed by a \$49 billion offering by Verizon, itself a large U.S.-parented MNC with significant foreign subsidiaries. See Matthew Robinson, *Verizon Raises \$49 Billion in Largest Corporate-Bond Sale*, Bloomberg Bus. (Sept. 11, 2013), <http://www.bloomberg.com/news/articles/2013-09-11/verizon-plans-49-billion-bonds-in-largest-company-offering-ever>.

⁵³ See, e.g., Hayne E. Leland & David H. Pyle, *Informational Asymmetries, Financial Structure, and Financial Intermediation*, 32 J. Fin. 371 (1977) (analyzing the problems posed by a leveraged capital structure in project choice).

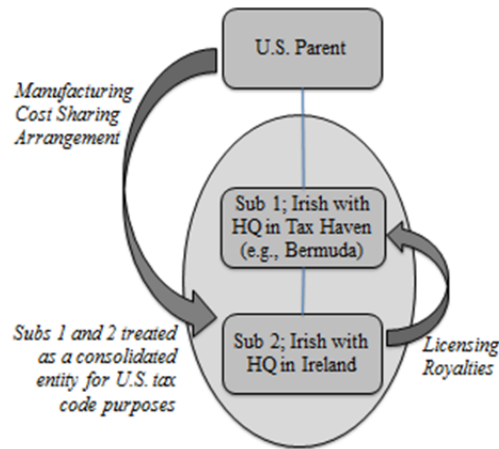
intangible property to exploit anomalies or inconsistencies among foreign tax jurisdictions. The effect is to reduce (and sometimes eliminate) foreign tax liability. A common variant of this scheme is popularly known as the “Double Irish” structure, pictured in Figure 3. Under this approach, a U.S. parent sets up two subsidiaries (sub 1 and sub 2), both of which are incorporated in Ireland. sub 1’s headquarters, however, are in a tax haven (such as Bermuda), while sub 2’s are in Ireland. Irish tax law broadly permits (until recently⁵⁴) the location of corporate “headquarters” to determine tax residence, and thus sub 1 would be considered a Bermudan tax entity (where there is no corporate tax).⁵⁵ sub 1 is endowed with rights to various of the parent’s hard-to-value intangible assets (for example, patents, trademarks, copyrights, etc.) which it then licenses to sub 2 at relatively high (but hard to value) royalty rates.⁵⁶ Sub 2 then acts as manufacturer/distributor of all the parent’s foreign sales, pursuant to a manufacturing cost sharing arrangement with the U.S. parent.⁵⁷ Its royalty payments to sub 1 are fully deductible under Irish law, and thus sub 2 shows little or no net earnings, which are capitalized into the royalty amount. sub 1 of course shows significant earnings, but it is taxed at the Bermuda rate of zero percent.

⁵⁴ See infra note 59 (documenting a phased-in change in Irish tax residency rules).

⁵⁵ See Corporate Tax Rates Table, supra note 27.

⁵⁶ The two foreign subs can elect under U.S. law to be treated on a consolidated basis, and therefore, any royalty or other transfer payments between them are disregarded for U.S. tax purposes. See Treas. Reg. § 301.7701-3 (2014).

⁵⁷ The cost sharing arrangement is usually required under U.S. law to keep sub 2 from being deemed a domestic subsidiary under U.S. law. See Treas. Reg. § 1.482-7A.

Figure 3: “Double-Irish” Structure for Foreign Tax Avoidance

The Double Irish structure—along with its variants⁵⁸—effectively shifts the MNC’s tax base among foreign jurisdictions in order to concentrate them in the jurisdiction with the most favorable tax treatment. As noted above, profit shifting is a dilemma endemic to territorial tax systems, though it is (arguably) less of a problem in systems that tax worldwide income. (Notably, Ireland recently imposed more significant constraints on the prospective use of the Double-Irish structure, substantially removing prospectively the option to peg an Irish corporation’s tax residency on the location of its corporate headquarters⁵⁹). Nevertheless,

⁵⁸ Figure 3 does not consider that Ireland imposes a withholding tax on all royalties paid to non-E.U. tax entities (which includes sub 1, a Bermuda tax entity). However, if such royalties are paid to tax entities in other E.U. countries (such as the Netherlands or Malta), no such tax is imposed. Thus, a somewhat more common variant on the Double-Irish structure interposes a Dutch subsidiary between sub 1 and sub 2 to act as a pass-through entity for the royalty, thereby sidestepping any withholding tax. This variant is sometimes called the “Double Irish Dutch Sandwich” structure. See Jeffrey L. Rubinger & Summer Ayers LePree, Death of the “Double Irish Dutch Sandwich”? Not So Fast, Taxes Without Borders (Oct. 23, 2014), <http://www.taxeswithoutbordersblog.com/2014/10/death-of-the-double-irish-dutch-sandwich-not-so-fast>.

⁵⁹ See Finance Act of 2014 (Act No. 37/2014) § 43 (Ir.), available at <http://www.oireachtas.ie/documents/bills28/acts/2014/a3714.pdf>. Specifically, all corporations incorporated in Ireland after January 1, 2015 will be deemed to be Irish corporations, regardless of the location of their headquarters. Companies incorporated in Ireland before 2015 will be grandfathered in on January 1, 2021. Id. The reforms, however, specifically exempt bilateral treaties between Ireland and other jurisdictions that codify the management test. Id. at § 43(1)(a)(2). Notably,

note that even if a structure such as the above succeeds in reducing the U.S. parent's foreign tax liabilities to zero (or near zero), it does not solve the problem of stranded offshore cash. If anything, successful base shifting between CFCs exacerbates matters: By causing the multinational to avoid most or all foreign taxes, base shifting results in a U.S. issuer's CFCs collectively holding an *even larger* stock of untaxed assets. If or when that cash is ever repatriated, the parent will not face a modest "leveling up" tax equal to the difference between foreign and U.S. nominal rates; rather, the tax bill associated with repatriation will be a far more discontinuous jump to the full 35–40% marginal rate of combined state and federal tax that most multinationals face in the United States. All told, the very foreign tax reduction strategies ingeniously pioneered and adopted by U.S. multinationals have significantly amplified the costs of repatriating those assets.

Finally, in addition to these well-known tactics, U.S. MNCs have pursued even more aggressive strategies to reduce and even eliminate their CFCs' tax liabilities through the political process. Several European jurisdictions, for example, specifically grant favorable tax treatment to income earned through intellectual property licenses as opposed to other corporate income (so-called "innovation boxes").⁶⁰ Such treatment, when combined with territorial tax treatment and the notorious difficulty in valuing IP rights, can facilitate base shifting among international affiliates.⁶¹ And bolder approaches also appear to have been pursued, usually

both Malta and United Arab Emirates have such treaties with Ireland, suggesting that a modest adaptation of the strategy may remain viable. See Rubinger & LePree, *supra* note 58.

⁶⁰ These include Belgium, France, Ireland, Hungary, Liechtenstein, Luxembourg, the Netherlands, Spain, the Swiss Canton of Nidwalden, the United Kingdom, Malta, and Cyprus. In general, these special rates are less than half the applicable corporate income tax rate, and in some cases (such as Malta) as low as zero. See Lisa Evers at al., *Intellectual Property Box Regimes: Effective Tax Rates and Tax Policy Considerations 1* (Nov. 2013) (unpublished manuscript, available at <http://ftp.zew.de/pub/zew-docs/dp/dp13070.pdf>). Recent legislation in the United States has similarly proposed reduced tax rates of around 10% on "qualifying income from patents and other intellectual property assets." See, e.g., John D. McKinnon, *Lawmakers Unveil Tax Plan on Intellectual Property*, *Wall St. J.* (July 29, 2015, 2:52 PM), <http://www.wsj.com/articles/lawmakers-unveil-new-tax-plan-on-intellectual-property-1438195972>.

⁶¹ Interestingly, just as the Irish Finance Act constrains the "Double Irish" structure, see *supra* note 59, the Irish Department of Finance is contemplating further relaxation of its conditions on IP Box treatment, so that "monoline" Irish IP licensors could potentially achieve an effective tax rate as low as zero percent. See *Irish Tax Alert: Finance Bill 2014: Impact on Multinational Corporations*, Deloitte (Oct. 23, 2014), <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-alert-ireland-231014.pdf>.

by more prominent and larger MNCs. Regulators in Brussels, for example, recently brought charges against Apple Inc. relating to alleged illegal agreements it entered with Irish authorities as early as 1991 to receive special tax-favored status (along with unusually low rates).⁶² These charges add to the stock of other creative strategies that—it has emerged—Apple employed to great effect, such as the creation of CFCs with no declared tax residence whatsoever and thus, they contended, no required tax liability.⁶³ Although these investigations are still underway, Apple has since been joined by several other MNCs that have come under similar scrutiny.⁶⁴ And the fact that such activities have raised the ire of international tax regulators (regardless of whether any U.S. MNCs will ultimately be forced to answer monetarily) suggests an additional vulnerability of the status quo.

Nevertheless, because this last set of strategies principally implicates *foreign* tax liabilities, they once again do little to address the problem of stranded overseas assets (and—as noted above—they may even exacerbate such problems by increasing the marginal costs of repatriation). Consequently, U.S. MNCs have continued to accrue significant sums of overseas cash that is expensive to repatriate, cumbersome to access, and increasingly risky and costly to hold. It is perhaps unsurprising, then, that issuers began to look for an alternative strategy—a strategy they found in the tax inversion.

II. CORPORATE INVERSIONS: THE NEW, NEW (OLD) MATH

Given the attendant costs and risks associated with “stranding” capital in CFCs (which can themselves be magnified by aggressive tax avoidance strategies), the resurgence of tax inversion transactions among U.S.

⁶² Tim Bradshaw et al., *Apple Hit by Brussels Finding over Illegal Irish Tax Deals*, *Fin. Times* (Sept. 28, 2014), <http://www.ft.com/intl/cms/s/0/ae979ad0-4708-11e4-8c50-00144fea b7de.html#axzz3a8ZbchXp>.

⁶³ *Id.* See generally Edward D. Kleinbard, *The Lessons of Stateless Income*, 65 *Tax L. Rev.* 99 (2011) (evaluating proposals to address stateless income planning); Chris William Sanchirico, *As American as Apple Inc.: International Tax and Ownership Neutrality 2–4* (Feb. 26, 2014) (unpublished manuscript, available at <http://ssrn.com/abstract=2394227>) (analyzing the meaning and significance of “ownership nationality” to the taxation of multinationals).

⁶⁴ Analogous investigations have been launched, for example, against Starbucks, Fiat, and Amazon. See Tom Fairless, *Huge Profit Stokes Concerns over Starbucks’s Tax Practices in Europe*, *Wall St. J.* (Apr. 6, 2015), <http://www.wsj.com/articles/starbucks-tax-practices-draw-european-scrutiny-1428363189>.

MNCs was perhaps unsurprising. This Part provides an overview of such transactions, their history, and the evolving set of regulatory constraints that the United States has promulgated in response. I then turn to a pragmatic analysis of which types of firms—in the light of these and other impediments—are likely the best (and worst) candidates to invert. The Part closes by analyzing in greater depth one such evident impediment: the requirement that inversion targets abandon U.S. (and most commonly Delaware) corporate law. Here, I argue that while this impediment is clearly a real one historically, its significance has faded for publicly traded companies over the last fifteen years, as federal mandates have progressively overshadowed and preempted state corporate governance laws, effectively unbundling tax and governance.

A. Overview and Regulatory Evolution

The intent behind an inversion transaction is to relocate the tax residence of a U.S. MNC parent outside of U.S. jurisdiction, transplanting it into a jurisdiction offering a more favorable tax environment. As noted in the previous Part, there are a host of foreign jurisdictions that offer lower tax rates, territorial (rather than global) tax treatment, more flexible tax residency rules, and more liberal recognition rules than does the United States. The most creative forms of inversion transactions, therefore, attempt to capitalize on these differences in a way that is maximally beneficial—all things considered—for the inverting corporation.⁶⁵

Given the upsurge in inversion activity of late, it is important to keep in mind that tax-avoidance-motivated merger transactions are hardly new. Indeed, an early border skirmish in the public battle over inversions took place over two decades ago, when in 1994, Helen of Troy, a publicly traded Delaware corporation in the personal care and cosmetics industry, formed a shell subsidiary in Bermuda (which at the time, as now, had no corporate income tax), causing the subsidiary to acquire the parent in a stock-for-stock transaction.⁶⁶ Under the then-prevailing tax

⁶⁵ An inversion need not exploit all of these tax differences to be attractive. Ireland, for example, has been a popular recent inversion destination notwithstanding its worldwide tax regime, as its low headline rates and permissive tax avoidance rules tend to swamp other factors. See *supra* notes 54–59 and accompanying text.

⁶⁶ A stock-for-stock acquisition of a parent by a wholly-owned subsidiary is a standard and unremarkable move in M&A (even if it has no logical parallel in, say, family law). Notably, another U.S. issuer, McDermott Inc., had done something similar to Helen of Troy in 1983, when it arguably pioneered this strategy to move its jurisdiction of incorporation to Panama.

rules, this transaction—like any other stock deal—was deemed nontaxable to U.S. shareholders.⁶⁷ Once the transaction closed, moreover, the surviving parent continued to be traded in the U.S. public markets under Helen of Troy's name, but with incorporation and tax residency in Bermuda.

The Bermudan tax abduction of Helen of Troy raised considerable alarm at the time about the use of captive subsidiaries to escape U.S. tax treatment—sometimes known as a “naked” or “shell” inversion. The U.S. Department of the Treasury soon thereafter dispatched a response, in the form of a set of anti-inversion regulations promulgated in 1996. The ultimate reforms made a naked inversion decidedly more expensive by deeming it a taxable event to U.S. shareholders of the inverted company unless the U.S. target's equity was diluted by new foreign ownership by no less than 50%.⁶⁸

Although this first generation of reforms possibly deterred a fair number of inversion transactions, it proved little more than a nuisance to others.⁶⁹ For example, the taxable nature of the transaction to shareholders mattered little if most shareholders of the inverting U.S. MNC were tax-exempt entities, or already had a high tax basis in their holdings, or were non-U.S. taxpayers. In addition, some acquisitions are designed to be taxable in any event (and many buyers in fact prefer taxable deals be-

See, e.g., Zachary Mider, *The Greatest Tax Story Ever Told: How U.S. Companies Learned to Relocate their Official Addresses Overseas and Avoid Taxes—in One Operetta*, *Bloomberg Bus.* (Dec. 18, 2014), <http://www.bloomberg.com/news/features/2014-12-18/i-hear-america-singing-never-pay-taxes-the-inversion-operetta> (describing the transaction).

⁶⁷ See I.R.C. § 368(a)(1)(B) (1994).

⁶⁸ See I.R.C. § 367 (2000) (allowing U.S. shareholders to recognize taxable gain (but not loss) in inversion transactions). Although such gain can be avoided in some circumstances, the § 367 implementing regulations make it effectively impossible to avoid them short of a significant shareholder dilution. Specifically, those conjunctive conditions are as follows:

- (a) The U.S. Target in the aggregate receives 50% or less (by vote and value) of the Non-U.S. Acquirer
- (b) The U.S. Target's directors, officers, and 5% shareholders that are U.S. persons own 50% or less (by vote and market value) of the Non-U.S. Acquirer
- (c) The Non-U.S. Acquirer is engaged in an “active trade or business” outside the United States and the value of the Non-U.S. Acquirer is at least equal to the value of the U.S. Target, and
- (d) The U.S. shareholder either (i) owns less than 5% (by vote and value) of the Non-U.S. Acquirer or (ii) enters into a five-year “gain recognition agreement.”

See *Treas. Reg.* § 1.367(a)-3, (as amended by T.D. 8702, 1997-8 I.R.B. 4).

⁶⁹ Indeed, it is possible that by clarifying the ground rules for consummating legitimate inversions, the reforms may have catalyzed other such transactions. See *infra* Figure 4 and accompanying text.

cause they involve an attractive basis adjustment to the target's assets and goodwill). Finally, even if some subset of shareholders were required to recognize some tax liability at the individual level, those costs were arguably dwarfed in many cases by the prospect for greater tax savings at the corporate level. Consequently, even after the 1996 reforms, several public U.S. MNCs continued to pursue the strategy (either by meeting the 50% threshold or by entering a taxable transaction).⁷⁰ Much of this calculus remains relevant today.

Eight years later, through the 2004 American Jobs Creation Act,⁷¹ Congress added a second round of double-barreled reforms that have become the centerpiece for structuring most of today's inversions. First, Section 4985 imposes a 15% "excise tax" on stock remuneration of officers, directors, and large block shareholders of the inverting company—a measure clearly intended to visit direct financial consequences on corporate decision makers.⁷² The levy is triggered if the transaction results in the U.S. target's shareholders retaining at least 60% ownership of the surviving entity (by vote or value).⁷³ It is difficult to sidestep the excise tax in practice, although in some cases U.S. targets can accelerate the vesting schedules of stock options compensation packages to blunt its force. Many inversions also manipulate the incidence of the excise tax, "grossing up" the compensation of any directors, officers, or block shareholders for any additional tax liability owed. Though commonplace, such strategies can prove expensive, since gross-up payments are themselves subject to both the excise tax and personal income tax rates. The terms of the recent Medtronic-Covidien transaction, for example, required Medtronic to underwrite a \$63 million dollar gross-up fund for

⁷⁰ Between the 1996 reforms and the subsequent 2004 reforms, nineteen public U.S. companies executed inversion transactions, including Tyco (1997), Fruit of the Loom (1998), Ingersoll-Rand (2001), and Herbalife (2002). Appendix B contains a compilation public outbound inversion transactions since 1994. See Shayndi Raice, *How Tax Inversions Became the Hottest Trend in M&A: Tax Inversions a Major Driver in Cross-Border Deals*, Wall St. J. (Aug. 5, 2014, 3:34 PM), <http://www.wsj.com/articles/how-tax-inversions-became-the-hottest-trend-in-m-a-1407240175>.

⁷¹ American Jobs Creation Act of 2004, Pub. L. No. 108-357, 118 Stat. 1418 (2004) (codified as amended in scattered sections of I.R.C.)

⁷² I.R.C. § 4985 (2012).

⁷³ See *id.* The tax applies to the equity compensation of officers, directors, and block shareholders of any affiliated group member who qualify as reporting persons under § 16(a) of the Exchange Act, as well as any fiduciary who held that position during the previous six months. *Id.*

its officers and directors, in order to offset (on an after-tax basis) an initial excise tax liability of no more than \$23.25 million.⁷⁴

The second prong of the 2004 reforms was much more direct. Section 7874 sets out criteria by which the IRS would simply ignore the expatriation aim of the transaction, treating the surviving parent as a “surrogate” U.S. company—and taxing it as such—no matter where it was incorporated.⁷⁵ Specifically, the section (and surrogate status) applies to transactions in which three conjunctive criteria are met: (1) the foreign buyer acquires (directly or indirectly) substantially all of the properties held by a U.S. corporation; (2) the former shareholders of the U.S. target end up owning at least a specified floor (either 60% or 80%) of the surviving entity’s stock; and (3) the expanded affiliated group that includes the foreign acquiring corporation does not have “substantial business activities” in the foreign acquiring corporation’s country of incorporation when compared to its overall business activities of the expanded affiliated group.⁷⁶ Under the terms of Section 7874, an inversion transaction can still procure favorable tax treatment (and avoid U.S. taxation of the surviving entity) if the inverter can demonstrate that the transaction flunks at least one of the above three conditions.

In many inversions, however—particularly those that are predominantly tax avoidance plays—conditions (1) and (3) are satisfied. The acquiring foreign parent in a typical inversion traditionally *does*, in fact, acquire all or substantially all of the properties of the U.S. target—indeed, the principal aim of such transactions is to remove those properties (to the extent possible) from U.S. tax treatment, which requires a substantial acquisition. (Moreover, standard successorship clauses in the target’s contractual instruments tend to require any sale to be a substantial transfer.⁷⁷) In addition, it is unlikely that a significant fraction of a U.S. inverter’s ventures will be located in the destination jurisdiction for the transaction (particularly if that jurisdiction is chosen predominantly

⁷⁴ Ajay Gupta, *Grossing Up an Inversion Tax*, 75 *Tax Notes Int’l* 806, 806 (Sept. 8, 2014).

⁷⁵ I.R.C. § 7874 (2012).

⁷⁶ *Id.*

⁷⁷ See Am. Bar Ass’n, *Revised Model Simplified Indenture*, 55 *Bus. Law.* 1115, §§ 5.01–5.02, at 1134–35 (2000) (permitting substitution of acquiring company only upon consolidation, merger, or transfer of all or substantially all assets). But see *infra* note 86 and accompanying text (discussing “spinversions”).

for attractive tax rules), and thus the “no substantial business activities” criterion would be flunked only through fortunate coincidence.⁷⁸

Therefore, the surest course in most cases for an inversion to obtain favorable tax treatment is to focus on the ownership continuity thresholds from condition (2) above. Section 7874 articulates two distinct cut-off points for the maximum ownership stake the U.S. target’s shareholders are allowed to retain in the post-transaction entity. The resulting tax treatment of the surviving entity depends on which (if either) dilution threshold it obtains. The first (and most favorable) threshold kicks in when shareholders of the U.S. target retain less than 60% of the surviving foreign parent corporation (measured either by voting power or economic value), by reason of their ownership of U.S. target corporation stock. When the former U.S. target shareholders are below this threshold (and thus their ownership is diluted by more than 40%), then the transaction and the surviving entity receive extensive benefits, including full prospective recognition of the surviving parent by U.S. tax authorities as a foreign corporation.

The benefits are still appreciable—though not quite as extensive—when the magnitude of dilution is smaller (that is, when U.S. target shareholders end up owning more than 60% but less than 80% of the surviving parent entity). Here, the surviving entity still receives foreign residency tax status going forward, but there are some significant strings attached. In particular, certain gains recognized by the U.S. target in the inversion establish what amounts to a lower bound on the U.S. company’s taxable income for the following ten years.⁷⁹ Such amounts are taxable in full at the maximum corporate tax rate, with no standard offsets (such as net operating losses) to shield the liability.⁸⁰

⁷⁸ Under new interpretive guidelines promulgated by the IRS in 2012, “substantial business activities” are present in any jurisdiction where the worldwide corporate group (post inversion) has at least 25% of its: (1) employees (including employee compensation); (2) assets; and (3) income. See T.D. 9592, 2012-28 I.R.B. 41, available at www.irs.gov/pub/irs-irbs/irb12-28.pdf (explaining the temporary guidelines under Treas. Reg. § 1.7874-3T). Before 2012, that safe harbor had been 10%, a threshold that was decidedly easier to meet. *Id.* It is worth observing that a minority of recent inversions have nonetheless taken the position that the surviving company met the “substantial business activities” test in the incorporation site of the surviving entity. These include Aon Corp., Rowan Companies, Tim Hortons, and Western Goldfields.

⁷⁹ The U.S. company’s taxable income (now as a subsidiary) over this ten-year period cannot be less than the “inversion gain,” meaning the gain recognized on its transfer of stock or assets plus certain royalty income from foreign affiliates. I.R.C. § 7874 (2012).

⁸⁰ *Id.*

Finally, if U.S. target shareholders retain 80% or more of the surviving parent (again measured either by voting power or value), then the foreign acquiring corporation is treated as a surrogate U.S. corporation for all U.S. tax purposes, and any of the foreign acquirer's pre-transaction subsidiaries become CFCs of the surrogate entity. At this threshold and above, the inversion not only fails as a tax avoidance mechanism, but it may actually invite greater tax liabilities to the extent that the foreign acquirer's affiliates are now under U.S. tax jurisdiction.

Figure 4: Organizational Structure of Standard Inversion (Reverse Subsidiary Merger)

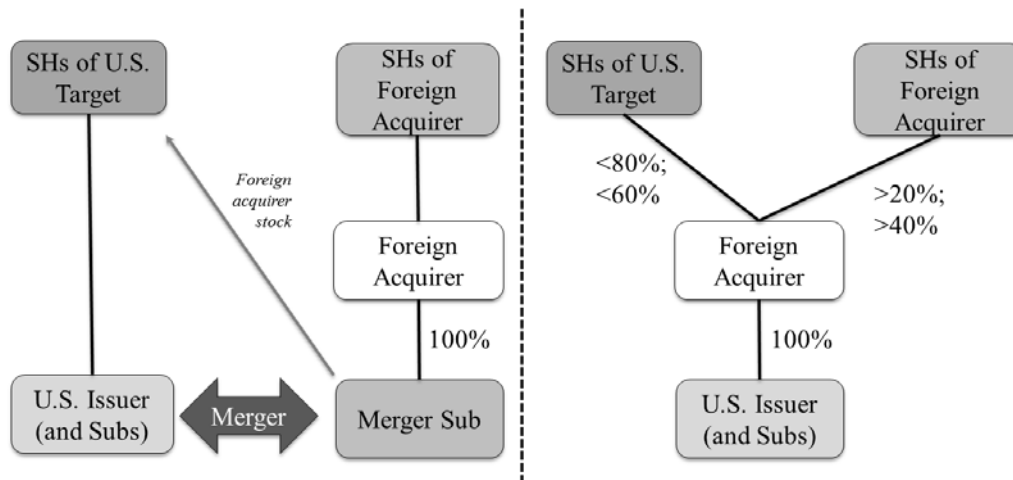


Figure 4 provides a depiction of a typical inversion that is designed to satisfy the 60% or 80% continuity thresholds. In the figure, a foreign acquirer creates a captive subsidiary (“Merger Sub”) that merges with the U.S. target, paying stock in the foreign acquirer as currency in the transaction.⁸¹ As a result of the merger, the foreign acquirer becomes the par-

⁸¹ While not pictured in Figure 4, keep in mind that the excise tax on compensation continues to apply when U.S. shareholders are diluted by less than 40%, and the transaction remains taxable to the inverter's shareholders when dilution falls short of 50%. The foreign subsidiary may formally be deemed the acquirer under the applicable merger statute (as illustrated), or it may be acquired by the U.S. company in a “reverse subsidiary merger.” Alt-

ent of the U.S. target (and all its subsidiaries). Former shareholders of the U.S. target emerge with stock of the foreign acquirer, and sit alongside shareholders of the acquiring corporation with an ownership claim that is designed to meet the relevant threshold (either 60% or 80%, depending on what tax benefits the parties are hoping to receive).

In some transactions, it can be difficult to meet the relevant dilution thresholds, because the U.S. “target” is simply too large relative to the foreign “acquirer” to produce the desired extent of dilution at a fair exchange rate for the stock transaction. Consequently, many such deals have attempted to embellish the relative valuations of the parties—and thereby satisfy the threshold—through a series of transactions meant to put the U.S. corporation on a starvation diet and/or its foreign counterpart on a fiscal bender. A common strategy for the former was to cause the U.S. target to pay a “skinny-down dividend,” such as by borrowing cash and paying it out as a dividend to shareholders, so as to reduce its net assets and equity value and make it more comparably sized to the target.⁸² Although longstanding IRS guidance dictated that such dividends were to be ignored if their “principal purpose” was to avoid anti-inversion regulations,⁸³ there are often ways to mask the rationale behind the payment (including the use of cash as part of the consideration for the acquisition of the U.S. target in the merger itself). Another common strategy has been to “puff up” the evident value of the foreign acquirer through aggregating passive assets (such as cash or stock of other companies) in retained earnings before executing the inversion.⁸⁴ Other structuring tactics include having the U.S. target, prior to the transaction, spin off various divisions—or alternatively have the foreign buyer ac-

though there are some tax implications of this latter structure, they are not as pertinent for the purposes of current discussion.

⁸² Several inversion transactions, such as Argonaut/PXRE (2007) and Valeant/Biovail (2010), used such strategies. See, e.g., Valent Pharm. Int’l, Agreement and Plan of Merger (Form 8-k, Ex. 2.1), 87–88 (June 23, 2010), available at <http://www.sec.gov/Archives/edgar/data/930184/000095012310060187/y85150exv2w1.htm>.

⁸³ See I.R.C. § 7874(c)(4) (“The transfer of properties or liabilities (including by contribution or distribution) shall be disregarded if such transfers are part of a plan a principal purpose of which is to avoid the purposes of this section.”).

⁸⁴ See, e.g., William R. Pauls, *Inversion Notice Boxes Out Foreign Insurers and Reinsurers*, 145 Tax Notes 1259, 1259–61 (Dec. 15, 2014) (noting that many foreign insurance and reinsurance companies that have been active in the inversions market have significant passive assets).

quire other foreign entities—to skew the balance.⁸⁵ Similarly, some deals involved a spinoff of a portion of a U.S. target to a newly formed foreign corporation, distributing the stock of the new corporation to the target’s stockholders (also known as a “spinversion”).⁸⁶ Such structures effectively reduce the size of the acquired entity relative to the acquiring foreign corporation, so as to satisfy the applicable dilution threshold under Section 7874. If all else failed, one final approach would be to have some of the consideration come in cash, or simply to grant the foreign acquirer exceptionally attractive terms of exchange in the deal, so as to justify a valuation that appears to hit the targeted dilution threshold.⁸⁷

In addition to complying with the requisite conditions prescribed by the U.S. tax code, of course, the inversion transaction must also satisfy applicable conditions in the foreign jurisdiction where tax residency of the surviving entity is sought. Thus, for example, if the transaction seeks tax residency in a jurisdiction that utilizes a “corporate headquarters” test, the headquarters of the resulting entity could not remain in the United States, but would have to be moved to the foreign location. Many recent inversions with surviving Irish parent corporations (such as Medtronic-Covidien) opted to make this move.⁸⁸

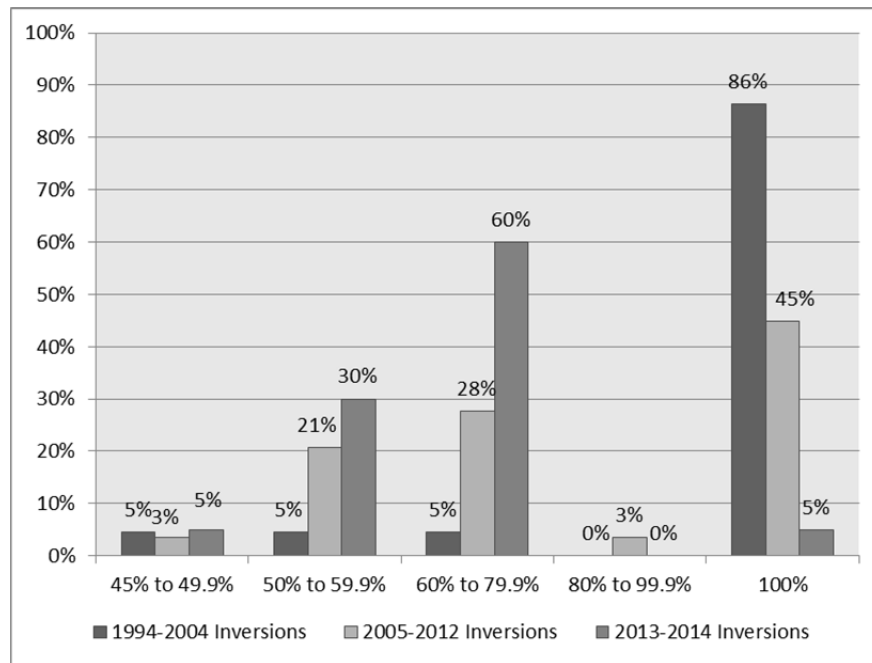
⁸⁵ See, e.g., Ajay Gupta, News Analysis: Will PayPal’s Spinoff End in an Inversion—or Two?, 76 *Tax Notes Int’l* 188, 193–94 (Oct. 20, 2014) (analyzing the use of pre-transaction spinoffs for satisfying § 7874).

⁸⁶ One notable example is Mylan’s acquisition of Abbott Laboratories’ foreign generic drug assets. See Michelle Fay Cortez, Mylan to Add Abbott’s Generic-Drug Unit, Cut Tax Rate, *Bloomberg Bus.* (July 14, 2014), <http://www.bloomberg.com/news/2014-07-14/abbott-to-sell-generic-drug-unit-to-mylan-for-5-3-billion.html>. It should be noted that both spinoffs and “spinversions” may create problems in allocating the U.S. corporation’s debt, and some debt covenants specifically prohibit such piecemeal sales. See Wachtell, Lipton, Rosen & Katz, *Spin-Off Guide* 1, 14 (2014), available at <http://www.wlrk.com/files/2014/SpinOffGuide.pdf>.

⁸⁷ Whether this last strategy might be a violation of fiduciary duties is a matter addressed below. See *infra* notes 108–07 and accompanying text.

⁸⁸ Joseph Walker, *Medtronic’s Tax Inversion: Not as Easy as It Seems*, *Wall St. J.* (June 19, 2014, 7:24 PM), <http://www.wsj.com/articles/medtronics-irish-jig-not-as-easy-as-it-seems-1403220286>.

Figure 5: Percentage Share of Surviving Inversion Entity Owned by Public Shareholders of the U.S. Target, by Relevant Ownership Threshold Cutoff Bands (Source: Appendix B)



Although the tax reforms of the 2000s clearly added teeth to the U.S. anti-inversion rules, the track record since suggests the changes were either ineffectual or were overpowered by other factors. Indeed, in the decade between the Helen of Troy inversion and 2004, a total of twenty-two inversions were announced in which a U.S. public company proposed to move its tax home abroad. In the ensuing decade between the 2004 reforms and 2014, in contrast, there have been more than twice that number (forty-nine), and twenty such transactions have been announced since 2012 alone.⁸⁹ That is not to say that inversion transactions have been impervious to the evolving regulatory landscape: To the contrary, the nature and composition of deals have changed significantly in response to the rule changes that have occurred over the last decade and a half. Figure 5 above illustrates one such change, summarizing the own-

⁸⁹ See *infra* Appendix B; Raice, *supra* note 70.

ership fraction retained by public U.S. target shareholders of the surviving entity for announced inversions between 1994 and the end of 2014. As the figure demonstrates, deal structure has responded discernibly to the changing regulatory landscape. Before the 2004 reforms took effect, the vast majority (86%) of inversions skewed heavily towards “naked” self-inversions. That number declined significantly after the 2004 reforms (to 45%), as a greater fraction of deals were structured to comply with the relevant dilution threshold tests under Section 7874. Self-inversions virtually disappeared from the scene after 2012, when additional IRS guidance tightened the “substantial business activities” test as an alternative to the dilution thresholds.⁹⁰ Nevertheless, the tax advantages of inversions evidently remained too lucrative for many U.S. issuers to pass up. During the 2013–14 years, fully nine-tenths of announced deals fell within one of the two size dilution buckets prescribed under Section 7874 (60% and 80%). During the summer of 2014, just as President Obama was making the pronouncement reproduced at the beginning of this Article, most analysts eagerly awaited what response (if any) would come from Congress, Treasury, or others.

That response came in September 2014, when the U.S. Treasury issued new Guidance intended to place more significant constraints on the attractiveness of tax inversions.⁹¹ The new Guidance did not (and indeed could not) alter the 60% or 80% statutory thresholds established under Section 7874. However, the new rules do make it harder for parties to engage in familiar parlor tricks designed to make a transaction compliant with targeted dilution thresholds. For example, the new restrictions heavily constrain skinny-down dividends, disregarding “extraordinary” dividends made during the three-year period that precedes the transaction.⁹² Additionally, the value of the foreign acquirer must be computed independent of passive asset holdings (such as cash or passive invest-

⁹⁰ See *supra* note 78.

⁹¹ I.R.S. Notice 2014-52, 2014-42 I.R.B. 712. The Secretary of Treasury is given considerable authority under § 7874 to make adjustments to the application of the statute “as are necessary to prevent the avoidance of the purposes of this section.” See I.R.C. § 7874(g) (2012).

⁹² The Guidance defines such a dividend or dividends to be in excess of (1) all distributions made during the taxable year by the domestic target over (2) 110 percent of the average of all distributions during the 36-month period immediately preceding such taxable year. I.R.S. Notice 2014-52, 2014-42 I.R.B. 714. Significantly, “distributions” is defined broadly in the Notice, and would implicate pre-inversion spinoffs (even if done tax-free under I.R.C. § 355). See Gupta, *supra* note 85.

ments) when at least 50% of the entity's assets are passive.⁹³ The new rules also place new hurdles in the way of "spinversion" transactions by treating the spun-off assets (even if incorporated abroad) as a U.S. corporation for tax purposes.⁹⁴ Another important area where the 2014 Guidance tightens up scrutiny is in post-inversion intercompany loans. The guidelines specifically deem as taxable "hopscotching" loans in which the CFCs owned by the U.S. target lend capital directly to the foreign acquirer. That is, these "hopscotching" loans are deemed for tax purposes to have been passed through the U.S. target—for a period of ten years after the inversion. Consequently, such payments continue to have to satisfy the I.R.C. Section 956 constraints discussed above,⁹⁵ and are otherwise treated as taxable distributions to the U.S. target.

It is still perhaps premature to declare definitively what durable effects the 2014 Guidance will have. On the one hand, the Guidance imposes nontrivial impediments for deal structuring, ones reflected in acquisitions that were signed (but not closed) at the time of the rule change.⁹⁶ In fact, the \$55 billion AbbVie/Shire deal was ultimately derailed substantially by the new rules, with AbbVie opting to pay a \$1.64 billion break fee rather than attempt to restructure the transaction.⁹⁷ Moreover, the pace of inversions announced in the months following the release of the Guidance slowed to a relative trickle. The first four

⁹³ I.R.S. Notice 2014-52, 2014-42 I.R.B. 712, 714. Prior guidelines excluded passive assets only if they were part of a transaction related to the merger (so-called "stuffing" transactions).

⁹⁴ Specifically, the Guidance partially closes an exception in § 7874 that deals with internal group restructuring, and which had allowed U.S. parents to move assets to a foreign spin-off entity, distributing the spun-off stock to the U.S. parent's shareholders. The Guidance calls for future regulations that will deem such foreign spin-offs to be domestic corporations for U.S. tax purposes, thereby eviscerating the tax benefits of the restructuring transaction. See Fact Sheet: Treasury Actions to Rein in Corporate Tax Inversions, U.S. Department of the Treasury (Sept. 22, 2014), <http://www.treasury.gov/press-center/press-releases/Pages/jl2645.aspx>.

⁹⁵ See *supra* notes 39–53 and accompanying text.

⁹⁶ These include the then-pending inversions of Abbott Labs/Mylan (a "spinversion"), Medtronic/Covidien, and AbbVie/Shire. Shares in each of these companies were off discernibly in the hours after Treasury released the Guidance. See Maureen Farrell & Steven Rus-solillo, *The Inversion Trade: Stocks Selling Off on Treasury Guidance*, *Wall St. J.* (Sept. 23, 2014), <http://blogs.wsj.com/moneybeat/2014/09/23/the-inversion-trade-stocks-selling-off-on-treasury-guidance>. Nevertheless, only the AbbVie/Shire merger ended up being derailed by the new rules; the other two closed after some restructuring. See *infra* Appendix B.

⁹⁷ Shire Gets \$1.64B Breakup Fee from AbbVie, *CBS News* (Oct. 20, 2014, 7:00 PM), <http://www.cbsnews.com/news/shire-gets-1-64b-breakup-fee-from-abbvie>.

months of 2015, for example, saw but two announced inversions⁹⁸—far off the pace from a year before, even as overall M&A activity remained historically robust.⁹⁹

On the other hand, there are several signs that the reform may be too little too late for some potential targets. First, the act of clarifying the ground rules for inversions can, paradoxically, provide a strategic play-book for architects of future transactions. (Perhaps consequently, more than a half dozen U.S. companies announced inversions after new reforms were proposed in September 2014.)¹⁰⁰ Second, within some industries (such as pharmaceuticals), the emigration genie appears not only to be out of the bottle, but acting as a veritable M&A *shadchan*: Several of the surviving foreign entities from *previous* inversions (such as Activis, Mylan, Endo, Tim Hortons, and Valeant) are now large enough to satisfy relevant tax dilution thresholds with many U.S. targets. And accordingly, several have been lining up for seconds (if not thirds).¹⁰¹

⁹⁸ These are Arris (April 2015) and Cyberonics (February 2015). See Cecile Daurat & Amy Thomson, Pace Soars as Arris Agrees to \$2.1 Billion Inversion Deal, *Bloomberg Bus.* (Apr. 23, 2015, 5:09 AM), <http://www.bloomberg.com/news/articles/2015-04-22/arris-agrees-to-acquire-u-k-based-pace-for-2-1-billion>.

⁹⁹ Dan Primack, M&A Mania: Deal Activity Hits 8-year High, *Fortune* (Mar. 31, 2015, 3:37 PM), <http://fortune.com/2015/03/31/ma-mania-deal-activity-hits-8-year-high>.

¹⁰⁰ See All My Bags Are Packed: Corporate America's Tax-Driven Exodus Continues, *The Economist* (August 15, 2015), <http://www.economist.com/news/business/21660986-corporate-americas-tax-driven-exodus-continues-all-my-bags-are-packed>. As one commentator put it: "In a perverse way, Treasury's most effective weapon may have been ambiguity . . . [W]ith [the] guidance, it is likely that lawyers will attempt to restructure many transactions to satisfy the new rules." Howard Gleckman, Treasury's New Rules May Slow, But Won't Stop Corporate Tax Inversions, *Forbes* (Sept. 23, 2014, 6:41 PM), <http://www.forbes.com/sites/beltway/2014/09/23/treasurys-new-rules-may-slow-but-wont-stop-corporate-tax-inversions>.

¹⁰¹ The cross-border acquisitive activity of such prior inverters has thus far been limited however: Although the *number* of outbound acquisitions (inversions and others combined) in the months since the Treasury's crackdown declined, the aggregate *dollar volume* of announced outbound deals increased somewhat. See David Crow et al., Tax Inversion Curb Turns Tables on U.S., *Fin. Times* (Mar. 15, 2015, 10:36 PM), <http://www.ft.com/cms/s/0/e1ba6eb0-ca5c-11e4-b8ff-00144feab7de.html#axzz3UVhNpbS5>. That said, the uptick in outright foreign acquisitions of U.S. firms (to the extent one exists) is more likely a piece of a dramatic increase in overall global M&A activity during this time. See Amanda Athanasiou, Did Treasury Cause an Increase in Foreign Takeovers?, 78 *Tax Notes Int'l* 514, 514 (May 11, 2015).

*B. You Get an Inversion; YOU Get an Inversion; EVERYBODY Gets an Inversion?*¹⁰²

Given the tax inversion's prominence in contemporary policy debates, one might conclude that it is now a dominant strategy for most/all domestic MNCs. Empirical evidence does not bear out that inference: Despite extensive media coverage, comparatively few inversion transactions have been executed during the last two decades.¹⁰³ The overall modesty of these numbers plausibly reflects the complicated and idiosyncratic regulatory landscape surrounding inversions. Some U.S. companies are likely—even after the most recent Treasury Guidance—to want to pursue them still; but for others, the costs and difficulties of inversions are likely to be prohibitive relative to other available options. Put simply, inverting is not the most profitable strategy for all firms, suggesting that the current wave may well abate without additional regulatory reforms.

Although cataloguing each consideration relevant to inversion calculus is beyond the scope of this Article, it is worthwhile noting some of the most significant ones briefly:

Domestic Orientation: As noted above, the principal benefit of inverting comes from the favorable tax treatment accorded to taxable income earned abroad. If a U.S. corporation's income is derived largely from domestic operations, most of its earnings will remain taxed at U.S. rates, regardless of the jurisdiction of incorporation. Similarly, the subsidiaries of the U.S. target often still fall under American tax rules after the inversion.¹⁰⁴

Alternative Strategies: Even for MNCs with substantial international operations, it is important to keep in mind that inversions are but one of several tax management tactics in play. The various noninversion strategies for reducing or deferring domestic tax liabilities (detailed at length above¹⁰⁵) continue to be available alternatives to an inversion. Consequently, while the 2014 Guidance appears to have fallen short of

¹⁰² See Look Back at Oprah's Free-Car Giveaway, The Oprah Winfrey Show (Sept. 13, 2004), <http://www.oprah.com/oprahshow/Oprahs-Entire-Audience-Are-Surprised-with-New-Cars-Video>.

¹⁰³ By my count, there were approximately seventy inversion transactions announced between 1994 and 2014, or between three and four per year. See *infra* Appendix B.

¹⁰⁴ Walker, *supra* note 88.

¹⁰⁵ See *supra* notes 25–64 and accompanying text.

quashing the profitability of all inversions, it may still have deterred a significant fraction of firms from pursuing that path, simply by making other conventional tax avoidance strategies marginally more attractive by comparison.

Stockpiled Foreign Tax Credits: The CFCs of several large U.S. multinationals—particularly in natural resource extraction industries—pay significant concession fees to foreign governments that are routinely (if controversially) characterized in part as taxes, even when the foreign country has otherwise miniscule corporate income tax rates.¹⁰⁶ Over time, such MNCs have amassed large arsenals of foreign tax credits that can help shield future repatriated distributions. Inverting would likely cause such companies to squander these considerable tax assets.

Shareholder Opposition: Some U.S. shareholders may find inversion transactions objectionable for a variety of reasons. First, as noted above, the applicable tax rules require these transactions to dilute U.S. shareholders, thereby giving them less influence over the surviving company. Second, most such transactions—unless significantly dilutive—are taxable to U.S. stockholders, regardless of the consideration paid. Should the U.S. target have significant numbers of taxable U.S. shareholders with large capital gains, or significant holdings by founders or other holders who want to maintain a modicum of influence, an inversion transaction might prove extremely unpopular, making approval less certain.¹⁰⁷

A Bleak (and Expensive) Singles Scene: In some industries, the population of acceptable foreign dancing partners is small, and potentially expensive. Even if a willing partner emerges, it can be hard to find one that is sufficiently large to meet the dilution thresholds described above (particularly so after the 2014 Guidance made it difficult to manipulate these boundaries). This scarcity is perhaps reflected in the terms of some recent deals, where the implied valuations have been eye-popping. AbbVie, for example, agreed to terms that valued its U.K. counterpart, Shire, at twenty-four times Shire's EBITDA and

¹⁰⁶ See *Exxon Corp. v. Comm'r*, 113 T.C. 338, 359–60 (1999); *Phillips Petroleum v. Comm'r*, 104 T.C. 256, 257–62, 316 (1995).

¹⁰⁷ Laura Saunders, An 'Inversion' Deal Could Raise Your Taxes: Shareholders Are Likely to Owe Capital-Gains Tax, *Wall St. J.* (Aug. 1, 2014, 12:34 PM), <http://www.wsj.com/articles/how-a-corporate-inversion-could-raise-your-taxes-1406910874>.

Medtronic agreed to a 14.3 multiple for Covidien, discernibly above recent norms.¹⁰⁸ Moreover, deals that run very close to these dilution margins can be risky and challenging to structure. For example, it may be prohibitively hard to negotiate a “floating” exchange rate in a merger (which could turn on the U.S. target’s stock price), since a sudden upturn in the target’s value could cause the terms of the deal to trip a dilution threshold (with adverse tax consequences).

Legal Challenges: Almost all acquisitions of public companies give rise to some sort of legal challenge. Inversion transactions— notwithstanding their tax benefits—are no exception. The terms of the acquisition may be subject to a host of potential challenges, ranging from complaints about the imposition of tax liability, to self-dealing, to *Blasius*-based challenges of improper manipulation of the shareholder governance franchise, to *Revlon*-based challenges asserting that the foreign acquirer received excessively generous terms of trade (possibly to make the transaction meet the relevant dilution threshold).¹⁰⁹

Technical Challenges: Because inversion transactions are virtually all strategic (rather than financial) mergers, there can be challenges in in-

¹⁰⁸ See Soyoung Kim, *Amid Tax Inversion Craze, Some U.S. Companies Get Cold Feet*, Reuters (Aug. 25, 2014, 6:19 PM), <http://www.reuters.com/article/2014/08/25/usa-tax-inversions-bubble-idUSL2N0QR12W20140825>. EBITDA stands for “earnings before interest, tax, depreciation and amortization,” and such multiples are a standard benchmark for valuations. In recent years, mean deal multiples have tended on average to be comfortably below 10x. See, e.g., Am. Appraisal, *Global M&A Valuation Outlook 2014*, at 6, available at http://global.american-appraisal.com/AA-Files/Library/PDF/MAGlobalOutlook_2014.pdf.

¹⁰⁹ See, e.g., *C & J Energy Servs. v. City of Miami Gen. Emp. and Sanitation Emp. Ret. Trust*, 107 A.3d 1049, 1052–53 (Del. 2014); *City of Miami Gen. Emp. and Sanitation Emp. Ret. Trust v. C & J Energy Services*, No. 9980-VCN, 2014 WL 6696435 (Del. Ch. 2014) (applying *Revlon* scrutiny to an inversion transaction structured to transfer more than fifty percent of control of the U.S. Target to a controlled foreign acquirer, in order to satisfy dilution thresholds under I.R.C. §§ 7874 and 367). In December 2014, the Delaware Supreme Court reversed, holding Vice Chancellor Noble had misconstrued what Delaware law requires of a target board in a *Revlon* transaction. The Supreme Court assumed for discussion, however, that *Revlon* was applicable, refraining from making a determination on whether reserving significant post-acquisition minority rights could render the *Revlon* test inapplicable. See *C & J Energy Serv.*, 107 A.3d at 1052–53 (Del. 2014). Shareholders have also challenged “grossing up” provisions in deals meant to make executives and directors whole for the inversion excise tax. Such a suit is currently in progress regarding the Medtronic deal. Marino Eccher, *Medtronic Shareholder Sues over Merger Tax Compensation Plan*, Pioneer Press (Oct. 6, 2014, 7:02 PM), http://www.twincities.com/business/ci_26674591/medtronic-shareholder-sues-over-merger-tax-compensation-plan.

tegrating the operations of the two participants. Corporate cultures and legal traditions can differ significantly. Moreover, inversions can require shifting to different accounting protocols (for example, GAAP to IFRS), which can prove cumbersome.

Regulatory Challenges: Particularly large transactions may face significant regulatory risk from competition authorities, foreign-direct-investment boards and even takeover panels. Particularly in industries where deal momentum has been considerable, industry concentration may soon grow substantial enough to invite serious antitrust scrutiny to new acquisitions (a factor that ultimately stymied the inversion transaction between Applied Materials and Tokyo Electron¹¹⁰). To the extent that such scrutiny entails some discretion by government actors, the current maelstrom surrounding inversions in the United States may heighten that risk further. Moreover, a significant form of regulatory risk can come from U.S. and foreign tax authorities themselves, who can (and do) retroactively alter the rules on tax treatment when a deal is part way between signing and closing (as occurred with the now-abandoned Abbvie-Shire transaction¹¹¹).

Jurisdictional Roulette: A final possible downside to inverting—and one that animates much of the rest of this Article—is jurisdictional: Under U.S. tax rules, an inversion requires moving the firm’s incorporation home away from the familiar jurisprudential stomping grounds for U.S. public companies—typically Delaware law¹¹²—and into the domain of a foreign jurisdiction (such as Ireland, the U.K., Canada, etc.). Not only might that new jurisdiction be relatively unfamiliar, but surrendering U.S. law could prove particularly costly for those firms and investors that benefit by “bonding” to the contours of Delaware law. Moreover, the Delaware safety net likely earns its keep at pivotal crisis moments in a corporation’s lifetime, where both the Chancery Court and the Delaware Supreme Court have developed reputations for swift, sophisticated, principled, and relatively predictable adjudica-

¹¹⁰ See Takashi Mochizuki et al., *Applied Materials, Tokyo Electron Cancel Merger Plan; Deal Collapses After Firms Give up on Winning Antitrust Approval*, *Wall St. J.* (Apr. 27, 2015, 10:42 AM), <http://www.wsj.com/articles/applied-materials-tokyo-electron-scrap-merger-plan-1430117758>.

¹¹¹ See *supra* note 96 and accompanying text.

¹¹² As detailed below, approximately 64% of U.S. inversion targets since 1994 (forty-six of seventy-two) expatriated from Delaware—a proportion that reflects Delaware’s overall dominance in public company incorporations. See *infra* Appendix B.

tion.¹¹³ How a foreign jurisdiction handles similar crisis moments is still unclear.¹¹⁴ Inverting can thus carry a material collateral cost as to corporate internal affairs—the company must trade in a strong and familiar hand for a brand new deck with a brand new dealer.¹¹⁵

Although it is unlikely that each of the aforementioned factors carries identical weight for all aspiring inverters, their aggregation can be sufficient to render the tax inversion game unworthy of the candle—at least for some companies. Perhaps consequently, some commentators have pointed to signs (corroborated by early data) that the inversion frenzy will begin to slow on its own accord, even without an extra push from tax policy.¹¹⁶

C. Internal Affairs, Corporate Governance, and the Loss of Delaware Jurisprudence

This Part closes by offering a more in-depth analysis of the final of the aforementioned costs of inverting: the loss of U.S. (and often Delaware) jurisprudence to expatriating corporations. How large a cost is associated with swapping Wilmington for London or Belfast? Reasonable minds can (and do) differ, and the issue is challenging to measure empirically. Nonetheless, Delaware's traditional dominance in attracting incorporations—and its record of maintaining that dominance—has been the topic of untold reams of academic writing. The prevailing views fall into one of three general camps, summarized below.

According to one line of argument, Delaware's focal popularity is an artifact of a regulatory "race to the bottom," in which corporate managers prefer Delaware because it offers a manager-friendly structure that (in their minds) takes precedence over broader considerations of share-

¹¹³ See, e.g., Donald F. Parsons Jr. & Joseph R. Slights III, *The History of Delaware's Business Courts: Their Rise to Preeminence*, 17 *Bus. L. Today*, March/April 2008, at 21, 22–23, available at <https://apps.americanbar.org/buslaw/blt/2008-03-04/slights.shtml>.

¹¹⁴ As one senior partner put it in a recent interview: "It sounds easy enough when you are just scheduling quarterly board meetings in some exotic locations. . . . But then if you're in the middle of an M&A deal or activist situation and the board has to meet frequently, we've seen this can become an administrative burden." Kim, *supra* note 108 (quoting Mario Ponce of Simpson Thatcher & Bartlett).

¹¹⁵ As I will argue below, however, this last collateral cost may not be as large as it once was, due to the progressive federalization of corporate governance. See *infra* Section II.C.

¹¹⁶ See Kim, *supra* note 108.

holder (or company) welfare.¹¹⁷ According to this account, corporate boards and CEOs—who control incorporation and reincorporation decisions—are naturally drawn to jurisdictions that provide them with a buffer against liability and shareholder monitoring. Consequently, regulatory competition tends to reward jurisprudential pandering to managerial self-interest and private benefits of control.

A second camp argues that Delaware's persistent position as a jurisprudential juggernaut is due to path dependent network externalities, whatever the reasons for the state's initial dominance.¹¹⁸ According to this account, most practicing lawyers have been traditionally schooled in Delaware corporate law, and they therefore have a natural inclination to preserving its contours. Therefore, regulatory competition is likely to have muted effects, since incumbent legal professionals have a stake in (and comfort with) the current dominant regime.¹¹⁹

A third camp—and likely a measured majority of corporate law scholars and practitioners—tends to believe that corporate governance “matters,” and that Delaware's legal framework and accompanying institutions add—all told—net economic value to public companies by encouraging governance practices that tend to serve shareholders' interests.¹²⁰ Even assuming managers would otherwise covet a management friendly (and investor unfriendly) regime, the argument goes, embracing such a regime would substantially impair the firm's access to low-cost debt and equity capital. Other U.S. jurisdictions more unabashed in their

¹¹⁷ E.g., Lucian Bebchuk et al, *Does the Evidence Favor State Competition in Corporate Law?*, 90 *Calif. L. Rev.* 1775, 1783 (2002); William L. Cary, *Federalism and Corporate Law: Reflections upon Delaware*, 83 *Yale L.J.* 663, 663 (1974).

¹¹⁸ E.g., Marcel Kahan & Ehud Kamar, *The Myth of State Competition in Corporate Law*, 55 *Stan. L. Rev.* 679, 738–39 (2002).

¹¹⁹ See, e.g., Lucian Arye Bebchuk & Assaf Hamdani, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 *Yale L.J.* 553, 557 (2002) (arguing Delaware's powerful incumbency deters active state competition).

¹²⁰ Roberta Romano, *The Genius of American Corporate Law* 148 (1993); Robert Daines, *Does Delaware Law Improve Firm Value?* 62 *J. Fin. Econ.* 525, 533 (2001) (arguing Delaware law enhances shareholder value by as much as five percent); Daniel R. Fischel, *The “Race to the Bottom” Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 *Nw. U. L. Rev.* 913, 919–20 (1982); William Savitt, *The Genius of the Modern Chancery System*, 2012 *Colum. Bus. L. Rev.* 570, 571; Ralph K. Winter, Jr., *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 *J. Legal Stud.* 251, 275–76 (1977); Albert B. Crenshaw, *Delaware Inc.*, *Wash. Post* (May 7, 2000) <http://www.washingtonpost.com/archive/business/2000/05/07/delaware-inc/fddd53ab-ebde-4176-9ce5-6817f2af609f>; Steven Lipin, *Firms Incorporated in Delaware Are Valued More by Investors*, *Wall St. J.* (Feb. 28, 2000, 12:01 AM), <http://www.wsj.com/articles/SB951694281741477590>.

solicitude for managerial interests, by contrast, have attracted less stable firms that tend to manifest more problems for investors.¹²¹ (The state of the literature regarding foreign jurisdictions—including popular inversion destinations—remains sparse.¹²²)

Empirically, the proposition that Delaware law creates value (at least historically) enjoys some support. Through the end of the 1990s, in fact, Delaware incorporation tended to predict significantly greater profitability and enterprise value than did non-Delaware incorporation.¹²³ Later research, however, has begun to demonstrate that the “Delaware effect” has been inconsistent in the years since, with a tendency towards substantial atrophy over that time.¹²⁴ Recent work by Martijn Cremers and Simone Sepe, for example, finds that the traditional valuation premium on Delaware incorporation abated substantially over the course of the decade from 2002 through 2012,¹²⁵ an effect corroborated in other measures of jurisdictional quality as well.¹²⁶ There are likely many reasons for this atrophying trend. However, one roughly contemporaneous phenomenon—documented at some length by Mark Roe¹²⁷ and others—concerned the interplay between state and federal securities law (as discussed in greater detail below).

In some contrast, substantial empirical evidence suggests that listing in U.S. securities markets is associated with positive and persistent economic value creation. A large literature on cross-listed issuers, for example, demonstrates that listing on U.S. securities markets is associated

¹²¹ Michal Barzuza & David C. Smith, What Happens in Nevada? Self-Selecting into Lax Law, 27 *Rev. Fin. Stud.* 3593, 3594–96 (2014) (finding that Nevada incorporations are significantly more likely to restate earnings than non-Nevada incorporators).

¹²² See Manuel Ammann et al., Product Market Competition, Corporate Governance, and Firm Value: Evidence from the EU-Area 1–7 (Apr. 14, 2011) (unpublished manuscript, available at <http://ssrn.com/abstract=1771622>) (reviewing literature).

¹²³ See Daines, *supra* note 120, at 527–28.

¹²⁴ Guhan Subramanian, The Disappearing Delaware Effect, 20 *J.L. Econ. & Org.* 32, 33 (2004).

¹²⁵ K.J. Martijn Cremers & Simone M. Sepe, Whither Delaware? Limited Commitment and the Financial Value of Corporate Law 2, 19–20 (Nov. 4, 2014) (unpublished manuscript, available at <http://ssrn.com/abstract=2519238>).

¹²⁶ See Brian R. Cheffins, et al., The Race to the Bottom Recalculated: Scoring Corporate Law Over Time 82 (*European Corp. Governance Inst., Law Working Paper No. 261/2014*, 2014), available at <http://ssrn.com/abstract=2475242> (“Our deployment of leximetric analysis indicates, for instance, there has been erosion of shareholder protections offered by state law over the past century. This erosion was generally modest, however, suggesting that if there was a meaningful race to the bottom, it did not occur during the twentieth century.”).

¹²⁷ Mark J. Roe, Delaware’s Competition, 117 *Harv. L. Rev.* 588, 592–93 (2003).

with positive price reactions.¹²⁸ Some of this literature suggests that a key driver of this market premium comes through “bonding” of foreign firms to the more demanding standards (including those related to corporate governance) in the United States.¹²⁹ Although others have disputed the channels through which this premium occurs,¹³⁰ the bonding hypothesis continues to have significant support in the academic community.¹³¹

Perhaps a more telling understanding of the value of U.S. incorporation versus U.S. listing lies in understanding the joint relationship between them. Well into the late twentieth century, the two were conceived as legally orthogonal: Corporate law and governance matters were considered the unique province of state law; U.S. securities regulation focused, in contrast, on maintaining a well-functioning trading market. This division of jurisdictional labor was famously acknowledged by the U.S. Supreme Court nearly four decades ago:

[W]e are reluctant to federalize the substantial portion of the law of corporations that deals with transactions in securities, particularly where established state policies of corporate regulation would be overridden. . . . “Corporations are creatures of state law, and investors commit their funds to corporate directors on the understanding that, except where federal law *expressly* requires certain responsibilities of

¹²⁸ See, e.g., John Ammer et al., *Why Do U.S. Cross-Listings Matter?* 1–4 (May 2008) (unpublished manuscript, available at <http://ssrn.com/abstract=1146605>) (reviewing the literature and independently exploring the impact of cross-listing on stock value).

¹²⁹ See, e.g., John C. Coffee, Jr., *The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications*, 93 *Nw. U. L. Rev.* 641, 691–92, 706–07 (1999) (analyzing the role of bonding in foreign issuers’ decisions to list in the U.S. markets); Craig Doidge et al., *Why Are Foreign Firms Listed in the U.S. Worth More?*, 71 *J. Fin. Econ.* 205, 209–10 (2004) (arguing that cross-listing in the United States reins in expropriation by dominant and controlling shareholders, as well as other agency costs); René M. Stulz, *Globalization, Corporate Finance, and the Cost of Capital*, 12 *J. Applied Corp. Fin.* 8, 9 (1999) (arguing that effective corporate governance lowers the cost of capital by reducing information and agency costs).

¹³⁰ Amir N. Licht et al., *What Makes the Bonding Stick? A Natural Experiment Involving the U.S. Supreme Court and Cross-Listed Firms* 29–32 (Harvard Bus. Sch., Working Paper No. 11-072, 2013), available at <http://ssrn.com/abstract=1744905>; Sergei Sarkissian & Michael J. Schill, *The Nature of the Foreign Listing Premium: A Cross-Country Examination* 4–5 (Darden Bus. Sch., Working Paper No. 1639848, 2012), available at <http://ssrn.com/abstract=1639848>.

¹³¹ Moreover, even if the U.S. listing premium is due to forces other than U.S. legal structure (for example, reputational bonding, or simply the liquidity of U.S. markets), the fact that this benefit is not easily replicated makes it a plausible target for tax levies, as discussed further below.

directors with respect to stockholders, state law will govern the internal affairs of the corporation.”¹³²

Times have indeed changed. Although the separation of corporate and securities law was never entirely air-tight, the acoustic separation between them began disintegrating substantially after the bursting of the dot-com bubble, as securities law began increasingly and progressively to colonize corporate governance, preempting and displacing the mandates of state corporate law. While this federal incursion into governance has occurred along multiple fronts, at its vanguard have been two landmark pieces of legislation (and their implementing regulations): the Sarbanes-Oxley Act of 2002 (“SOX”)¹³³ and the Dodd-Frank Act of 2010 (“Dodd-Frank”).¹³⁴

The substantial federalization of corporate governance is multi-dimensional and widely acknowledged, drawing the attention of academic commentators, judges, and regulators over recent years,¹³⁵ along with a lively—if characteristically raucous—debate about its normative desirability.¹³⁶ This federalization trend also appears manifest empirical-

¹³² *Santa Fe Indus., Inc. v. Green*, 430 U.S. 462, 479 (1977) (quoting *Cort v. Ash*, 422 U.S. 66, 84 (1975) (emphasis added)).

¹³³ Pub. L. No. 107-204, 116 Stat. 745 (2002) (codified as amended in scattered sections of U.S.C.).

¹³⁴ Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified as amended in scattered sections of U.S.C.).

¹³⁵ See, e.g., Stephen M. Bainbridge, *Dodd-Frank: Quack Federal Corporate Governance Round II*, 95 *Minn. L. Rev.* 1779, 1780–89, 1794–96 (2011); William W. Bratton and Joseph A. McCahery, *The Equilibrium Content of Corporate Federalism*, 41 *Wake Forest L. Rev.* 619, 622–23 (2006); Frank H. Easterbrook, *The Race for the Bottom in Corporate Governance*, 95 *Va. L. Rev.* 685, 694–95 (2009); Jill E. Fisch, *The New Federal Regulation of Corporate Governance*, 28 *Harv. J.L. & Pub. Pol’y* 39, 39–41 (2004); Mark J. Roe, *A Spatial Representation of Delaware-Washington Interaction in Corporate Lawmaking*, 2012 *Colum. Bus. L. Rev.* 553, 554–56; Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 *Yale L.J.* 1521, 1523–29 (2005); Joel Seligman, *A Modest Revolution in Corporate Governance*, 80 *Notre Dame L. Rev.* 1159, 1159 (2005); Leo E. Strine, Jr., *Breaking the Corporate Governance Logjam in Washington: Some Constructive Thoughts on a Responsible Path Forward*, 63 *Bus. Law.* 1079, 1081–82 (2008); Daniel M. Gallagher, *Comm’r, Sec. & Exch. Comm’n, Remarks at the 26th Annual Corporate Law Institute, Tulane University Law School: Federal Preemption of State Corporate Governance* (Mar. 27, 2014), available at <http://www.sec.gov/News/Speech/Detail/Speech/1370541315952#.Uzr4pRb31US>.

¹³⁶ Compare Kate Litvak, *The Effect of the Sarbanes-Oxley Act on Non-U.S. Companies Cross-Listed in the U.S.*, 13 *J. Corp. Fin.* 195, 226 (2007) (showing negative effects of SOX on foreign companies cross-listed in the U.S. exchanges), with Marcelo Bianconi et al., *Firm Value, the Sarbanes-Oxley Act and Cross-Listing in the U.S., Germany, and Hong Kong Destinations*, 24 *N. Am. J. Econ. & Fin.* 25, 42–43 (2013) (finding that SOX appears to have

ly, as federal law has increasingly begun to overshadow state law in providing the investor protections that are commonly included in standard corporate governance indexes.¹³⁷ In some instances, the SOX-Dodd Frank-era reforms extended or sharpened preexisting state law mandates; more often, however, the new rules entered arenas where state law was silent—implicitly permitting issuer flexibility. Consider a sampling of the corporate governance mandates that have become enshrined in federal securities law during the last fifteen years alone:

Internal Controls: Perhaps the most notorious mandate introduced by SOX is a requirement to include in the firm's annual report assessments by the chief executive officer, chief financial officer, and an outside auditor of the effectiveness of the firm's internal controls over the accuracy of financial statements.¹³⁸

Certification of Financial Statements: Chief executive officers and chief financial officers of U.S. issuers are required to certify the accuracy of the firm's periodic reports, and are subject to criminal penalties for false certifications.¹³⁹

Executive Compensation Restrictions: Senior officers and directors are now precluded from receiving many types of loans from their corporations.¹⁴⁰ Moreover, such fiduciaries are now required to make a significantly more complete disclosure of the elements of their executive pay,¹⁴¹ as well as a clear exposition of the relationship between execu-

discouraged U.S.-destination cross-listings, but that firms already cross-listed in the U.S. "commanded a premium, due to the market perception of higher standards").

¹³⁷ See, e.g., Cheffins et al., *supra* note 126 (conducting a historical "leximetric" analysis of shareholder protections in Delaware, Illinois, and the collection of Model Business Corporation Act states, and finding that federal mandates have become the dominant driver of shareholder protections in the modern era).

¹³⁸ 17 C.F.R. §§ 299, 308 (2011); see Management's Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, 68 Fed. Reg. 36,636, 36,636 (June 18, 2003) (to be codified at 17 C.F.R. §§ 210, 228, 229, 240, 249, 270, and 274).

¹³⁹ See Certification of Disclosure in Companies' Quarterly and Annual Reports, 67 Fed. Reg. 57,276, 57,280 (Sept. 9, 2002) (to be codified at 17 C.F.R. §§ 228, 229, 232, 240, 249, 270, and 274).

¹⁴⁰ SOX, Pub. L. No. 107-204, § 403, 116 Stat. 745, 787 (2002) (codified at 15 U.S.C. § 78m(k) (2012)).

¹⁴¹ See Executive Compensation and Related Person Disclosure, 71 Fed. Reg. 53,158, 53,168-70, 53,208-09 (Sept. 8, 2006) (to be codified at 17 C.F.R. §§ 228, 229, 232, 239, 240, 245, 249, and 274).

tive compensation and the issuer's financial performance.¹⁴² Under a recent SEC rule change pursuant to Dodd-Frank, moreover, issuers will be required to disclose the ratio of their CEO's pay to that of the median employee.¹⁴³ In addition, in the event of an accounting restatement, the CEO and CFO must return to the issuer bonuses, incentives, or equity-based compensation they received prior to the issuance of the restated financials, along with any profits they realized from the sale of corporate stock during that period.¹⁴⁴ Further regulations regarding "pay for performance" of CEOs also appear to be in the works as of this writing.¹⁴⁵

Board & Committee Structure: All publicly traded U.S. firms were required under SOX to have audit committees composed exclusively of independent directors.¹⁴⁶ Later reforms from the exchanges required majority independence of public companies' boards,¹⁴⁷ as well as independence of all members of an issuer's compensation committee (and its advisers), the latter reform required by Dodd-Frank.¹⁴⁸

Broker Voting of Shares: Under a series of NYSE rule changes, broker-dealers are no longer permitted to vote "uninstructed" shares of beneficial owners who have not submitted proxy instructions related to directorial elections¹⁴⁹ and executive compensation matters.¹⁵⁰

¹⁴² Dodd-Frank, Pub. L. No. 111-203, § 953, 124 Stat. 1376, 1903 (2010) (codified at 15 U.S.C. § 78n (2012)).

¹⁴³ Pay Ratio Disclosure, Securities Act Release No. 9877, Exchange Act Release No. 75610, 80 Fed. Reg. 50,104, 50,104 (Aug. 18, 2018).

¹⁴⁴ Id. § 954, 124 Stat. at 1904 (codified at 15 U.S.C. § 78j-4(b) (2012)); SOX § 304, 116 Stat. at 778 (codified at 15 U.S.C. § 7243 (2012)).

¹⁴⁵ See, e.g., Sunshine Act Meeting Notice, Sec. & Exch. Comm'n (Apr. 22, 2015), <http://www.sec.gov/news/openmeetings/2015/ssamtg042915.htm> (announcing plans to consider a regulation "requiring registrants to disclose in a clear manner the relationship between executive compensation actually paid and the financial performance of the registrant").

¹⁴⁶ SOX § 301, 116 Stat. at 775-76 (codified at 15 U.S.C. § 78j-1(m) (2012)).

¹⁴⁷ See Order Approving Proposed Rule Changes and Amendments Relating to Corporate Governance, 68 Fed. Reg. 64,154, 64,154-55, 64,175-76 (Nov. 12, 2003).

¹⁴⁸ 17 C.F.R. § 240.10C-1(b) (2014); see Listing Standards for Compensation Committees, 77 Fed. Reg. 38,422, 38,428 (June 27, 2012) (to be codified at 17 C.F.R. §§ 229 and 240).

¹⁴⁹ Order Approving Proposed Rule Change, as Modified by Amendment No. 4, to Amend NYSE Rule 452 and Corresponding Listed Company Manual Section 402.08 to Eliminate Broker Discretionary Voting for the Election of Directors, 74 Fed. Reg. 33,293, 33,293 (July 1, 2009).

¹⁵⁰ Notice of Filing and Order Granting Accelerated Approval to Eliminate Broker Discretionary Voting on Executive Compensation Matters, 75 Fed. Reg. 56,152, 56,152-54 (Sept. 15, 2010).

Say on Pay: Under Dodd-Frank, issuers are required to conduct a non-binding vote of shareholders no less frequently than once every three years to approve the compensation of a public company's named executive officers.¹⁵¹

Proxy Access: The SEC was given authority under Dodd-Frank to alter the rules relating to shareholder proxy voting of issuers.¹⁵² Shortly after its passage, the SEC promulgated several proxy access rules related to shareholder proposals and director nominations, although the most potent among them, Rule 14a-11, was subsequently challenged and (controversially) invalidated in the D.C. Circuit.¹⁵³ Left intact, however, was a provision explicitly permitting shareholders to propose by-law amendments that would require granting nomination power to qualifying shareholders.¹⁵⁴

CEO/Chair Identities: Public companies are required to disclose whether the same person or different persons hold the positions of CEO and Chairman of the Board.¹⁵⁵

Fiduciary Duties: The common law fiduciary obligations imposed on officers, directors, and dominant shareholders are a defining characteristic of state corporate law. Even here, however, several post-Dodd-Frank judicial decisions involving information management and insider trading have begun to embrace explicitly a federal standard for fiduciary duties, purportedly drawn from "federal common law."¹⁵⁶

¹⁵¹ Dodd-Frank, Pub. L. No. 111-203, § 951, 124 Stat. 1376, 1899–1900 (2010) (codified at 15 U.S.C. § 78n-1 (2012)).

¹⁵² § 971, 124 Stat. at 1915 (codified at 15 U.S.C. § 78n (2012)).

¹⁵³ For an analysis of the challenge to Rule 14a-11, see Matthew Spitzer & Eric Talley, On Experimentation and Real Options in Financial Regulation, 43 J. Legal Stud. S121 (2014).

¹⁵⁴ After initially siding with issuers' attempts to exclude such proposals under the provisions of Rule 14a-8(i)(9) (dealing with proposals that conflict directly with management proposals), the SEC has since retrenched to study the proper scope and application of the section. See Mary Jo White, Chair, Sec. & Exch. Comm'n, Statement from Chair White Directing Staff to Review Commission Rule for Excluding Conflicting Proxy Proposals (Jan. 16, 2015) (available at <http://www.sec.gov/news/statement/statement-on-conflicting-proxy-proposals.html>).

¹⁵⁵ Dodd-Frank § 972, 124 Stat. at 1915 (codified at 15 U.S.C. § 78n-2 (2012)).

¹⁵⁶ See, e.g., *United States v. Whitman*, 904 F. Supp. 2d 363, 369–70 (S.D.N.Y. 2012); *Steginsky v. Xcelera Inc.*, 741 F.3d 365, 367, 371 (2d Cir. 2014); cf. *Starr Int'l Co. v. Fed.*

Related Party Transactions: Public companies are required to conduct appropriate oversight and disclosure of all related party transactions for potential conflicts of interest.¹⁵⁷

Shareholder Dilution: Public companies are required to obtain a shareholder vote before any transaction or issuance of securities that would result in a dilution of shareholders by twenty percent or more.¹⁵⁸

Whistleblower Protections: The SEC is required to pay bounties (of between ten and thirty percent of the amount collected) to individuals who voluntarily provide original information leading to the successful SEC enforcement of a violation of federal securities laws resulting in monetary sanctions exceeding \$1 million.¹⁵⁹

It is important to acknowledge that the progressive federalization of corporate governance—while substantial—has not been absolute, and certain core tenets of state law have remained important factors in firm governance. One domain where state law arguably retains appreciable *mojo* is in antitakeover jurisprudence, where the Delaware Chancery Court is an acknowledged bellwether, and where securities law has thus far remained largely peripheral. An expatriated U.S. company could easily find itself the target of a hostile suitor, and beholden to the mandates of an adopted jurisdiction that is both unfamiliar and relatively unfriendly towards antitakeover devices (such as poison pills, staggered boards, and other “embedded” defenses¹⁶⁰). The vast majority of recent inver-

Reserve Bank of N.Y., 742 F.3d 37, 38, 40–41 (2d Cir. 2014) (holding federal common law fiduciary duty principles trump Delaware state law when a “federal instrumentality” is the purported defendant). This trend was arguably invited by the SEC’s promulgation of Rule 10b5-2 in 2000, setting out federal standards for duties of “trust and confidence” in insider trading contexts. See 17 C.F.R. § 240.10b5-2 (2014).

¹⁵⁷ Executive Compensation and Related Party Disclosure, 71 Fed. Reg. 53,158, 53,252–54 (Sept. 8, 2006) (to be codified at 17 C.F.R. § 229.404). Although disclosure of a related party had been mandatory in some form since the early 1980s, the 2006 reform was substantial and defended by the SEC as justified because of the “many developments since then, including the increasing focus on corporate governance and director independence.” *Id.* at 53,161.

¹⁵⁸ NYSE Listed Co. Manual R. 312.03 (2015); see also NASDAQ Listing R. 5635 (2009). While these rules predated Sarbanes-Oxley, both were amended in the years since.

¹⁵⁹ Dodd-Frank § 922, 124 Stat. at 1841–42 (codified at 15 U.S.C. § 78u-6 (2012)).

¹⁶⁰ See generally Jennifer Arlen & Eric Talley, *Unregulable Defenses and the Perils of Shareholder Choice*, 152 U. Pa. L. Rev. 577 (2003) (describing various forms of explicit and embedded takeover defenses).

sions, for example, have incorporated in European Union states, and are potentially subject both to the E.U. Takeover Directive, as well as the jurisdiction of country-specific takeover panels, both of which take a dim (if not prohibitory) view of measures that “frustrate” hostile suitors.¹⁶¹ For U.S. MNCs contemplating inversions, then, the loss of anti-takeover protections may impose a price that is excessively steep.

That said, the cost of forsaking American antitakeover law may be tolerable—even trivial—for many U.S. targets for several reasons. First, controlled U.S. targets that remain controlled after an inversion transaction have little to fear from takeover battles to begin with. Second, in some prominent inversion destinations, the company may be able to elude local takeover regulations with an assortment of tactics. In the U.K., for example, it is possible to avoid falling under the jurisdiction of the Takeover Panel and E.U. Directive by remaining listed outside of Europe.¹⁶² Alternatively, inverters to the Netherlands have made use of a longstanding legal structure known as a *stichting*, which can be employed as a functional equivalent of a poison pill that can temporarily block hostile suitors.¹⁶³ Third, significant hostile acquisition activity in the United States has shifted over the last decade to proxy contests, an area that has long been governed disproportionately by federal securities law. And finally, recent legal scholarship has raised new questions about whether federal law could be interpreted to preempt many of Delaware’s

¹⁶¹ See, e.g., Gleiss Lutz, European Directive Takeover Guide 1, 9–11 (2014), available at <http://www.ibanet.org/Document/Default.aspx?DocumentUid=D999E949-ED7C-44AE-86B1-2F2E8A36C069>; Bonelli Erede Pappalardo et al., Guide to Public Takeovers in Europe 21, 23 (2013), available at <http://www.debrauw.com/wp-content/uploads/NEWS%20-%20PUBLICATIONS/Guide-to-Public-Takeovers-in-Europe-2013.pdf>.

¹⁶² See, e.g., The Panel on Takeovers & Mergers, The Takeover Code, at A3–A5 (11th ed. 2013), available at <http://www.thetakeoverpanel.org.uk/wp-content/uploads/2008/11/code.pdf>. But see Irish Takeover Panel, Irish Takeover Act 1997, Takeover Rules And Substantial Acquisition Rules, at T5 (2013), available at <http://irishtakeoverpanel.ie/wp-content/uploads/2014/01/ITP-Takeover-Rules.pdf> (directing that even solely U.S.-exchange-traded Irish companies are subject to the panel’s jurisdiction).

¹⁶³ The *stichting* is an independently governed “foundation” established by the board, which receives an ongoing option to purchase a significant block of voting preferred shares, effectively allowing it to veto any hostile bid (at least temporarily). See 2 B.W. §§ 285, 291 (2015), available at http://wetten.overheid.nl/BWBR0003045/Boek2/Titel6/Artikel285/geldigheidsdatum_12-05-2015 and http://wetten.overheid.nl/BWBR0003045/Boek2/Titel6/Artikel291/geldigheidsdatum_12-05-2015. Mylan NV, a recent U.S. inverter to the Netherlands, activated a *stichting* when it received hostile interest from Teva Pharmaceuticals (itself a previous inverter to Israel). See Shayndi Raice & Margot Patrick, The Rise of the ‘Stichting,’ an Obscure Takeover Defense, Wall St. J. (Apr. 22, 2015, 12:15 PM), <http://www.wsj.com/articles/the-rise-of-the-stichting-an-obscure-takeover-defense-1429716204>.

most historically important takeover rules, suggesting that federalization may already be on the verge of expanding to that domain as well.¹⁶⁴

Although there is room for debate about the precise extent of the federalization of corporate law, few would quibble with the proposition that *the new federal mandates described above have decidedly displaced and/or preempted a large and important swath of state law related to corporate governance*. At the very least, the steady federal involvement in corporate governance has upended the conceptual distinction that business law has traditionally drawn between securities law and corporate law.

The steady march of federal law into the realm of corporate governance—for good or for ill—is highly relevant to tax inversion calculus in at least two respects. Primarily, it suggests that the loss of Delaware law simply does not represent the same kind of cost *today* for aspiring inverters that it might have two decades ago, when securities law carried far less weight in dictating the contours of corporate governance. To the extent that federal law has appropriated from Delaware (and other states) large sectors of corporate governance jurisprudence, most of the benefits from domestic incorporation can be retained simply by remaining listed in U.S. securities markets (governed by federal securities laws), which inverting companies have overwhelmingly opted to do.

Secondly, the availability of U.S.-style corporate governance structures through securities laws (independent of corporate law) substantially undermines the incorporation-centered approach in the United States for determining tax residency. In other words, tax status is now no longer mandatorily “bundled” with a company’s corporate governance regime. A public company is free to choose its tax jurisdiction largely independent of concerns about governance; it need not accept them (at least from the United States) as a fully conjoined package. And, since the vast majority of U.S. inversions are structured to retain substantial voting control, management, and assets within the United States, the surviving entity from an inversion typically remains subject to the same set of federal securities mandates as was its U.S.-incorporated fore-

¹⁶⁴ See, e.g., Lucian A. Bebchuk & Robert J. Jackson, Jr., *Toward a Constitutional Review of the Poison Pill*, 114 *Colum. L. Rev.* 1549, 1551–52 (2014); Guhan Subramanian, Steven Herscovici & Brian Barbetta, *Is Delaware’s Antitakeover Statute Unconstitutional? Evidence from 1988–2008*, 65 *Bus. Law.* 685, 686–88 (2010).

bear.¹⁶⁵ As I demonstrate in the next Part, the federal unbundling of tax from corporate governance can have significant implications for regulatory competition—implications that bear centrally on the inversion invasion, and how best to address it.

III. INVERSIONS THROUGH THE LENS OF REGULATORY-COMPETITION THEORY

This Part abstracts from the practical details of tax inversions, and into a conceptual and analytic assessment of the role that inversions play on a larger policy stage: regulatory competition. Specifically, I develop and analyze a framework that builds on (and in some ways extends) the regulatory competition literature¹⁶⁶ to study competitive dynamics when jurisdictions install and offer multi-attribute regulatory products. My attention—unsurprisingly—will highlight two such attributes: tax policy

¹⁶⁵ Foreign-incorporated companies listed in the United States may, under some circumstances, be exempt from certain federal governance and disclosure mandates if deemed to be “Foreign Private Issuers” (“FPIs”) for purposes of securities law. See 17 C.F.R. § 230.405 (2013) (defining FPIs). The exemptions include more liberal disclosure mandates, exemptions from most proxy rules, and greater flexibility in choice of accounting regime. For most U.S. inverters, however, FPI status is not a realistic option for the surviving entity, since it requires, *inter alia*, a majority of voting shareholders to be non-U.S. residents, a majority of directors (as well as a majority of executive officers) to be non-U.S. citizens and non-U.S. residents, a majority of assets to be located outside the United States, and the company’s locus of business administration to be outside the United States. Moreover, the predicate conditions for FPI status must be reestablished on an annual basis. *Id.* For an overview of the FPI rules, see Div. of Corp. Fin., *Accessing the U.S. Capital Markets—A Brief Overview for Foreign Private Issuers*, Sec. & Exch. Comm’n (Feb. 13, 2013), <http://www.sec.gov/divisions/corpfint/internatl/foreign-private-issuers-overview.shtml>.

¹⁶⁶ The analysis below tracks the general approach in the framework for regulatory competition developed in Gillian Hadfield & Eric Talley, *On Public Versus Private Provision of Corporate Law*, 22 *J.L. Econ. & Org.* 414, 419–20 (2006) (reviewing the corporate law regulatory competition literature); Joel Slemrod & John D. Wilson, *Tax Competition with Parasitic Tax Havens* 4–6 (Nat’l Bureau of Econ. Research, Working Paper No. 12225, 2006), available at <http://www.nber.org/papers/w12225> (reviewing the tax competition literature); see also Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the “Race-to-the-Bottom” Rationale for Federal Environmental Regulation*, 67 *N.Y.U. L. Rev.* 1210 (1992) (situating regulatory competition in environmental contexts). However, here I situate the analysis differently, drawing inspiration from more general theories of oligopolistic competition in multidimensional product space. See, e.g., Andrew Caplin & Barry Nalebuff, *Aggregation and Imperfect Competition: On the Existence of Equilibrium*, 59 *Econometrica* 25, 28–34 (1991); Andrew S. Caplin & Barry J. Nalebuff, *Multi-Dimensional Product Differentiation and Price Competition*, 38 *Oxford Econ. Papers* 129, 132–34 (1986); Avner Shaked & John Sutton, *Relaxing Price Competition Through Product Differentiation*, 49 *Rev. Econ. Stud.* 3 (1982).

and corporate governance regulations. Specifically, I will consider conditions under which jurisdictions offering packages of tax and governance regulations may differentiate themselves from one another, and what implications follow for such differentiation when firms enjoy jurisdictional mobility. Although the analysis below explores a specific, numerical example with a variety of simplifying assumptions, the example is surprisingly adaptable to far more generalized (and technically complicated) settings, yielding qualitatively similar conclusions.¹⁶⁷

Several central intuitions emerge from this analysis. First, I demonstrate that *bundling ultimately enriches firm choice*: That is, when jurisdictions can bundle governance and tax regulations, they will tend to differentiate themselves in their offerings, with some jurisdictions serving as market “leaders” in governance while others serve as market “laggards.” Second, jurisdictions that enjoy a position as market leaders will rationally attempt to capture the value they have created through their tax policies, appearing less generous in their tax treatment of domestic firms. Third, by dint of their attractive governance regimes, leaders can afford to moderate their responses to tax competition from other jurisdictions, and thus a market leader need not be drawn into ruinous competition with tax “havens” or other low-tax jurisdictions. Rather, a leader’s optimal response to another jurisdiction’s aggressive tax policies may be muted, possibly substantially. Finally (and significantly), the advantageous strategic position that a governance leader enjoys persists only insofar as the tax and governance attributes offered by the leader remain “bundled”—that is, firms must be forced to accept the leader’s tax policy as they embrace its governance rules, and they cannot selectively assemble a collage of the best pieces of different jurisdictions’ regulatory frameworks. Unbundling tax from governance (as I argue has substantially happened through U.S. securities law reforms) not only negates the leader’s market power, but it likely induces long-term reduction in regulatory differentiation—a clear negative when firms have heterogeneous needs and capabilities.

¹⁶⁷ The model introduced in the text below is deliberately kept simple for the sake of exposition. Extensions to it are discussed in succeeding subsections, and Appendix A to this Article offers a more generalized analysis for curious (and masochistic) readers.

A. Framework and Preliminaries

Consider a population of for-profit corporate entities (“firms”) making strategic decisions about their regulatory home. To ease exposition, I normalize the total size of the population of entities at 1 (although any other normalization would work too).¹⁶⁸ For purposes of current discussion, suppose each firm chooses among “bundled” regulatory goods, and that its chosen jurisdiction commits it both to that jurisdiction’s corporate governance rules and to its tax regime.¹⁶⁹ Each firm in the population is assumed to generate baseline “gross” profit of $\pi > 0$, which is constant across all firms. That said, a firm’s *net* payoff is subject to both upward and downward revisions away from this baseline as a byproduct of the regulatory environment it selects. Accordingly, I assume that firms in the population choose their regulatory environment in order to maximize firm value *net* of such revisions to their baseline.¹⁷⁰

To focus on the most basic ingredients of regulatory competition, I suppose in this example that there are two jurisdictions—Jurisdiction 1 (“ J_1 ”) and Jurisdiction 2 (“ J_2 ”), which compete with each other for incorporations and resulting tax revenue.¹⁷¹ The jurisdictions are interested in maximizing their tax revenues less the administrative cost of building and maintaining their regulatory structure.

As noted above, regulatory competition plays out through a bundle of regulatory attributes offered by each jurisdiction to firms that are incorporated there, which I denote as (x_1, τ_1) and (x_2, τ_2) , for the respective

¹⁶⁸ For example, if there were 38,000 firms in the population, then one need only multiply all of the total revenue numbers below by 38,000. Normalizing the market size to 1 economizes on notation with no loss in generality.

¹⁶⁹ In this baseline model, I assume these two choices are necessarily bundled, and moreover I assume that all the taxes an entity pays are determined by its state of incorporation. Both assumptions are easy to relax without changing any of the important insights. Later, Subsection III.C.v will return to this caveat and demonstrate how the model can accommodate it.

¹⁷⁰ The alert reader will note that a firm’s choice of regulatory environment may itself be subject to agency costs, so that a firm’s choice of regulatory environment may not fully reflect an aim to maximize firm value. See, e.g., Oren Bar-Gill & Lucian Arye Bebchuk, *Misreporting Corporate Performance* (2002) (unpublished manuscript, available at <http://ssrn.com/abstract=354141>) (describing the effect of regulatory environments on the ability of managers to misreport corporate performance). Although this argument is not the core focus of this Article, the framework introduced below is capable of folding in agency costs in the choice of incorporation as well. Such concerns might be reflected, say, by firms that have a lower willingness to pay for corporate governance (denoted as θ below).

¹⁷¹ The analysis is easily generalizable to n jurisdictions. See Appendix A for details.

jurisdictions. The terms τ_1 and τ_2 are the *tax elements* of regulatory competition, and they represent the per-firm tax levies imposed by each respective jurisdiction on firms it regulates.¹⁷² Intuitively, higher values of τ_1 and τ_2 correspond to larger per-firm tax levies in the respective jurisdiction. Tax levies are normalized to be non-negative (and thus $\tau_1 \geq 0$ and $\tau_2 \geq 0$).¹⁷³

The terms x_1 and x_2 embody the *nontax elements* of corporate regulation, to which I refer collectively as the “corporate governance” attributes of each jurisdiction. These variables embody canonical corporate law/regulation commitments thought to affect firm value (such as minority shareholder protections, fiduciary duties, judicial quality, board structure, shareholder governance rights, network externalities, and the like). Although the framework developed below is general enough to analyze corporate governance as a set (or vector) of traits, for simplicity I suppose that all relevant traits can be collapsed into a single, scalar numerical value (x_1 and x_2). In this vein, larger values of x_1 and x_2 correspond to “better” packages of corporate governance rules. Like tax levies, governance regimes are normalized to be non-negative: That is, values of x_1 or x_2 set equal to zero correspond to the minimal possible effort by the jurisdiction to build a value-creating governance framework.

Although taxes play an obvious role in a firm’s profitability, it is important to acknowledge that governance matters too. Indeed, a growing (and already sizeable) literature in empirical corporate finance has made a persuasive case that “good” corporate governance can and frequently does reduce intra-firm agency costs and firms’ cost of capital, thereby enhancing shareholder value.¹⁷⁴ At the same time, neither theory nor empirical evidence suggests that “good governance” has the homogeneous effects across all firms. For some firms, the ability to commit (or

¹⁷² Expressing taxes in terms of total tax levy (rather than rates) makes the analysis somewhat straightforward without altering the core intuitions.

¹⁷³ This is little more than a normalization, since subsidies received in the jurisdictions can be represented by adjusting the value of π upwards.

¹⁷⁴ See supra Section II.C; see also Mihir A. Desai, *The Decentering of the Global Firm*, 32 *World Econ.* 1271, 1281 (2009) (“Legal homes can . . . determine the rights for a firm’s investors and workers, wherever they are located.”); Paul A. Gompers et al., *Corporate Governance and Equity Prices*, 118 *Q.J. Econ.* 107 (2003) (finding that firms with stronger shareholder rights had increased value and returns); Lucian Bebchuk et al., *What Matters in Corporate Governance?*, 22 *Rev. Fin. Stud.* 783 (2009), available at <http://ssrn.com/abstract=593423> (finding that corporate bylaws that allowed for board entrenchment, such as poison pills, reduced firm value).

bond) into a strong governance scheme can be highly valuable. In other firms, governance is less prized.¹⁷⁵

Accordingly, in what follows I suppose that firms value corporate governance heterogeneously. In particular, suppose the responsiveness of firm value to governance structure can be summarized as a point on a scale ranging from a low of 0 (unresponsive) to a high of 1 (maximally responsive). A firm's position on this scale (the firm's "type") is denoted by the variable θ , which is simply a point on the unit scale between 0 and 1. To capture the interaction between the jurisdiction's corporate governance regulation (x_i) and the firm's type (θ), a firm can increase its value beyond its baseline by θx_i . I assume that firms' types are uniformly distributed in the population between extreme endpoints of 0 and 1.¹⁷⁶

Given that all firms value corporate governance to some degree (and thus would be willing to pay for it), jurisdictions may naturally be interested in offering high-quality governance regulation. However, strong regulatory regimes require resources to build and maintain. In particular, I suppose that for both jurisdictions, installing corporate governance institutions requires expending real resources—expenditures that become less effective (that is, have decreasing returns) as the state's corporate governance protections grow. In particular, suppose that installing a corporate governance structure of (x_i) necessitates an expenditure of $\frac{1}{2}(x_i)^2$ for Jurisdiction i (where $i = 1, 2$).

Finally, in order to capture the idea that Delaware holds a dominant position in the arena of corporate governance, I assume that J_1 has an incumbency advantage over J_2 , and therefore enjoys a first-mover advantage in installing its governance regime (x_1) before J_2 chooses its own regime (x_2). In this sense, the incumbent jurisdiction effectively establishes a beachhead in regulatory space to which the entrant jurisdiction must attempt profitably to respond. The second mover (J_2) must consequently choose whether to emulate the incumbent or to differentiate itself with a distinct governance regime. Once both jurisdictions have

¹⁷⁵ This latter group may include firms for which governance is in principle value-enhancing, but in which agency costs or private benefits of control swamp those benefits in affecting incorporation decisions. See *supra* notes 13–16 and accompanying text. In fact, as shown in Appendix A, the framework presented here extends, easily allowing some or all firms to place a *negative* value on governance (that is, $\theta < 0$). See *infra* Appendix A.

¹⁷⁶ Although this is in some ways a restrictive assumption, the analysis easily generalizes to any distribution $F(\theta)$ satisfying (so-called) "monotone hazard rate" properties. For details, see Appendix A.

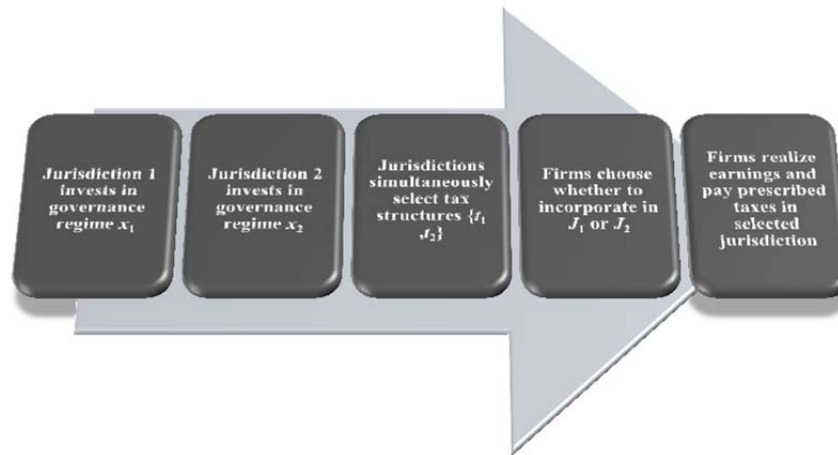
2015]

Corporate Inversions

1705

each committed to a governance regime, they simultaneously set the terms of their tax regimes (τ_1 and τ_2). This sequence is deliberate, and it is meant to capture the idea that governance regimes are more complex to build—and harder to dismantle—than a simple change in corporate tax levies. The sequential structure of the model is illustrated in Figure 6.

Figure 6: Sequential Structure of Multi-Attribute Regulatory Competition Game



Reiterating, the analysis at this stage makes two critical assumptions: (1) that each jurisdiction’s regulatory offerings are mandatorily “bundled,” and thus firms cannot assemble hybrid regulatory structures, adopting the tax attributes of one jurisdiction and the governance attributes of another; and (2) that the competing jurisdictions endeavor to maximize their expected tax revenues net of their costs of installing their regulatory corporate governance structures. I will explicitly relax each of these assumptions in a later subsection; indeed, doing so will help to illustrate some of the key points for my argument.

B. Solving the Game (Equilibrium)

With this structure in mind, I now proceed to solve the game by standard backwards induction techniques, beginning at the final stage,

with the firms' choices of regulatory regime.¹⁷⁷ At this stage, firms choose their governance regimes from among the two providers that have already selected their regulatory packages. For a firm of type θ , the expected payoffs from incorporating in Jurisdictions 1 and 2 (respectively) consists of (a) the firm's baseline profits, *plus* (b) the value contributed by the chosen jurisdiction's corporate governance regime, *less* (c) the tax levy imposed by the chosen jurisdiction. These payoffs can be represented by the following expressions:

$$\text{Firm's payoff from incorporating in } J_1: \Pi(x_1, \tau_1 | \theta) = \underline{\pi} + \theta \cdot x_1 - \tau_1$$

$$\text{Firm's payoff from incorporating in } J_2: \Pi(x_2, \tau_2 | \theta) = \underline{\pi} + \theta \cdot x_2 - \tau_2$$

A profit-maximizing firm will simply choose the jurisdiction that offers it a package of governance and tax resulting in the larger of the above payoffs.

Comparing the above expressions, it becomes immediately clear that if the two jurisdictions were to offer *identical* governance regimes ($x_1 = x_2$), then all firms (regardless of type) would flock *en masse* to the jurisdiction imposing the lowest taxes. Thus, if (say) Jurisdiction 2 were charging a tax levy of \$100,000, Jurisdiction 1 could steal the entire incorporation market by imposing a levy of \$99,999. Anticipating this competition, of course, Jurisdiction 2 would reduce its levy further, and so forth, all the way to the point where there is no profitable deviation left, and both jurisdictions impose a tax levy of zero.¹⁷⁸ This logic gives rise to the following intuitive proposition:

Proposition 1: When jurisdictions offer identical corporate governance regulations, competition in tax rates will enter a ruinous "death spiral," driving firm-level tax levies as well as total tax revenues in both jurisdictions to zero.

¹⁷⁷ The solution exposited below corresponds to the unique "Bayesian perfect" equilibrium of the game. See Appendix A for details.

¹⁷⁸ This is a version of the well-known "Bertrand paradox" from industrial organization, which states that when two or more firms engage in pure price competition with no capacity constraints and bounded monopoly profits, the only equilibrium (in pure or mixed strategies) consists of marginal-cost pricing. Joseph E. Harrington, Jr., A Re-Evaluation of Perfect Competition as the Solution to the Bertrand Price Game, 17 *Mathematical Soc. Sci.* 315, 315 (1989). Here, when J_1 and J_2 offer the same corporate governance rules, all of these conditions are met. The marginal cost of providing a preexisting established regulatory regime is zero (and therefore so is the tax levy).

The intuition embodied in Proposition 1 reflects what many perceive to be the largest concern in the current inversion wave—that it has invited a type of “ruinous” tax competition, inevitably driving tax rates across all jurisdictions to zero. It will also, by implication, drive total tax *revenues* to zero in both jurisdictions, a factor that would clearly deter jurisdictions offering copycat corporate governance regimes to begin with (as explored below).

Now consider the situation where the competing jurisdictions differentiate their corporate governance regimes (so that $x_1 \neq x_2$). Suppose further (somewhat arbitrarily) that $x_1 > x_2$ and thus the incumbent jurisdiction is the corporate governance “leader” offering the strongest governance protections (the analysis of the case where $x_1 < x_2$ is entirely symmetric).¹⁷⁹ When jurisdictions have differentiated governance regulations, choosing between them involves comparing *both* the corporate governance and tax attributes of each. Once again revisiting and comparing the expressions above, a representative firm of type θ is willing to incorporate in J_1 if and only if its expected payoff from J_1 exceeds its expected payoff from J_2 , which is equivalent to the following choice condition¹⁸⁰:

$$\text{Choose } J_1 \text{ over } J_2 \text{ if and only if: } \theta \geq \theta^* \equiv \frac{\tau_1 - \tau_2}{x_1 - x_2}$$

In other words, the corporate governance leader (assumed provisionally to be J_1) will be systematically the most attractive—all else constant—to those firms whose valuations are relatively responsive to strong governance rules—or in terms of the model, with high values of θ that exceed a critical cutoff value, θ^* , as defined above.

There are a few noteworthy features that emerge from the above choice condition. First, because firm types are distributed uniformly, the jurisdictions’ market shares for incorporations can be tidily summarized by θ^* , so long as $\theta < \theta^* < 1$. Specifically, the corporate governance leader (J_1 here) will capture a $(1 - \theta^*)$ share of the market, while the laggard (J_2 here) will capture the remaining θ^* share. Second, note from the above

¹⁷⁹ As will become apparent below, the incumbent firm will generally have an incentive to select the most protective corporate governance, and thus this ordering will *not*, in the end, be arbitrary.

¹⁸⁰ The condition from the text is an algebraic rearrangement of the condition stating that the firm’s payoff in J_1 (that is, $\pi + \theta x_1 - \tau_1$) is at least as large as its payoff in J_2 (that is, $\pi + \theta x_2 - \tau_2$).

expression that whenever the jurisdictions split the market (that is, when $0 < \theta^* < 1$), it must be the case that the leader imposes a higher tax than the follower—that is $(\tau_1 - \tau_2) > 0$. Finally, although it is not obvious a priori, it turns out that in any equilibrium of this game, θ^* will be between 0 and 1 (and thus the jurisdictions divide the market).¹⁸¹ Indeed, unlike competing oligopolists in a production market (who generally must cover their marginal costs of production), with regulatory competition the predominant costs for the jurisdiction are quasi-fixed (building and maintaining the system), and the governance regulations can be provided to one more incorporating firm at effectively zero (or very low) marginal cost. Consequently, should either jurisdiction find itself excluded entirely from the market by a competitor charging a positive price, there will be a way for it to respond profitably in equilibrium through tax cuts or better governance regimes (or both), recapturing some market share. Therefore, in any plausible equilibrium of the tax competition stage, it will be the case that $0 < \theta^* < 1$. Collectively, these observations give rise to a second proposition¹⁸²:

Proposition 2: When jurisdictions offer differentiated corporate governance regulations, they will in equilibrium split the market and impose differentiated taxes as well, with the corporate governance leader imposing a tax premium relative to the corporate governance laggard.

Moving backwards, consider next the equilibrium of the tax game. The governance leader and laggard each simultaneously choose a tax to impose in a manner that maximizes its expected tax revenues weighted by the market share captured by the jurisdiction (holding constant the other jurisdiction's conjectured imposed tax). Equivalently, the jurisdictions' respective taxation problems are as follows:

$$J_1\text{'s Taxation Problem: } \underset{\tau_1 \geq 0}{\text{Max}} \tau_1 \cdot (1 - \theta^*) = \underset{\tau_1 \geq 0}{\text{Max}} \tau_1 \cdot \left(1 - \frac{\tau_1 - \tau_2}{x_1 - x_2} \right)$$

$$J_2\text{'s Taxation Problem: } \underset{\tau_2 \geq 0}{\text{Max}} \tau_2 \cdot \theta^* = \underset{\tau_2 \geq 0}{\text{Max}} \tau_2 \cdot \left(\frac{\tau_1 - \tau_2}{x_1 - x_2} \right)$$

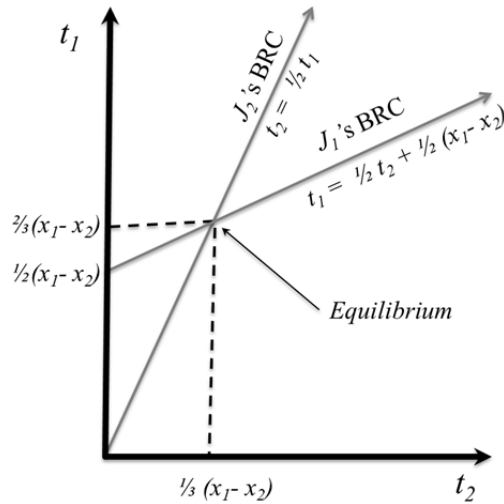
¹⁸¹ This turns out no longer to hold when tax law and corporate governance are “unbundled”—a key argument of this Article. See *infra* Subsection III.C.5.

¹⁸² See Appendix A for a more formal proof of this claim.

From the above maximization problems, one can derive a (so-called) “best response correspondence” (“BRC”) for each jurisdiction.¹⁸³ The BRC addresses a simple question: For each possible conjectured tax levy that the “competing” jurisdiction might impose, what is the optimal, revenue-maximizing tax levy to charge in response?

Figure 7 below plots the BRCs for each jurisdiction on the same set of axes. In the figure, J_1 's imposed tax is represented by the vertical axis, and J_2 's by the horizontal axis. As can be seen from the figure, each of the jurisdictions imposes a tax levy that is partially (but not completely) responsive to its competitor's. Jurisdiction 2 (the governance laggard), for example, always charges half the tax it predicts that J_1 will impose. In contrast, J_1 (the leader) charges a strictly positive baseline tax (of $\frac{1}{2}(x_1 - x_2)$) regardless of what J_2 imposes, *even if* it believes that J_2 will impose a tax of zero. Above that level, J_1 increases its tax by fifty cents for every dollar of increase by J_2 . Note that each jurisdiction's profit-maximizing tax levy increases as the other jurisdiction's levy increases, effectively reinforcing one another.¹⁸⁴

Figure 7: Best Response Correspondences in Taxation Competition Stage



¹⁸³ The BRCs are derived from partially differentiating J_1 's and J_2 's expected payoffs in the taxation game with respect to τ_1 and τ_2 , respectively, and setting each partial derivative equal to zero. Because the expected payoff functions are strictly concave, the solutions to those first order conditions will be maxima.

¹⁸⁴ In game theoretic terms, the jurisdictions' taxation strategies are said to be “strategic complements”—a setting where competition can prove quite severe. See, e.g., Jeremy I. Bulow et al., *Multimarket Oligopoly: Strategic Substitutes and Complements*, 93 *J. Pol. Econ.* 488, 489, 494 (1985).

Moreover, as Figure 7 reveals, there is a unique point where the levied taxes are the mutual best responses of one another—that is, the point where the BRCs of each jurisdiction intersect. This is the unique equilibrium of the taxation stage of the game. It corresponds to the point where each jurisdiction is playing a best response to its opponent, and thus there is no reason for either to change. In the above example, the unique taxation equilibrium corresponds to a tax imposed by the leader of $\frac{2}{3}(x_1 - x_2)$, whereas the laggard imposes a smaller tax levy of $\frac{1}{3}(x_1 - x_2)$. Note from this equilibrium that the jurisdictions always split the market, with resulting market shares of $\theta^* = \frac{1}{3}$ for the laggard and $(1 - \theta^*) = \frac{2}{3}$ for the leader. At these equilibrium tax levies, the laggard and leader will realize expected tax revenues of $\frac{1}{9}(x_1 - x_2)$ and $\frac{4}{9}(x_1 - x_2)$, respectively.

Proposition 3: When jurisdictions have differentiated corporate governance rules, the unique equilibrium in the taxation stage involves positive levies by both jurisdictions. Moreover, the taxes imposed and total tax revenues in both jurisdictions grow as the corporate governance offerings become increasingly distinct. Both jurisdictions enjoy strictly positive payoffs.

A noteworthy feature of the tax equilibrium described in Proposition 3 is that the taxes levied and total tax revenues for the jurisdictions grow as the magnitude of differentiation (captured by $(x_1 - x_2)$) increases. This effect is true even for the corporate governance *laggard*, who stands to collect greater tax revenues the *worse* its governance regime becomes relative to the leader's. The reason for this seemingly counterintuitive effect is simple, and it is an artifact of oligopolistic market dynamics more generally: When the extent of product differentiation grows in any market, the providers are less likely to be competing for the same buyers. The leader tries to extract higher levies from firms that value governance highly (that is, those with high values of θ), making its product more expensive and less attractive to low and moderate valuers. Since the laggard is the only other choice available, it is also able to raise its levy modestly without losing significant market share.

As noted above, although the foregoing analysis presumes that J_1 is the leader in corporate governance (and thus $x_1 > x_2$), the analysis is identical if J_1 were the laggard. In either case, what is clear from the above discussion is that both jurisdictions are decidedly better off when they offer differentiated governance regulations as opposed to when they

emulate one another (and ruinous price competition ensues). Accordingly, absent a coordination failure, the jurisdictions will have strong incentives to offer differentiated regulatory structures. The one remaining question concerns which jurisdiction emerges as the leader and which becomes the laggard.

Accordingly, let us move back one more stage in the sequence, in order to determine how the jurisdictions will select their corporate governance rules anticipating the later tax competition described above. Here, as noted above, the model assumes a strategic advantage for J_1 , viewing it as somewhat akin to Delaware's incumbency status in the corporate governance world. Although this incumbency could take on numerous instantiations in this model (for example, J_1 might face a lower marginal cost of installing governance than J_2), I capture the effect here by giving J_1 a first-mover advantage over J_2 in setting its governance structure. Recall that for either jurisdiction, installing corporate governance x_i imposes a cost of $\frac{1}{2}x_i^2$, which drags down gross tax revenues that the jurisdiction will collect in the taxation game (more so for the leader than the laggard).

Thus, consider the strategy of J_2 , after J_1 has committed to a governance structure of $x_1 \geq 0$. Jurisdiction 2 will attempt to compute its best strategy in two contingencies: (1) it lags, installing governance rules $x_2 < x_1$ at a cost of $\frac{1}{2}x_2^2$, thereby generating gross tax revenues of $\frac{1}{9}(x_1 - x_2)$ as per the discussion above; or (2) it leapfrogs J_1 to lead, installing governance rules $x_2 > x_1$ again at a cost of $\frac{1}{2}x_2^2$, and generating gross tax revenues of $\frac{4}{9}(x_2 - x_1)$.

Should J_2 choose to lag, its optimal strategy is counterintitively simple: It should adopt the most lax (that is, the "worst") governance scheme possible, setting $x_2 = 0$, which it can implement at no cost. The reasoning here is closely related to the discussion surrounding Proposition 3 above—so long as J_2 is destined to be a laggard, its tax revenues (as well as the leader's) increase the more it differentiates itself from the leader's regime—even if that differentiation is in the downward direction. Thus, reducing x_2 not only increases J_2 's revenues in the tax stage, but it also reduces its total up-front costs of installing governance to begin with. And the maximal degree to which J_2 can differentiate itself as a laggard is to "go big" (as it were), setting $x_2 = 0$, and securing a payoff for itself equal to $\frac{1}{9}(x_1 - 0) = \frac{1}{9}(x_1)$. (Note once again that this payoff increases as J_1 's governance regime improves.)

Should J_2 attempt to lead, in contrast, it will select a governance structure $x_2 > x_1$ that maximizes its tax revenues ($\frac{4}{9}(x_2 - x_1)$), less its up-front costs of implementing that structure ($\frac{1}{2}x_2^2$). Here, it is easy to confirm¹⁸⁵ that J_2 's optimal choice is to set $x_2 = \frac{4}{9}$, which generates net tax revenues equal to $\frac{4}{9}(x_2 - x_1) = (\frac{16}{81} - \frac{4}{9}x_1)$. Note here that J_2 's payoff as a leader *decreases* as J_1 's installed level of governance improves (and thus becomes less differentiated from and more competitive with J_2 's).

Comparing this payoff to the profit maximizing from becoming a laggard, then, it is clear that J_2 will choose to become a leader only if J_1 has not installed a level of governance that is "too high" to make it unprofitable for J_2 to become a governance leader. In this example specifically, this means that J_2 will become a leader only if J_1 chooses a relatively lax governance regime, so that $x_1 < \frac{16}{45}$, and lagging becomes more profitable for J_2 than leading.¹⁸⁶

Finally, step back to the beginning of the game to determine how the first mover, J_1 , will design its governance structure. From the analysis above, it is clear that if J_1 installs any value $x_1 < \frac{16}{45}$, it will induce J_2 to lead, and it will become the laggard. Similar to the above analysis, the highest attainable payoff for J_1 if it wishes to be a laggard is to set $x_1 = 0$, generating a net payoff for J_1 of $\frac{1}{9}(x_2 - x_1) = \frac{4}{81}$. In contrast, if J_1 selects any $x_1 > \frac{16}{45}$, J_2 will be content to lag, setting $x_2 = 0$. Here, similar to the analysis for J_2 above, J_1 will optimally set $x_1 = \frac{4}{9}$, charging a levy of $\frac{2}{3}(x_1 - x_2) = \frac{8}{27}$, and generating net tax revenues of $\frac{4}{9}(x_1 - x_2) = \frac{4}{9}(\frac{4}{9} - 0) = \frac{16}{81}$. Because this payoff is four times that which J_1 would realize as a laggard, it is clear that J_1 will use its first-mover advantage to become a governance leader. The foregoing discussion is summarized in the following Proposition:

Proposition 4: The unique equilibrium of the game involves differentiated bundles of governance regime and tax levy, in which the incumbent/first mover becomes a governance leader, installing a relatively high quality of governance, and the entrant/second mover becomes a laggard, installing the lowest quality of governance possible. The leader and laggard divide the market, and both impose positive tax

¹⁸⁵ The result comes immediately from setting J_2 's marginal revenues from increasing x_2 (or $\frac{4}{9}$) equal to its marginal costs (x_2).

¹⁸⁶ To see this, note that J_2 's payoff as a leader, $(\frac{16}{81} - \frac{4}{9}x_1)$, exceeds its payoff as a laggard, $\frac{1}{9}(x_1)$, when and only when the following condition holds: $(\frac{16}{81} - \frac{4}{9}x_1) > \frac{1}{9}(x_1)$. Solving this condition for x_1 yields the numerical figure stated in the text.

2015]

Corporate Inversions

1713

levies on incorporating firms, with the leader imposing a tax premium over the laggard.

One notable aspect of the equilibrium described above is that competition induces jurisdictions to differentiate their offerings to cater to firms' heterogeneous preferences for governance. The leader jurisdiction delivers greater value to firms that place the greatest value on strong governance (extracting more tax revenue from them in the process). Firms that place relatively low value on governance, in contrast, are priced out of the leader's regime, and incorporate instead with the laggard. Although this equilibrium is not fully efficient, it may be the best practically attainable outcome in a regulatory competition setting.¹⁸⁷

C. Variations and Robustness

Although the discussion above completes the description of the model's equilibrium, the framework above has developed its core intuitions in a relatively simplified setting, with particular assumptions about structure, players, payoffs, sequence, and so forth. It is important to understand how critical these simplifications are for the analysis—in fact, many of the core arguments in this Article are exposed only through relaxing several of these assumptions. I therefore turn for the remainder of this Part to a series of extensions to the baseline model that explore the robustness of the arguments above to alternative strategic environments.

¹⁸⁷ My discussion thus far has concentrated on *equilibrium* behavior, rather than on social welfare concerns. Given the nature of my thesis, this focus is appropriate. Nevertheless, it warrants observing that within this framework, governance is a pure public good with a fixed cost of provision (and no marginal costs or congestion costs). Consequently, a benevolent social planner would optimally eschew duplicating regulatory investments in multiple jurisdictions, and would instead concentrate governance infrastructure in a single jurisdiction, sweeping in *all* firms (without rationing out relatively low valuers). It is easily confirmed that the social planner's optimal level of governance in this example is $E(\theta) = 1/2$, applied to all firms. The above equilibrium does not fully achieve that benchmark, since (1) the leader slightly underinvests in governance relative to the social optimum ($4/9$ rather than $1/2$), and (2) the leader prices out the lowest valuing one-third of firms. See generally Truman F. Bewley, A Critique of Tiebout's Theory of Local Public Expenditures, 49 *Econometrica* 713, 715–17 (1981) (defining pure public good as independent of population and noting that, in a pure public good Tiebout model with a government concerned about public welfare, the Pareto optimum is achieved when public goods are concentrated in a single region). That said, one can show that the equilibrium described above delivers greater social value than either a profit-maximizing monopoly jurisdiction structure or a structure with more than two competing jurisdictions (discussed below).

1. Greater Dimensionality of Governance

One potential extension to the model would be to expand the dimensionality of “governance” regimes. In the baseline model above, the competing jurisdictions’ choice of governance regime was effectively a scalar. However, governance is itself a multidimensional phenomenon, and Jurisdiction 1’s governance regime might better be viewed in some cases as a “vector” of instruments. For example, suppose each jurisdiction could separately install a level of “judicial quality” (“ y_i ”) independent of “minority shareholder protections” (“ z_i ”). Now each of jurisdictions 1 and 2 would offer a package with three attributes— $\{y_1, z_1, \tau_1\}$ and $\{y_2, z_2, \tau_2\}$, respectively. Other dimensions (or additional subdivisions of the above) are possible as well.

It turns out that greater dimensionality in governance is easily handled in the model. As in the baseline case above, if firms have differentiated preferences among different dimensions of governance, then much turns on whether a firm’s preference for one governance attribute (say judicial quality) is highly correlated with its preference for others (say minority protections). When such correlations are strong, very little changes from the discussion above. Conversely, when these correlations are weaker (or even reversed), it could turn out that J_1 and J_2 differentiate themselves along different governance dimensions, say with J_1 leading in judicial quality and J_2 leading in minority protections. Nevertheless, the notion that the jurisdictions differentiate from one another in their bundled offerings—ultimately serving different market segments—remains intact.

2. More Competing Jurisdictions

Another extension concerns the addition of more jurisdictions beyond J_1 and J_2 . For example, how would the inclusion of, say, a third or fourth jurisdiction alter the equilibrium? As demonstrated in Appendix A, the core insights from the two-jurisdiction case remain robust (with some caveats). First, even when there are $n > 2$ jurisdictions in competition, no two jurisdictions will emulate one another’s corporate governance rules. So doing would immediately invite ruinous tax competition between those two jurisdictions, driving their gross revenues to zero (along with all those with inferior governance regimes). Consequently, all jurisdictions will embrace differentiated governance and tax regimes, effectively dividing the market into n segments, in a manner that stratifies the

2015]

Corporate Inversions

1715

population according to the firms' demand for good governance (the value of θ). For example, extending the analysis above to three jurisdictions, and assuming (as above) the jurisdictions continue to choose their governance structure sequentially (starting with J_1 , then J_2 , then J_3), the unique equilibrium strategies and payoffs are as depicted in the table below¹⁸⁸:

Table 1: Regulatory Competition Equilibrium with Three Jurisdictions

	τ_i	x_i	<i>Mkt. Shr.</i>	<i>Net Rev.</i>
J_1	0.098897	0.24095	54.00%	0.024374
J_2	0.014645	0.05780	33.33%	0.003212
J_3	0.007323	0.00000	12.67%	0.000928

As in the two-jurisdiction case, the early movers establish themselves as “leaders” in a manner that matches the sequence of jurisdictional choices. Accordingly, the last mover will serve the market as the laggard, setting $x_3 = 0$ just like the baseline model.

A notable change introduced by the inclusion of $n > 2$ jurisdictions is the emergence of “middling” governance providers (J_2 in the three-jurisdiction case) who sit below the leader and above the laggard in their offerings. For middling jurisdictions, tax strategy is slightly more complicated, since a change in tax levels now interacts on the margin with competitors on either “side” of the middling jurisdiction. Consequently, for such jurisdictions, tax changes will tend to play a more powerful role in building (or losing) market share, and they will therefore respond somewhat more vigorously to price changes among their immediate neighbors.

Perhaps more interesting is the effect that additional competition has on jurisdictional heterogeneity. Somewhat surprisingly, the addition of a third jurisdiction actually *reduces* the range of governance options that firms have available to them. In particular, the leader jurisdiction (J_1) now optimally installs $x_1 = 0.24095$ (rather than 0.44444 as in the baseline case), charges a levy $\tau_1 = 0.098897$ (rather than 0.29630), and re-

¹⁸⁸ For the derivations underlying this table, see Appendix A.

ceives net tax revenues of 0.024374 (rather than 0.19753). Although the leader retains a robust market share (54%) in equilibrium, it is unable to convert its market dominance into appreciable net economic rents. Moreover, notwithstanding the presence of more jurisdictions providing governance and the continued incentives jurisdictions have to differentiate from one another, they tend to cluster more tightly around the “low quality” end of the governance spectrum. While possibly counterintuitive, the reason for this effect is straightforward—more jurisdictional players means more price competition; more price competition, in turn, means lower gross revenues; and lower gross revenues, in turn, dampen early movers’ ex ante incentives to invest in strong governance.

3. *Non-Revenue-Maximizing Competitors and Tax “Havens”*

A related extension concerns how predicted behavior would change if one relaxed the assumption that jurisdictions are motivated solely by maximizing their expected tax revenues net of regulatory installation costs. Specifically, suppose the laggard jurisdiction (J_2) had preferences that caused it to compete on tax levies differently—and far more aggressively—than predicted in the previous section. This is an important extension, since much of the competition for U.S. incorporations is said to come from “tax havens” whose objectives appear to have little to do with tax earnings maximization. Such behavior may emerge, for example, if regulators are captured by interests wishing to minimize tax liabilities, or alternatively crave international fame and prominence that comes with a high market share of incorporations. Or such jurisdictions may simply have preferences that are the function of political constraints and commitments on taxes. Alternatively, the initial costs of installing anything more than “minimal” corporate governance may be prohibitive for “late mover” jurisdictions, inducing many of them (rationally) to cluster at $x_i = 0$, and inducing stiff price competition that drives their tax levies towards zero.¹⁸⁹ Understanding how regulatory competition works when one’s competitors are extremely aggressive, are captured, or pursue other goals can be helpful in disentangling the current situation.

¹⁸⁹ In the example above, the cost of installing governance was quadratic, so that $c'(0) = 0$. In a more general setting, it might be that $c'(0) > 0$, inducing late-moving jurisdictions to choose (rationally) to install minimal governance, impose no taxes, and earn no positive (or negative) net revenues. See Appendix A for details.

Accordingly, suppose that the laggard jurisdiction J_2 has an incentive (for whatever reason) to fix τ_2 far below the predicted equilibrium level derived above, such as $\tau_2 = 0$ (while still choosing location $x_2 = 0$).¹⁹⁰ How should the leader J_1 react (if at all) to such behavior? As it happens, insights into this question can be divined from the analysis already conducted. So long as J_1 remains a governance leader and revenue maximizer itself, its optimal strategy is readily gleaned from the best response correspondence depicted in Figure 6. In particular, recall from the figure that for every dollar by which J_2 reduces its tax levy, J_1 should respond in a muted fashion, reducing its own levy by only fifty cents. Even in the extreme case, where J_2 levies a tax of zero (to capture maximal market share), J_1 would still continue to impose a positive tax of $\frac{1}{2}(x_1) > 0$. While slightly less than its previous equilibrium value of $\frac{2}{3}(x_1 - x_2)$, this model still allows J_1 to collect positive tax revenues and secure a fifty percent market share. At the same time, however, the additional competition by J_2 will introduce enhanced price competition on the leader, reducing ex ante returns for J_1 to investment in governance. In this scenario, J_1 's optimal governance regime would be to install a governance regime of $x_1 = 0.25$, charge a tax of $\tau_1 = 0.125$ and garner net tax revenues of 0.03125 (as compared to 0.4444, 0.29630, and 0.19753, respectively, in the baseline case). All told, the leader would rationally respond to a single, aggressive competitor in much the same way that it would have to respond to multiple competitors: reducing taxes (but not eliminating them), dialing down its own governance protections (but not completely), and realizing less net income.

Moreover, if this extension is added onto the prior extension, a non-revenue-maximizing laggard jurisdiction may have even less of an effect on the leader than on others. Indeed, if, say, the market laggard reduced its price to zero to capture market share, that decision would be primarily visited on the laggard's immediate neighbor, who would respond (as described above) in a somewhat muted fashion. This effect would propagate sequentially towards the leader, but with somewhat dampened responses at each successive juncture. By the time the shock

¹⁹⁰ This assertion that J_2 continues to fix $x_2 = 0$ is reasonable for many types of alternative objectives that J_2 might entertain; analyzing all such possibilities, however, is beyond the scope of this discussion. It should also be noted that some tax "havens" that levy no corporate income taxes do assess fees and/or franchise taxes that serve a similar purpose.

reached the market leader, the laggard's aggressive behavior may well have been diluted through other jurisdictions' responses.

It is important to note that the arguments above are no longer valid when the market *leader* (rather than a laggard) begins reducing price in a non-revenue-maximizing way. Here, because the leader already offers a higher quality governance regime, reducing price (say to zero) allows the leader to capture the entire market. Nevertheless, it remains the case that if a more aggressive laggard competitor induces some downward pressure on the incumbent's revenue-maximizing tax, such behavior need not cause the incumbent to slip into ruinous tax competition.¹⁹¹

4. *Multinational Earnings and Territorial Taxation*

A notable simplifying assumption of the baseline model analyzed above was that it represented firms' tax levies as being paid to a single jurisdiction, and it therefore did not need to distinguish the sources of the firms' profits (that is, how much was earned in each jurisdiction). This assumption clearly requires additional scrutiny. Indeed, as demonstrated in Part II, inverting U.S. issuers are *by hypothesis* multinational firms generating earnings from across jurisdictions—a fact that clearly is in tension with the framework analyzed above. Moreover, a central tax policy debate surrounding inversions concerns the manner in which U.S. tax law approaches extraterritorial earnings and the global reach of U.S. corporate tax law (as compared to the territorial reach of other jurisdictions). In the baseline model, all income was effectively territorial, and thus there was no distinction between territorial and worldwide systems. Once again, practical observation is in clear tension with the baseline model. Hence, the intuitions developed above are likely to be pertinent only if they carry over to settings where corporate income is earned (and is taxed) across multiple jurisdictions.

Luckily, both of these generalizations are easy to incorporate into the model (at the cost of some additional notation). One way to do so is as follows: Suppose that each firm's baseline earnings—denoted earlier as π —could be decomposed into the sum of two different income streams,

¹⁹¹ It should be acknowledged that if the entrant jurisdiction were *truly* insensitive to costs, it could potentially install an arbitrarily strong governance regime (for example, a value of x_2 approaching infinity) and charge no taxes, dominating the market. This possibility seems far-fetched in the tax haven context, and in any event, the problem of “tax havens with prohibitively good governance rules” does not appear to be a fear that anyone has expressed in the current debate over inversions.

2015]

Corporate Inversions

1719

π_1 and π_2 , which the firm receives (exogenously) from operations in Jurisdictions 1 and 2, respectively. Further, let t_1 and t_2 denote the taxes that Jurisdictions 1 and 2 impose on that portion of profits generated from within the jurisdiction (regardless of where the firm is incorporated). Finally, redefine τ_1 and τ_2 slightly from the earlier analysis to denote an *additional* or *extraordinary* tax levy that each of Jurisdictions 1 and 2 can impose only on corporations choosing to incorporate in that jurisdiction. These additional surcharges could take any number of institutional forms, but one obvious one is that they proxy for tax levies imposed by the jurisdiction in question on the extraterritorial earnings of domestically incorporated entities. Thus, one potential factor in selecting one's place of incorporation would be to minimize the *additional* tax burden placed on firms that choose to incorporate in each jurisdiction (a consideration that maps comfortably into the current debate on U.S. tax law and inversion incentives).

Within this modified setup of the basic framework, each firm's payoff from incorporating in J_1 and J_2 now would become:

Firm's payoff from incorporating in J_1 :

$$\Pi(x_1, t_1, t_2, \tau_1 | \theta) = (\underline{\pi}_1 - t_1) + (\underline{\pi}_2 - t_2) + \theta x_1 - \tau_1$$

Firm's payoff from incorporating in J_2 :

$$\Pi(x_2, t_1, t_2, \tau_2 | \theta) = (\underline{\pi}_1 - t_1) + (\underline{\pi}_2 - t_2) + \theta x_2 - \tau_2$$

The terms in the parentheses are simply the after-tax revenues that the firm receives from its operations in each of Jurisdictions 1 and 2. Comparing the two expressions above, it becomes clear that a representative firm of type θ is willing to incorporate in J_1 if and only if the following choice condition holds:

$$\text{Choose } J_1 \text{ over } J_2 \text{ if and only if: } \theta \geq \theta^* \equiv \frac{\tau_1 - \tau_2}{x_1 - x_2}$$

Note that this is *precisely* the same expression that defined the market shares of each jurisdiction in the basic model above. And indeed, all the rest of the insights follow precisely the same too, including the nature of "bundled" regulatory competition. In other words:

Proposition 5: When firms receive earnings streams from multinational sources, and are taxed on those earnings by the jurisdiction where they are earned, jurisdictional competition remains viable, and a corporate governance leader can extract value by bundling its governance regime with an extraordinary tax on firms choosing to incorporate with the leader. The unique equilibrium involves differentiated corporate governance rules and positive extraordinary levies (with the leader's levy exceeding the laggard's). Both jurisdictions enjoy strictly positive payoffs.

Although the “extraordinary tax” referenced in the proposition above could take any number of institutional forms, one such form is to characterize it as a domestic tax on a company's foreign earnings. And thus a worldwide corporate tax system—such as the one that prevails in the United States—would be perfectly consistent with this bundled form of competition (as well as the additional premium levied by the corporate governance leader).

Perhaps even more intriguingly, the above extension delivers immediate insights as to whether (and how) a jurisdiction that taxes on a worldwide basis might compete with jurisdictions that employ territorial approaches. Suppose, for example, that Jurisdiction 2 (the laggard) adopted a territorial system, and therefore imposed a uniform tax only on that income earned by a firm inside J_2 , regardless of the firm's tax residence. In other words, J_2 would choose not to levy an extraordinary tax on firms' extraterritorial earnings, and it effectively sets $\tau_2 = 0$. In terms of the baseline model, this corresponds to the case when J_2 behaved in an aggressive or non-profit-maximizing fashion, exactly like the extension analyzed in Subsection (3) above. However, just as before, the corporate governance leader (J_1) can still compete profitably by imposing a positive extraordinary levy on firms choosing to incorporate there in the amount $\tau_1 = \frac{1}{2}(x_1 - x_2) > 0$. It therefore becomes immediately apparent that *it would be destructive of J_1 's interests to mimic J_2 's territorial tax regime*, which would constrain J_1 to set $\tau_1 = 0$ as well.

Proposition 6: When the laggard jurisdiction is constrained to utilize a territorial tax regime, the optimal response of the leader is to continue to levy extraordinary taxes on domestically incorporated firms (albeit at slightly moderated levels relative to when all regimes can impose extraordinary tax levies).

5. Unbundled Regulatory Instruments

A fifth—and critical—assumption in the foregoing analysis was that tax and nontax attributes of each jurisdiction’s regulatory offerings were mandatorily “bundled” into a conjoined package. That is, when opting into their preferred regulatory environment, firms had to choose between J_1 ’s regulatory package on the one hand, and J_2 ’s package on the other. They did *not* have the option to combine regulatory instruments between the jurisdictions.

How would the nature of regulatory competition change if firms were able to debundle their regulatory packages? Depending on the mechanism of debundling, the effect could be significant (and undesirable). In the extreme case, unbundling would prescribe granting firms the discretion to mix and match at will, likely by choosing J_1 ’s desirable governance regime and J_2 ’s lower tax rate. From J_1 ’s perspective, this would be like competing against a jurisdiction offering package (x_1, τ_2) , thereby imposing a lower tax levy for identical governance dimensions. As shown above, J_1 and J_2 would then be compelled to compete solely in tax levies, and the only equilibrium would be a form of “ruinous” tax competition such that $\tau_1 = \tau_2 = 0$.

Moreover, anticipating that unbundling will augur ruinous competition, neither jurisdiction will have an incentive *ex ante* to invest in assembling (or maintaining) a strong corporate governance regime. Consequently, in the first stage of the game, both the leader and the laggard will install the minimum level of corporate governance, so that $x_1 = x_2 = 0$. This logic can be summarized as follows:

Proposition 7: If firms were permitted to “unbundle” tax from governance attributes, then all firms will opt to be taxed in the lowest-tax jurisdiction and governed through the corporate governance leader. The unique equilibrium in this setting involves all jurisdictions installing the lowest possible level of corporate governance, levying no taxes, and generating no tax revenue.

What might the technology of unbundling look like? Although examples abound, two in particular stand out in the light of current debates. The first is a territorial tax system, which effectively makes tax levies on a firm independent of where it incorporates. As shown above, a corporate governance leader would never have an incentive to adopt such a system, even if all other competitors had previously done so.

A second technology for unbundling is perhaps even more focal for purposes of this Article: J_1 might simply permit it, by supplying its corporate governance regime—mostly free of charge—to any foreign-incorporated firm wishing to use it. Although this strategy seemingly runs counter to the leader's interests, as Part III has argued, U.S. securities law has been doing something like it (even if unwittingly) over the last decade and a half. The next Part tentatively explores some institutional responses to this generous governance giveaway.

6. Does Governance Really Matter?

A final consideration warranting attention concerns an empirical assessment as to whether corporate law considerations really “matter” relative to tax benefits in firms' inversion calculus. In other words, given the much-heralded magnitude of stranded off-shore earnings and high relative tax rates as core drivers of corporate expatriations, do corporate governance considerations represent anything more than rounding error in assessing the costs and benefits of inverting? This is an important question, since much of the conceptual analysis above turns on the heterogeneity of firms' valuations of governance causing them to “sort” into different tax/governance regimes, and the simultaneous importance of a tax and governance tradeoff for the “marginal” firm. If the tax incentives were simply too overpowering to resist, then it would cast doubt on whether there *are* any marginal firms to begin with: Instead, all firms with a substantial foreign CFC footprint would stand to gain an inframarginal benefit by inverting, irrespective of governance.

Although a detailed empirical analysis of this issue is beyond the scope of this Article, there are several reasons to believe that governance concerns can and do play a role in modulating the rate of corporate inversions. First, recall from the previous Part that inversions are but one of many alternative tax strategies that MNCs can use to manage off-shore earnings (including intercompany loans, debt financing, and the like). As the magnitude of stranded CFC earnings has grown, so too has the incentive to pursue these alternative strategies as well; thus, it is far from clear that inversions would invariably emerge as the dominant strategy, even when the aggregate amount of offshore earnings grows large. What is clear, however, is that (a) the principal alternative strategies to inversion do not also require corporate expatriation; and (b)

the corporate-governance costs of inverting have waned in recent years due to the federalization of corporate law.¹⁹²

Second—and relatedly—it is instructive to consider the raw numbers: As illustrated in Appendix B, despite the significant popular attention inversions have garnered, the *total* number of announced transactions over the last two decades has been surprisingly modest (around seventy by the count offered in Appendix B, or around 3.3 per year). This figure constitutes approximately *five hundredths of one percent* of the average number of public companies traded in U.S. securities markets each year during that same interval of time (thousands of which have multinational earnings).¹⁹³ If the force of tax incentives were as irresistible as is popularly claimed, then it is perplexing indeed that such a miniscule fraction of U.S. MNCs have taken the bait. A plausible alternative hypothesis is that some firms were deterred from inverting (possibly channeled into alternative strategies) by nontax considerations, with corporate governance concerns constituting one of them, particularly prior to SOX and Dodd-Frank.¹⁹⁴

Third, consider the market's reactions to inversion announcements. If all inverting firms are in fact "inframarginal," harvesting a bounty of considerable tax benefits with negligible costs, then it follows that such firms should have experienced a strong and persistent windfall in their stock price upon the announcement of a planned inversion. Indeed, given the curiously small overall number of inverting companies noted above, the announcement of an intent to expatriate should be both newsworthy and significant to the lucky shareholders of those firms. On the other hand, the existence of appreciable governance tradeoffs coinciding with inverting would tend to dampen the tax benefits from inverting—particularly during those years where securities law did not play a significant role in arbitrating corporate governance.

¹⁹² It is perhaps worth noting that the fraction of inverters that left Delaware *after* SOX increased from 58% to 64%. See *infra* Appendix B. Although this is not a drastic sea change, it is consistent with the claim that Delaware's market power in governance began to erode as federal law expanded through the 2000s and beyond.

¹⁹³ Although the total number of public companies in the United States has fluctuated, a ballpark estimate puts the average at around 6,000 during this two-decade span. See Dan Strumpf, U.S. Public Companies Rise Again: Stock-Market Listings Grow for First Time Since Internet Boom, *Wall St. J.* (Feb. 5, 2014, 3:43 PM), <http://www.wsj.com/articles/SB10001424052702304851104579363272107177430>.

¹⁹⁴ It is worth noting that *all* of the companies announcing an inversion also manifested an intent to remain listed on U.S. exchanges (in some cases as a dual listing).

Figure 8: Three-Day Cumulative Abnormal Returns Around Inversion Announcement

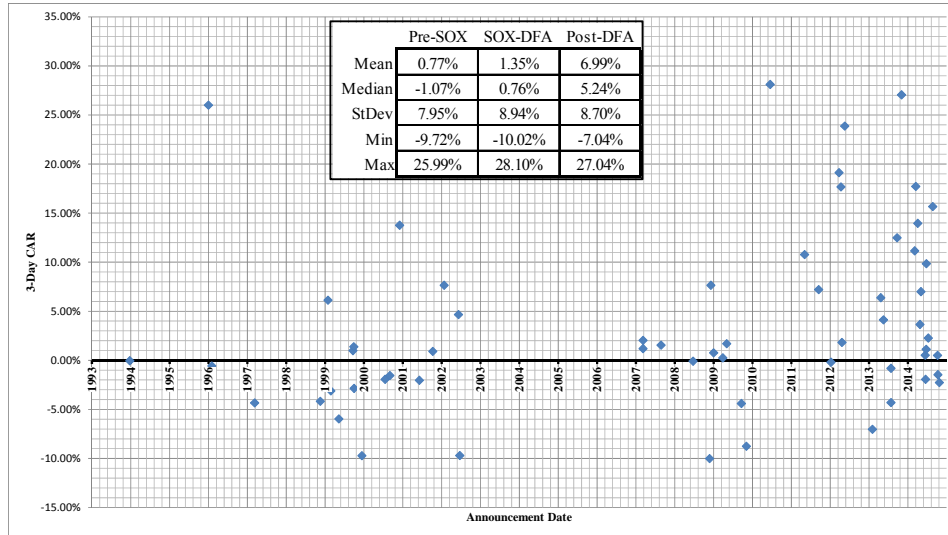


Figure 8 plots the three-day cumulative abnormal return (“CAR”) of stock prices for U.S. inverters over two decades (through the end of 2014), centered on the date of announcement.¹⁹⁵ It is immediately apparent from the figure that announcement returns are highly heterogeneous, and by no means are they categorically rosy: While some issuers experience robust positive returns upon declaring an intent to invert, others experience strong negative stock-price reactions, and many barely register much of a reaction in either direction. This overall heterogeneity—punctuated by the frequency of strongly *negative* CARs—appears inconsistent with the view that inverters categorically create immediate, unalloyed value for shareholders: Evidently, even with tax incentives, the market discounts tax gains against other factors

¹⁹⁵ An “abnormal return” reflects the extent to which the return on a company’s equity exceeds what one would predict given observed market movements on that day. See Appendix B for more details. The figure plots each inverter’s “cumulative” abnormal returns over the three-day trading period that spans the trading days before and after the announcement date. The figure includes firms that announced but ultimately did not close an acquisition. (Approximately ten inverters are not represented in the figure because of data unavailability.)

(such as governance considerations).¹⁹⁶ Note further that the CAR pattern associated with inversion announcements—while remaining heterogeneous throughout—grows more positive overall as time progresses. While announcement returns before SOX are statistically indistinguishable from zero, the overall presence and magnitude of positive CARs on announcement grows in time, and is the strongest after Dodd-Frank. This pattern is consistent with the thesis articulated above—that over the last fifteen years, federal law has substantially displaced state law as the central arbiter of corporate governance, thereby removing one of the key impediments to inverting.¹⁹⁷

IV. SYNTHESIS AND SOME TENTATIVE REFORM PROPOSALS

The results from Part III reveal several intuitions that are relevant to understanding some policy tradeoffs inherent in the recent inversion wave. Most centrally, the analysis suggests that, so long as U.S. corporate law offers a more attractive regime for corporate governance than do salient jurisdictional competitors, then U.S. tax authorities perhaps need not engage in hasty, tit-for-tat responses to the tax policies of foreign authorities. In particular, the most radical reforms currently on the table—such as the complete elimination of corporate taxes or the migration to a territorial system of taxes—are dubious responses (at best) to the existing trend, and may even prove counterproductive (both to the United States and to general social welfare). Assuming the United States is still able to offer a distinct (and attractive) governance product, then it can likely afford to impose a tax premium as well. Domestic policymakers may therefore have the flexibility to approach responsive tax reform

¹⁹⁶ One could argue that the inverters experiencing strongly negative abnormal returns represent examples of managerial agency costs, whereby managers pursue their own interests (while also freeing up firm capital) by inverting to a less stringent jurisdiction. Such a theory, however, would be inconsistent with the claim that governance is of second order importance. It is, in contrast, highly consistent with many of the arguments I have offered above.

¹⁹⁷ One could also argue, of course, that this pattern could be consistent with tax incentives too, since during this same period of time off-shore earnings grew considerably too as did the international gap in headline tax rates. Nevertheless, as noted above, the enhanced tax-avoidance stakes would also render alternative tax management strategies more attractive. Moreover, the tax eligibility rules governing inversions over this period also ballooned significantly, which could well push in the opposite direction—making inversions less profitable and attractive than other strategies. In addition, recall from Figure 1 that Ireland's attractive 12.5% tax rate is not a new phenomenon, but has been in place since 2003 (well before the most recent trends).

in a more incremental fashion, embracing changes similar to approaches that were recently undertaken in the 2014 anti-inversion reforms without re-imagining the entire corporate tax philosophy of the United States.

This of course does not imply that utter passivity is the optimal U.S. response to recent extraterritorial migrations either. Clearly, something has induced a discernible inversion exodus to take hold. To be sure, the large (and growing) differences in nominal tax rates imposed on U.S. resident corporations are part of this problem (see Figure 1 above), and the U.S. may well wish to consider reducing nominal rates by some margin to narrow (though not eliminate) the gap. However, the analysis offered above suggests that tax differentials are perhaps only part of the problem, and that an analogously significant concern is the extent to which the U.S. has unwittingly undermined its own ability to secure corporate tax revenues by unbundling corporate governance from tax residence. As argued in Part II, over the last fifteen years, U.S. securities law has gradually supplanted state corporate governance laws as the *lingua franca* (and *lex franca*) of U.S.-traded companies, independent of incorporation jurisdiction. By unbundling governance from tax, the federal government has arguably compromised its ability to extract tax revenues in exchange for offering value-enhancing governance. To the extent that this unbundling trend continues, moreover, the inversion wave could actually grow worse.

My analysis therefore suggests at least two alternative measures as promising responses to this trend: either (1) the United States should devise a means for “pricing out” the governance services that it increasingly gives away to public companies; and/or (2) the federal government should reverse course in its longstanding program to suffuse securities law with a series of corporate governance requirements. I address each (briefly and tentatively) below.

A. Pricing Federal Governance

One potential response for re-bundling tax and governance would be for the U.S. government to charge foreign corporations for their access to U.S. securities laws, markets, courts, regulators and jurisprudence. Perhaps the most effective way to do this would be to assess an extraordinary tax surcharge to issuers who list (or cross-list) on U.S. exchanges, subject to an allowance for issuers who, by virtue of U.S. incorporation, are subject to U.S. tax treatment at the parent level.

At present, the fees charged to foreign issuers by U.S. exchanges are not subject to any extraordinary U.S. tax, and they are trivial by comparison to typical U.S. tax obligations. For example, the NASDAQ exchange imposes an annual fee ranging from \$45,000 to \$155,000, depending on the market and number of shares,¹⁹⁸ while the NYSE charges a per-share fee ranging from a total of \$25,000 to a top-end of \$500,000.¹⁹⁹ Other exchanges, such as BATS, offer no fees, other than an initial \$5,000 listing fee, at all for securities that are traded in sufficient volumes.²⁰⁰ While certainly not pocket change, none of these fees comes remotely close to the type of tax liability of most U.S. multinationals. Moreover, given the multiplicity of exchanges in the U.S. (and their common regulatory mandates imposed by securities law), it is perhaps not surprising that listing fees appear to reflect significant price competition, and are not effective conduits to extract the value of U.S. corporate governance. (A similar observation applies, at least in principle, to other intermediary actors such as investment bankers and the corporate bar.) Imposing an extraordinary levy on foreign issuers, then, might well reduce the difference in tax burden between domestic and foreign incorporations, effectively re-bundling the benefits of U.S. listings with tax revenues.

One potentially significant drawback to a special tax levy on foreign issuers comes from preexisting constraints the United States faces under international law. Although levying a listing surcharge on listed foreign corporations may not carry the same constitutional implications as when U.S. states discriminate against out-of-state corporations, it could face significant challenges elsewhere. In particular, international tax treaties typically prohibit (or heavily constrain) tax discrimination against foreign incorporated entities.²⁰¹ To the extent that such taxes abrogate these

¹⁹⁸ NASDAQ, Initial Listing Guide 13 (Jan. 2015), available at <https://listingcenter.nasdaq.com/assets/initialguide.pdf>.

¹⁹⁹ NYSE Listed Co. Manual, at 902.02, 902.03 (2015), available at http://nysemanual.nyse.com/LCMTTools/PlatformViewer.asp?selectednode=chp_1_10&manual=%2Ffcm%2Fsections%2Ffcm-sections%2F.

²⁰⁰ See Listings, BATS, <http://www.batstrading.com/listings/> (last visited Mar. 25, 2015).

²⁰¹ See, e.g., U.S. Dep't of Treasury, United States Model Income Tax Convention of November 15, 2006, at art. 24 ("Nationals of a Contracting State shall not be subjected in the other Contracting State to any taxation or any requirement connected therewith that is more burdensome than the taxation and connected requirements to which nationals of that other State in the same circumstances, in particular with respect to residence, are or may be subjected."); The Joint Comm. on Taxation, Explanation of Proposed Income Tax Treaty Between the United States and Poland (JCX-68-14) at 3 (June 17, 2014) (adopting provisions

treaty provisions, they could well be unenforceable. This particular problem might be addressed, however, by double-barrel reforms: simultaneously reducing tax liability for U.S. incorporated issuers (such as through a material reduction in tax rates or transitioning to a territorial system), *combined with* a uniform listing surcharge for all listed companies, foreign and domestic. Nevertheless, such fixes involve time, effort, and creativity and may themselves run various types of risks to enforcement.

A second (and perhaps more imposing) challenge, however, might remain. As noted above, my central thesis in this Article turns on federal securities law displacing state corporate law, but not on whether the displacing elements of federal securities law are desirable or not. Either way, both foreign and domestic listing entities are subject to the same governance restrictions, and consequently the cost of leaving U.S. corporate law jurisprudence goes down. Nevertheless, if one is convinced that the governance reforms in SOX and Dodd-Frank were an affirmatively misguided (and the jury is still out on this one—and haggling with one another),²⁰² then imposing a listing surcharge comes with an attendant risk: flight from U.S. securities markets as well as state corporate law. Indeed, if the governance changes during the last fifteen years have been misguided, then they have eroded the value of a U.S. listing *writ large*. Accordingly, an overly aggressive attempt to extract rents from U.S. listed companies might bring about an undesirable consequence—flight to foreign exchanges. Thus, while a listings surcharge may be one way to approach the unbundling dilemma, it is a potentially risky proposition.

B. Rolling Back Federal Corporate Governance

A second possible policy option to re-bundle tax and governance would entail “rolling back” (either retrenching or repealing) many of the governance reforms introduced by SOX, Dodd-Frank, and their progeny, which—as argued above—have squeezed out state law in several domains where states were traditionally dominant. Several of the federal

substantially similar to the U.S. Model treaty, which contains nondiscrimination provisions on tax treatment of foreign entities relative to domestic entities).

²⁰² See *supra* notes 135–36 and accompanying text.

governance mandates delineated in Part II, for example, could be candidates for the chopping block under this approach.²⁰³

Although roll-backs are, in some ways, less legally fraught than new tax levies, they carry appreciable risks and obstacles of their own. One such impediment stems from task of coordinating state and federal legal actors. When the federal government is the chief authority for both taxation and provision of governance (as is plausibly the case now), it is easier to develop a coherent strategy for bundling the two policy instruments. In contrast, when states (such as Delaware) are the primary producers of corporate governance, while the federal government retains primary tax authority, it becomes unclear whether the relevant actors have adequate incentives and abilities to coordinate with one another in a way that internalizes relevant costs and benefits. Put simply, how strong is Delaware's incentive to build and maintain a valuable corporate governance regime if the federal government proceeds to extract the lion's share of that value through federal taxation?

Granted, states likely internalize some revenue benefits from offering strong governance regimes (such as nurturing a strong regional legal services market), but many states raise somewhat little capital from corporate taxes on domestic corporations, particularly when such businesses do their business elsewhere.²⁰⁴ All else constant, the coordination problems that would ensue from ceding governance back to the states represent a distinct drawback to using federal roll-backs to re-bundle tax with company law.

Yet another impediment to using federal rollbacks to re-bundle tax and corporate law—and an artifact of federal-state coordination problems noted above—potentially comes from firms themselves. Increasingly, incorporated entities are going to extraordinary lengths to “contractualize” their corporate governance regimes, which can have the effect of instituting a form of private unbundling. For example, the Medtronic-Covidien inversion included a term in the surviving entity's Irish articles of association that largely replicates a U.S.-style business com-

²⁰³ See supra notes 117–64 and accompanying text.

²⁰⁴ Under Del. Code Ann. tit. 30, § 1902(a) (2015), domestic and foreign corporations are required to pay a tax of 8.7% of federal taxable income allocated and apportioned to Delaware. The apportionment formula is based on an equally weighted three-factor method of property, wages, and sales in Delaware as a ratio of property, wages, and sales everywhere. See id. § 1903(b)(6).

bination statute.²⁰⁵ In addition, U.S. companies have increasingly inserted choice of forum clauses in their governing bylaws, usually to steer internal affairs litigation back to their own state of incorporation.²⁰⁶ However, it is plausible that inverting companies may employ similar tactics to effect the opposite result, steering corporate litigation *away* from their unfamiliar new foreign home, and *back into* U.S. (and Delaware) courts. It is unclear how receptive the Delaware Chancery Court would be to adjudicating, say, corporate litigation involving the internal affairs of an Irish or British corporation. However, it seems plausible that at least some Delaware judges—who do not personally benefit from federal tax revenues and who enjoy being at the helm of high-profile business litigation—might be willing to entertain such cases. It bears noting, for example, that the Delaware Chancery Court recently recognized the validity of an unconventional forum-selection bylaw for a Delaware corporation that had opted into North Carolina courts to litigating internal affairs disputes.²⁰⁷ Chancellor Bouchard appealed to principles of comity to justify the uniform interpretation of forum-selection bylaws, no matter what their directionality.²⁰⁸

To the extent such self-help strategies become routine and accepted, a roll-back of federal corporate governance mandates would face long odds in reclaiming U.S. market power in the regulatory competition market. It seems plausible, then, that a federal governance roll-back

²⁰⁵ See Medtronic Holdings Ltd., Registration Statement (Form S-4), Annex D at D-46 to D-52 (July 14, 2014), available at http://www.sec.gov/Archives/edgar/data/1613103/000119312514267867/d741931ds4.htm#rom741931_133. The provision was fashioned after the business combination statute in Minnesota, Medtronic's place of incorporation. See Minn. Stat. § 302A.673 (2014).

²⁰⁶ See, e.g., *Boilermakers Local 154 Ret. Fund v. Chevron Corp.*, 73 A.3d 934, 939–40 (Del. Ch. 2013).

²⁰⁷ *City of Providence v. First Citizens BancShares, Inc.*, 99 A.3d 229, 231 (Del. Ch. 2014).

²⁰⁸ As Chancellor Bouchard concludes:

Further supporting my conclusion are important interests of judicial comity. If Delaware corporations are to expect, after *Chevron*, that foreign courts will enforce valid bylaws that designate Delaware as the exclusive forum for intra-corporate disputes, then, as a matter of comity, so too should this Court enforce a Delaware corporation's bylaw that does not designate Delaware as the exclusive forum. In my opinion, to conclude otherwise would stray too far from the harmony that fundamental principles of judicial comity seek to maintain.

Id. at 242 (footnote omitted). Motivated partially in response to *City of Providence*, Delaware has recently amended its corporate code to allow Delaware corporations to place a forum selection clause favoring Delaware in their charter or bylaws, while disallowing any such provision that would prohibit Delaware courts from having jurisdiction. See Del. Code Ann. tit. 8, § 115 (2015).

2015]

Corporate Inversions

1731

would have to be coupled with a stronger mandate (from Congress, the Supreme Court, or some other actor) on the sanctity of the internal affairs doctrine in the face of such “inverted” choice of law/forum provisions.

Finally, a strategy of rolling back of federal corporate governance mandates poses challenges in prioritizing *which particular mandates* should be subject to repeal. It seems plausible that at least some recent federal mandates have enhanced average company value, while others have been value-eroding. (The relative mixture of beneficial and misguided mandates is, as noted above, still subject to considerable debate.) One might have an intuitive inclination to target those federal mandates that are generally thought the least successful in enhancing company value. However, the calculus of unbundling calls even this intuitive logic into question. Recall that both good and bad governance mandates can effectively displace state law, and in that sense both types incrementally unbundle tax from governance. Somewhat counter-intuitively, one could argue that it is paramount to pull the plug first on the *most valuable* federal governance mandates, since those rules represent the most significant areas where federal law provides the maximal benefit to foreign issuers without attempting to extract tax revenues. Consequently, as with levies in U.S. listings, the option of regulatory roll-backs also presents a variety of practical challenges.

CONCLUSION

Tax inversions have been at the center of a significant legal policy debate for at least the last two years and one that has sporadically flared up for decades. Such transactions have proven extraordinarily difficult for policy makers to address, because they represent a complex intersection of tax law, capital mobility, public finance, corporate law and governance, securities law, and perfervid political jockeying about the appropriate role (if any) of corporate taxes. This Article has approached the subject using the lens of regulatory-competition theory, arguing our current bout with “inversionitis” is an artifact—at least in part—of a fundamental (and largely self-inflicted) shift in the competitive landscape, where the United States has traditionally enjoyed market power by “bundling” its tax residency rules with a strong system of state corporate law and governance, utilizing the latter to extract rents through the former. Since the turn of the twenty-first century, U.S. market power in the regulatory competition sphere has dwindled—perhaps unwittingly—

as securities law has progressively unbundled these two policy levers through a steady colonization of corporate governance. An effective palliative for our current malaise, then, may lay in securities market reforms that address the unbundling phenomenon squarely (rather than a radical reimagining of U.S. corporate tax policy). The precise shape of prescriptive reform, however, turns crucially on one's assessment of (among other things) whether our fifteen-year-long experiment in federal corporate governance has been innovatively creative, or irresponsibly destructive. And concededly, this latter question is still open to some speculation and debate; but the dilemmas it poses may be far more tractable (and politically manageable) than those presented by radical tax reform proposals.

APPENDIX A

This appendix extends and analyzes in greater detail the regulatory competition framework underlying the illustrative example discussed in the text.

A. General Framework

Consider a continuum of profit maximizing business organizations (firms) that make strategic decisions about their regulatory jurisdiction. The total size of the population of firms is normalized at size 1. Each firm chooses from a “menu” of regulatory offerings of various jurisdictions, and in particular a firm's choice commits it to the jurisdiction's corporate governance regime as well as its tax rules (that is, tax and corporate governance are bundled). Each firm in the population generates a baseline *gross* payoff of $\pi > 0$, which is assumed constant across all firms in the population. Each firm's payoff, however, is subject to both upward and downward revisions from this baseline as a by-product of the regulatory and tax environment it selects (detailed below). I assume that firms in the population choose their regulatory environment in order to maximize their payoffs net of such revisions.

Firms select their regulatory home from among $n \geq 2$ jurisdictions, indexed as J_i , where $i \in \{1, 2, \dots, n\}$. The jurisdictions are assumed to compete with one another for incorporations and the resulting tax revenues. Specifically, I suppose that jurisdictions are interested in maximizing their expected tax revenues less the administrative cost of installing and maintaining their regulatory structure.

Interjurisdictional competition plays out through a bundle of regulatory attributes offered by each jurisdiction to firms that are incorporated there. Each jurisdiction offers a package of regulatory instruments denoted (\vec{x}_i, τ_i) . The term τ_i denotes a tax levy imposed on firms incorporating in J_i . Intuitively, higher values of τ_i correspond to larger per-firm tax levies in J_i . Tax levies are normalized to be non-negative. The vector \vec{x}_i embodies the nontax elements of corporate regulation, to which I refer collectively as the “corporate governance” attributes of each jurisdiction. In the most general setting, \vec{x}_i would have $h \geq 1$ elements, and thus \vec{x}_i can be decomposed into its components $\{x_{i1}, x_{i2}, \dots, x_{ih}\}$. These variables embody canonical corporate law and other regulation commitments thought to affect firm value (such as minority shareholder protections, fiduciary duties, judicial quality, board structure, shareholder govern-

ance rights, network externalities, and the like). For the purposes of this analysis, however, I will concentrate on the case of $h = 1$ (so that corporate governance is reflected along a scalar index), but it is relatively straightforward to extend the model to higher order dimensions, with little change to the core analytic results derived below.

The *net* profits of each firm stem from two deviations away from their gross values. Specifically, for a firm choosing jurisdiction i , net profits are given by:

$$\underline{\pi} + \theta \cdot x_i - \tau_i \quad (1)$$

where θ denotes the marginal value that the firm places on the quality of the governance regime. I assume that firms are heterogeneous, and that $\theta \in [\underline{\theta}, \bar{\theta}]$ is distributed according to probability density function $f(\theta) > 0$, and associated cumulative distribution function $F(\theta)$. Moreover, assume that $f(\cdot)$ and $F(\cdot)$ satisfy conventional monotone hazard rate properties (so that $F(\theta)/f(\theta)$ is non-decreasing in θ , and $[1 - F(\theta)]/f(\theta)$ is non-increasing in θ).

Although incorporating firms value strong governance (high values of x_i), installing and maintaining high quality governance is costly to the jurisdictions. Specifically, I assume that in order to install governance level x_i , J_i must expend $c(x_i)$ in costs, where $c(0) = 0$, $c'(x_i) \geq 0$, and $c''(x_i) > 0$. I also assume that $\lim_{x_i \rightarrow 0^+} c'(x_i) = 0$, so that sufficiently small investments in corporate governance visit—in the limit—arbitrarily small costs on the jurisdiction.²⁰⁹

The order of the game proceeds in three stages:

In Stage 1, jurisdictions sequentially choose their governance regimes $\{x_1, x_2, \dots, x_n\}$. I normalize the sequence to follow the jurisdictions' index numbers, so that J_1 is the first mover, followed by J_2 , and so forth.

In Stage 2, once jurisdictions have committed to a governance regime, all jurisdictions simultaneously choose tax levies $\{\tau_1, \tau_2, \dots, \tau_n\}$, which are assumed to be bundled with governance.

²⁰⁹ I explore the implications of relaxing this last assumption below.

2015]

Corporate Inversions

1735

In Stage 3, firms select their jurisdiction so as to maximize expected net profits, paying corresponding jurisdictional taxes.

I analyze Bayesian perfect equilibria of the above extensive form, characterizing optimal strategies and associated payoffs moving backwards through the stages of the game.

1. Firms' Jurisdictional Choice

Consider first the final stage, where firms choose their incorporation jurisdiction, assuming all jurisdictions have committed both to a governance regime and a tax levy. If firms are value maximizing, then each strictly prefers to incorporate in J_k if that jurisdiction offers a net value exceeding that available in all other jurisdictions:

$$\underline{\pi} + \theta \cdot x_k - \tau_k > \underline{\pi} + \theta \cdot x_i - \tau_i \quad \forall i \neq k. \quad (2)$$

(I assume that if the maximal attainable net value for a firm is offered by two or more jurisdictions, the firm randomizes in choosing between them). Consequently, a firm of type θ will strictly favor jurisdiction k over all other jurisdictions $i \neq k$ whenever:

$$\theta \cdot (x_k - x_i) > \tau_k - \tau_i \quad \forall i \neq k \quad (3)$$

Note that this condition immediately suggests that were two jurisdictions J_i and J_k to offer identical corporate governance regimes ($x_i = x_k$), then those jurisdictions will compete for firms on the basis of tax rates alone (τ_i and τ_k), with firms strictly favoring the lower-tax jurisdiction. (As noted in the text, a similar argument holds for any jurisdictions that unbundle their governance regimes from their tax regimes.)

Alternatively, when jurisdictions offer differentiated regimes (so that, say, $x_i < x_k$ without loss of generality), a firm of type θ will favor jurisdiction k over i whenever:

$$\theta > \hat{\theta}_{i,k} \equiv \left(\frac{\tau_k - \tau_i}{x_k - x_i} \right) \quad \forall i \neq k \quad (4)$$

The variable $\hat{\theta}_{i,k}$ represents the type of firm (in θ space) that would be indifferent between the bundled offerings of J_i and J_k . As is immediately evident from condition (4), should any jurisdiction i offer a corporate governance regime that is weaker than that offered by some other jurisdiction k (and thus $x_i < x_k$), then a necessary condition for jurisdiction i to have a non-zero market share of incorporations is that it levies a strictly lower tax than jurisdiction k (and thus $\tau_i < \tau_k$).

2. Tax Levy Stage

Moving back to Stage 2, suppose all jurisdictions have installed governance regimes (in Stage 1), and they must set tax levies simultaneously in the light of these installed regimes and firms' anticipated jurisdictional preferences (described above). It facilitates exposition to develop an alternative indexing scheme, where jurisdictions are ranked according to their chosen governance regimes, from "highest" to "lowest." Specifically, let $x_{(1)}$ denote the highest-quality regime chosen by any jurisdiction, $x_{(2)}$ the second-highest regime, and so forth.²¹⁰ Note that these alternative indexes $\{x_{(1)}, x_{(2)}, \dots, x_{(n)}\}$ need not coincide with the sequential indexing of the firms above (that is, $\{x_1, x_2, \dots, x_n\}$), since it is not clear (at least yet) how the quality of installed governance relates to the sequential order of play in Stage 1—a topic taken up below.

The first important insight comes from understanding how tax competition between jurisdictions relates to the similarity of their governance regimes. In particular, suppose that two (or more) jurisdictions had chosen identical governance regimes (so that, say, $x_{(m+1)} = x_{(m+2)} = \dots = x_{(m+i)}$). As noted above, in selecting between these jurisdictions, firms will concentrate solely on minimizing tax liabilities, since there is no difference in governance. Accordingly, the jurisdictions will face pure price competition in taxes, and the only equilibrium entails both jurisdictions charging zero taxes. This intuition is stated formally in Lemma 1.

Lemma 1: If any subsequence of ordered jurisdictions $\{m+1, \dots, m+i\}$ install identical governance structures (and thus $x_{(m+1)} = x_{(m+2)} = \dots = x_{(m+i)}$), then in equilibrium all such jurisdictions levy taxes of $\tau_{(m+1)} = \tau_{(m+2)} = \dots = \tau_{(m+i)} = 0$, and realize zero gross payoff.

²¹⁰This notation may appear unintuitive at first, since it implies the ordering $x_{(1)} \geq x_{(2)} \geq \dots \geq x_{(n)}$ which is the reverse indexing from conventional "order statistics" within sampling theory. As shall become apparent below, however, this convention makes for a more natural alignment of the two indexing schemes in equilibrium.

Lemma 1 is analogous to the familiar result in Bertrand competition models, where total market size is bounded (as is present here). As is well known in the literature,²¹¹ the only equilibrium in such situations involves marginal cost pricing—and in this framework all costs are quasi-fixed, and thus marginal costs are zero. Alternatively, if jurisdictions offer differentiated governance regimes, then firms may sort depending on their marginal values of governance. In particular, firms that value governance relatively little (and thus θ is close to zero) will tend to choose the lowest tax regimes, while firms that value governance more (and θ is relatively high) are willing to pay more for governance through taxes, and thus may choose to be governed by a higher tax regime.

A concomitant of the reasoning above is that if any jurisdiction with governance regime $x_{(m)}$ assesses a levy of $\tau_{(m)} = 0$, then this strategy will have significant “trickle-down” effects on any jurisdictions that have installed a less attractive governance policy.

Lemma 2: If any jurisdiction with profile $x_{(m)}$ charges levy of $\tau_{(m)} = 0$, then in equilibrium all jurisdictions with strictly weaker governance regimes (that is, $\{i \mid x_{(i)} < x_{(m)}\}$) realize zero gross payoff and zero market share.

Lemma 2 establishes the vulnerability of laggard jurisdictions to strong price competition from jurisdictions with stronger governance regimes. Indeed, because of the ordering of the $x_{(i)}$, we know that $x_{(i)} < x_{(m)}$ for all $i > m$. All such jurisdictions are not able to offer a stronger governance regime than $x_{(m)}$, and even if they reduced their tax levy to zero, consumers would prefer to incorporate under regime $x_{(m)}$ and pay $\tau_{(m)} = 0$.

Combining Lemmas 1 and 2 immediately yields the following:

Lemma 3: If any subsequence of ordered jurisdictions $\{m+1, \dots, m+i\}$ installs identical governance structures (and thus $x_{(m+1)} = x_{(m+2)} = \dots = x_{(m+i)}$), then in equilibrium all jurisdictions with strictly weaker governance regimes (that is, $\{i \mid x_{(i)} < x_{(m)}\}$) realize zero profits and zero market share.

²¹¹ Michael R. Baye & John Morgan, A Folk Theorem for One-Shot Bertrand Games, 65 Econ. Letters 59, 59–60 (1999); Todd R. Kaplan & David Wettstein, The Possibility of Mixed-Strategy Equilibria with Constant>Returns-to-Scale Technology Under Bertrand Competition, 2 Span. Econ. Rev. 65, 65–66 (2000).

The above lemmas convey different ways in which the tax levy game can devolve into “ruinous” competition (via Bertrand pricing). However, ruinous competition need not follow when jurisdictions are differentiated, and can therefore exercise some market power, as elucidated below.

For the sake of precision, I introduce two definitions. First, let $\bar{x}_{(m+1)}$ denote the largest non-unique value in the sequence $\{x_{(1)}, x_{(2)}, \dots, x_{(n)}\}$ (and thus by implication $\bar{x}_{(m+1)} = \bar{x}_{(m+2)}$). Lemmas 1–3 imply that $\tau_{(m+1)} = 0$, and moreover that all firms with governance structures weaker than $\bar{x}_{(m+1)}$ must enjoy zero profits and zero market share. By construction, then, all jurisdictions offering governance regimes $\{x_{(1)}, x_{(2)}, \dots, x_{(m)}\}$ offer governance regimes that are fully differentiated from one another, so that $x_{(1)} > x_{(2)} > \dots > x_{(m)}$. If all jurisdictions have positive market share (an assumption that will be borne out in equilibrium), firms will tend to favor regime $x_{(i)}$ over those of its immediate ordinal neighbors ($x_{(i+1)}$ and $x_{(i-1)}$) whenever the following condition holds:

$$\begin{aligned} \theta &\in \left(\frac{\tau_{(i)} - \tau_{(i+1)}}{x_{(i)} - x_{(i+1)}}, \frac{\tau_{(i-1)} - \tau_{(i)}}{x_{(i-1)} - x_{(i)}} \right) \\ &\equiv \left(\hat{\theta}_{i+1,i}, \hat{\theta}_{i,i-1} \right) \end{aligned} \quad (5)$$

With these definitions in hand, the equilibrium of the taxation stage game can be characterized as follows:

Proposition 1a: Suppose $\bar{x}_{(m+1)} = 0$ and thus all n governance regimes are distinct. The unique equilibrium of the tax levy stage game involves all jurisdictions capturing positive market share, all making positive profits, and all imposing taxes of $\tau_{(1)} > \tau_{(2)} > \dots > \tau_{(n)}$ characterized by the system:

$$\begin{aligned} i=N: \tau_{(N)} \left(\frac{f(\hat{\theta}_{N,N-1})}{(x_{(N-1)} - x_{(N)})} \right) &= F(\hat{\theta}_{N,N-1}) \\ i \in \{2, \dots, m\}: \tau_{(i)} \left(\frac{f(\hat{\theta}_{i,i-1})}{(x_{(i-1)} - x_{(i)})} + \frac{f(\hat{\theta}_{i+1,i})}{(x_{(i)} - x_{(i+1)})} \right) &= (F(\hat{\theta}_{i,i-1}) - F(\hat{\theta}_{i+1,i})) \\ i=1: \tau_{(1)} \left(\frac{f(\hat{\theta}_{2,1})}{(x_{(1)} - x_{(2)})} \right) &= (1 - F(\hat{\theta}_{2,1})) \end{aligned}$$

2015]

Corporate Inversions

1739

Proposition 1b: Suppose $\bar{x}_{(m+1)} > x_{(n)}$ and thus at least two governance regimes are not unique. The unique set of payoff-equivalent equilibria of the tax levy stage is as follows:

All jurisdictions with governance regimes $x_{(i)} = \bar{x}_{(m+1)}$ levy tax of $\tau_{(i)} = 0$, capturing zero profits;

All jurisdictions with governance regimes $x_{(i)} < \bar{x}_{(m+1)}$ capture zero profits and zero market share;

All jurisdictions with governance regimes $x_{(i)} > \bar{x}_{(m+1)}$ earn positive profit share, imposing positive taxes $\tau_{(1)} > \tau_{(2)} > \dots > \tau_{(m)}$, where:

$$i \in \{2, \dots, m\}: \tau_{(i)} \left(\frac{f(\hat{\theta}_{i,i-1})}{(x_{(i-1)} - x_{(i)})} + \frac{f(\hat{\theta}_{i+1,i})}{(x_{(i)} - x_{(i+1)})} \right) = (F(\hat{\theta}_{i,i-1}) - F(\hat{\theta}_{i+1,i}))$$

$$i=1: \tau_{(1)} \left(\frac{f(\hat{\theta}_{2,1})}{(x_{(1)} - x_{(2)})} \right) = (1 - F(\hat{\theta}_{2,1}))$$

Proof: Consider first Proposition 1a, and thus assume that all values of $x_{(i)}$ are distinct. First, realize that $\tau_{(1)} > 0$ in any equilibrium. To see this, suppose that there exists an equilibrium where the leader charges $\tau_{(1)} = 0$. By Lemmas 1 and 2 above, in equilibrium all other jurisdictions must either also charge $\tau_{(i)} = 0$, or have no market share (or both). Here, however, if $x_{(1)}$ is distinct from others, there exists a profitable unilateral deviation for the leader away from zero pricing. Indeed, note that the leader's marginal profit (as a function of $\tau_{(1)}$) is given by:

$$(1 - F(\hat{\theta}_{2,1})) - \tau_{(1)} \left(\frac{f(\hat{\theta}_{2,1})}{(x_{(1)} - x_{(2)})} \right) \quad (6)$$

Note that if $\tau_{(1)} = 0$ (as is assumed *arguendo*) the leader must have positive market share in this posited equilibrium (indeed 100%), and thus when evaluated at $\tau_{(1)} = 0$, the leader's marginal profit must be strictly positive; consequently, the leader will have an incentive to deviate by increasing its assessed levy. This exposes a contradiction, and thus in any equilibrium, it must be the case that $\tau_{(1)} > 0$. The remainder of the

proof of Proposition 1a is by induction. Suppose there were an equilibrium in which $\tau_{(i)} > 0$ for all $i = \{1, \dots, k-1\}$, but that the jurisdiction with governance regime $x_{(k)}$ levies a tax of $\tau_{(k)} = 0$. Jurisdiction k 's marginal profit as a function of its tax levy is:

$$\left(F(\hat{\theta}_{k,k-1}) - F(\hat{\theta}_{k+1,k}) \right) - \tau_{(k)} \left(\frac{f(\hat{\theta}_{k,k-1})}{(x_{(k-1)} - x_{(k)})} + \frac{f(\hat{\theta}_{k+1,k})}{(x_{(k)} - x_{(k+1)})} \right) \quad (7)$$

Because $x_{(k)}$ is unique by hypothesis, it follows that $x_{(k-1)} > x_{(k)} > x_{(k+1)}$. Consequently, it also follows that $\theta_{j+1,j} = 0$ for all $j \geq k$, since $x_{(k)}$ provides a better governance structure at zero price (see Lemma 3). Moreover, because $\tau_{(k-1)} > 0$, by hypothesis, it also follows that when evaluated at $\tau_{(k)} = 0$, $\theta_{k,k-1} = \frac{\tau_{(k-1)}}{x_{(k-1)} - x_{(k)}} > 0$. The above marginal profit condition is therefore strictly positive at $\tau_{(k)} = 0$, and thus the jurisdiction offering $x_{(k)}$ will have an incentive to deviate by increasing its assessed levy up to some level strictly $\tau_{(k)} \in (0, \tau_{(k-1)})$. By induction then, it becomes clear that if all firms are fully differentiated in governance, all will charge positive levies of $\tau_{(1)} > \dots > \tau_{(n)} > 0$, claim positive market share, and make positive gross profits. The conditions in Proposition 1a are simply the first order conditions for an optimum, assuming all firms have positive market share (as shown above).

The proof of Proposition 1b is identical to Proposition 1a, up to the consideration of the jurisdiction offering $\bar{x}_{(m+1)}$. This jurisdiction (by definition) offers a non-unique governance structure that is identical to at least one other jurisdiction's offering. By Lemma 1, we know all such jurisdictions offering $\bar{x}_{(m+1)}$ must charge levies of $\tau_{(i)} = 0$, dividing what is left of the market but making no profits. All others in the market with inferior governance regimes fail to capture market share (regardless of the levy they charge).

3. Governance Regime Choice Stage

Finally, consider how jurisdictions will select their regime choice at the ex ante stage. Recall here, under the alternative indexing regime, J_1 moves first, installing corporate governance regime x_1 , followed by J_2 with x_2 , and so forth. Recall also that installing regime x_i requires an expenditure (of effort and/or monetary resources) of $c(x_i)$, where $c(0) = 0$, $c'(x_i) \geq 0$, and $c''(x_i) > 0$, and $\lim_{x_i \rightarrow 0^+} c'(x_i) = 0$. This observation, in turn, generates the following result:

Proposition 2: In any equilibrium of the regime choice game, all jurisdictions install unique governance regimes in which $x_i \geq 0$, with one jurisdiction installing a regime of $x_i = 0$. Equilibrium levies increase in the quality of the governance regime offered by the jurisdiction.

Proof: First note that no jurisdiction J_i would install a strictly positive regime choice x_i coinciding with the regime choice of some earlier mover, J_i . Indeed, by setting $x_i = x_k$, jurisdiction i incurs strictly positive costs of $c(x_k)$ and generates zero gross profits in equilibrium (see Proposition 1b). Consequently, J_i 's expected net payoff would be $-c(x_k)$, which cannot be an equilibrium since a payoff of no less than zero was obtainable by setting $x_i = 0$. To show that only one jurisdiction installs a governance regime of $x_i = 0$, suppose in equilibrium some set of m jurisdictions selected identical regimes of $x_i = 0$ for all $I \in m$. Applying Lemma 1, it follows that all such jurisdictions must generate zero net profits. Let x_{min} constitute the lowest governance regime selected by any jurisdiction outside of m . Some member of m would find a profitable deviation by selecting $x_i = \varepsilon$, where $0 < \varepsilon < x_{min}$. By Proposition 1b, such a jurisdiction would earn strictly positive gross profits, and because $\lim_{x_i \rightarrow 0^+} c'(x_i) = 0$, there exists a value of ε sufficiently small that installing such a regime would generate strictly positive net profits.²¹² This logic remains valid for any $m > 1$, and thus at most one jurisdiction will install a regime of $x_i = 0$. Because all jurisdictions earn strictly positive profits, they must capture market share as well, and this is possible only if equilibrium tax levies (τ_i) are increasing in the quality of governance (x_i).

Proposition 2 demonstrates that any equilibrium of the regime choice stage will involve differentiated locations. Moreover, we know that such an equilibrium exists, since both the maximum tax levy and the maximum governance level are effectively bounded by the structure of the jurisdictions' payoffs.²¹³ However, as with other endogenous entry

²¹² If the limiting conditions on $c'(x_i)$ are not satisfied, then there may not be a profitable deviation for a laggard jurisdiction offering $x_i = 0$ to separate from other laggards also offering $x_i = 0$. In this case, the equilibria would be similar to Proposition 2, but there would be a cluster of "tax haven" jurisdictions each offering regime $x_i = 0$ and charging zero equilibrium levies. So long as $c'(x_i)$ is sufficiently small, however, the first moving jurisdiction will find it profitable to separate from the havens, installing $x_1 > 0$ and earning positive net revenues in equilibrium.

²¹³ As to tax levies, it is clear that the most any firm would be willing to pay to incorporate in J_i would be $\pi + \theta$, and this is the maximal bound on any tax levy that any jurisdiction could charge. As to locations, although the choice of x_i is unbounded the convexity of $c(x_i)$

games with quality differentiation in industrial organization,²¹⁴ there may be many equilibria of the regime choice game. In the special case of the uniform distribution, there turns out to be a unique equilibrium, which can be computed using numerical methods. Moreover, in that context, it turns out that sequential order corresponds with governance order, so that $x_i = x_{(i)}$ for all $i \in \{1, 2, \dots, n\}$. The next subsection explores this special case in detail.

B. Numerical Example for Three Jurisdictions

This subsection utilizes the analysis above to compute the equilibrium of the three-jurisdiction model where $\theta \sim U[0,1]$. As noted above, in equilibrium no two jurisdictions offer duplicative governance. The discussion below distinguishes between the "laggard" jurisdiction (J_3), the "middling" jurisdiction (J_2), and the "leader" jurisdiction (J_1). I assume (arbitrarily at this stage) that $x_1 > x_2 > x_3$ —an assumption that must be verified in equilibrium. Because the firm choice stage remains identical to the general case, we begin with Stage 2 (the Tax Levy Stage).

1. Laggard Jurisdiction's Tax Levy Problem

Consider first the laggard jurisdiction J_3 , and assume that it has installed the lowest governance level x_3 . At the taxation stage, J_3 chooses τ_3 to maximize its expected gross revenues, given its opponents' strategies (τ_1 and τ_2):

$$\tau_3 \cdot F(\hat{\theta}_{3,2}) = \tau_3 \cdot \left(\frac{\tau_2 - \tau_3}{x_2 - x_3} \right) \quad (8)$$

The first order conditions associated with maximizing this expression yield (after simplification):

$$\tau_3 = \frac{\tau_2}{2}, \quad (9)$$

similarly applies that there a critical value of x_i beyond which not even a monopolistic jurisdiction would venture.

²¹⁴ W. J. Lane, Product Differentiation in a Market with Endogenous Sequential Entry, 11 Bell J. Econ. 237, 237–38 (1980).

2015]

Corporate Inversions

1743

which defines J_3 's reaction as a function of other players' conjectured taxation strategies. Note that the laggard jurisdiction responds only to the conjectured strategy of its immediate neighbor (the middling jurisdiction J_2), and thus any shocks to the leader's (J_1 's) strategy affects the laggard only indirectly (through J_2 's reaction, as analyzed below).

2. Middling Jurisdiction's Tax Levy Problem

Recall that the middling jurisdiction's market is defined by an interior interval in θ -space:

$$[\hat{\theta}_{3,2}, \hat{\theta}_{2,1}] = \left[\frac{\tau_2 - \tau_3}{x_2 - x_3}, \frac{\tau_1 - \tau_2}{x_1 - x_2} \right] \quad (10)$$

J_2 's tax problem takes competitors' locations and levies as given, and maximizes:

$$\tau_2 \cdot (F(\hat{\theta}_{2,1}) - F(\hat{\theta}_{3,2})) = \tau_2 \cdot \left(\frac{\tau_1 - \tau_2}{x_1 - x_2} - \frac{\tau_2 - \tau_3}{x_2 - x_3} \right) \quad (11)$$

The first order conditions associated with maximizing this expression yield (after simplification):

$$\tau_2 = \frac{\tau_1}{2} \cdot \left(\frac{x_2 - x_3}{x_1 - x_3} \right) + \frac{\tau_3}{2} \cdot \left(\frac{x_1 - x_2}{x_1 - x_3} \right), \quad (12)$$

which defines J_2 's best response correspondence. Note that a conjectured strategy change by either J_1 or J_3 elicits a reaction from the middling jurisdiction, but the reaction is more attenuated for any specific shock than in the previous case of the laggard. In particular, the middling jurisdiction is most responsive to strategic shocks by one of her immediate neighbors if her location is relatively distant from her other immediate neighbor (allowing her to respond to the former without cannibalizing her competitive posture with the latter). Note as well that a version of this condition holds for any intermediate jurisdiction in the more general case of $n > 3$ firms—a simple extension of this framework.

3. Leader Jurisdiction's Tax Levy Problem

Finally, consider the leader jurisdiction, J_1 , who sets τ_1 to maximize:

$$\tau_1 \cdot (1 - F(\hat{\theta}_{2,1})) = \tau_1 \cdot \left(1 - \frac{\tau_1 - \tau_2}{x_1 - x_2}\right) \quad (13)$$

For J_1 , the conditions associated with a maximum yield the following best response correspondence:

$$\tau_1 = \frac{x_1 - x_2}{2} + \frac{\tau_2}{2} \quad (14)$$

Notice that, like the laggard, the leader responds only to conjectured changes in the middling jurisdiction's strategy, and the laggard's does not directly enter. Note further that the leader is the only jurisdiction charging a positive price regardless of other players' strategies. That is, even if the laggard and the middling jurisdiction charge zero levy, the leader imposes a minimal levy of $\frac{1}{2}(x_1 - x_2) > 0$.

4. Tax Levy Stage Game

Collecting the best response functions for the jurisdictions (denoted above), it is possible to solve for the equilibrium tax, market share, and profitability values for each jurisdiction (as a function of the chosen jurisdictional regimes), recorded in the following table:

Table 2: Equilibrium Tax, Market Share, and Profitability for Three Jurisdictions

	τ_i	Mkt. share	Gross profits
J_1	$\frac{(x_1 - x_2)}{2} + \frac{1}{6} \frac{(x_2 - x_3)(x_1 - x_2)}{(x_1 - x_3)}$	$\frac{1}{2} + \frac{1}{6} \frac{(x_1 - x_2)}{(x_1 - x_3)}$	$\frac{1}{36} \frac{(x_1 - x_2)(3x_1 + x_2 - 4x_3)^2}{(x_1 - x_3)^2}$
J_2	$\frac{1}{3} \frac{(x_2 - x_3)(x_1 - x_2)}{(x_1 - x_3)}$	$\frac{1}{3}$	$\frac{1}{9} \frac{(x_2 - x_3)(x_1 - x_2)}{(x_1 - x_3)}$
J_3	$\frac{1}{6} \frac{(x_2 - x_3)(x_1 - x_2)}{(x_1 - x_3)}$	$\frac{1}{6} \frac{(x_2 - x_3)}{(x_1 - x_3)}$	$\frac{1}{36} \frac{(x_2 - x_3)(x_1 - x_2)^2}{(x_1 - x_3)^2}$

A few aspects of this table are worth noting. First, it is clear that levied taxes increase in the quality of corporate governance, with J_1 (the leader) charging the most. Second, note that the leader always commands at least half the market, while the laggard controls no more than one-sixth.

5. Investment Stage

Finally, we move back to the first stage of the game, in which jurisdictions sequentially install corporate governance regimes to maximize their expected net payoff (that is, their gross payoff less costs of installation). Following the assumption from the text that the costs of installing x_i are quadratic, and given by $c(x_i) = \frac{1}{2}(x_i)^2$, the net payoffs of the respective jurisdictions are given by:

$$\begin{aligned}\Pi_1(x_1, x_2, x_3) &= \frac{1}{36} \frac{(x_1 - x_2)(3x_1 + x_2 - 4x_3)^2}{(x_1 - x_3)^2} - \frac{(x_1)^2}{2} \\ \Pi_2(x_1, x_2, x_3) &= \frac{1}{9} \frac{(x_2 - x_3)(x_1 - x_2)}{(x_1 - x_3)} - \frac{(x_2)^2}{2} \\ \Pi_3(x_1, x_2, x_3) &= \frac{1}{36} \frac{(x_2 - x_3)(x_1 - x_2)^2}{(x_1 - x_3)^2} - \frac{(x_3)^2}{2}\end{aligned}\tag{15}$$

Start with last mover, J_3 , who installs its regime observing what first two movers have already installed; that is, $x_1 > x_2 > 0$. Assuming the last mover is a laggard, and sets $x_3 < x_2$ (an assumption that must be confirmed below), its marginal profit as a function of x_3 is:

$$\begin{aligned}\frac{\partial \Pi_3}{\partial x_3} &= \frac{\partial}{\partial x_3} \left(\frac{1}{36} \frac{(x_2 - x_3)(x_1 - x_2)^2}{(x_1 - x_3)^2} - \frac{(x_3)^2}{2} \right) \\ &= -\frac{(x_1 - x_2)^2 (x_1 + x_3 - 2x_2)}{36(x_1 - x_3)^3} - x_3\end{aligned}\tag{16}$$

Note that this expression is strictly negative²¹⁵ if $x_3 > 2x_2 - x_1$, which is always satisfied if $x_2 < \frac{1}{2} x_1$, in which case the optimal value of x_3 is a

²¹⁵ Note the marginal profit is also strictly negative if $x_3 > x_1$, but in this case the above profit function would no longer be appropriate because J_3 would no longer be a laggard. This possibility is discussed later.

corner solution at $x_3 = 0$. (As will be shown below, the unique equilibrium of this game satisfies the above sufficiency condition, and thus the laggard will optimally choose to install the minimum quality corporate governance regime).

Now consider the middling jurisdiction, which observes x_1 and conjectures that the laggard will install x_l as above. Assuming this jurisdiction chooses $x_2 \in (x_3, x_1)$, it maximizes:

$$\frac{(x_2 - x_1)(x_3 - x_2)}{9(x_3 - x_1)} - \frac{(x_2)^2}{2} \quad (17)$$

The first conditions associated with a maximum are (after simplification):

$$x_2^* = \frac{x_1 + x_3}{9x_1 - 9x_3 + 2} \quad (18)$$

It is straightforward to show that the above condition implies $x_2^* < \frac{1}{2} x_1$,²¹⁶ and thus $x_3^* = 0$. Imposing this condition allows one to simplify the middling jurisdiction's optimal governance choice condition:

$$x_2^* = \frac{x_1}{9x_1 + 2} \quad (19)$$

Anticipating the behavior of the middling and laggard jurisdictions (as described above), the leader jurisdiction sets x_1 to maximize:

$$\frac{1}{36} \frac{(x_1 - x_2)(3x_1 + x_2 - 4x_3)^2}{(x_1 - x_3)^2} - \frac{(x_1)^2}{2} \quad (20)$$

²¹⁶ Given the above optimality condition, we know that $x_2 < \frac{x_1}{2}$ so long as

$$x_2 = \frac{x_1 + x_3}{9x_1 - 9x_3 + 2} < \frac{x_1}{2}$$

For this condition to hold, however, it must be the case that $x_3 > \frac{9x_1^2}{9x_1 + 2}$. However, it is easily verified that for any such values of x_3 , the marginal payoff of the laggard jurisdiction is strictly negative.

2015]

Corporate Inversions

1747

Subject to the backwards induction conditions that when called into play, suggest that J_2 and J_3 will play their equilibrium governance strategies derived above, and that the equilibrium of the resulting tax levy game then ensues. Substituting these conditions into the leader's payoff yields:

$$\frac{1}{36} \frac{x_1(9x_1+1)(27x_1+7)^2}{(9x_1+2)^3} - \frac{(x_1)^2}{2} \quad (21)$$

The associated maximum of this function occurs at $x_1 = 0.24095$, which then allows one to generate the remaining equilibrium values, as reflected in the table from the main text.

Finally, to confirm this is an equilibrium, it is necessary to check that neither J_2 nor J_3 would have an incentive to leapfrog any other jurisdiction in installing its corporate governance regime. Consider first whether the middling jurisdiction would have an incentive to leapfrog J_1 , installing a governance regime $x_2 > x_1$ in order to become the leader. Assuming the leader acted according to the above equilibrium, installing $x_1 = 0.24095$, the optimal governance value for x_2 to install if she were interested in leading would be given by $x_2 = 0.3397$. J_2 's resulting profits in this case would be $-0.01996 < 0$, clearly less than her profits under the posited equilibrium. Consequently, J_2 is better off by not leapfrogging the leader.

Similarly, consider the laggard's incentive to leapfrog J_1 . Here J_3 would set x_3 to maximize its profits as a leader given the installed governance of the other jurisdictions. Similarly, the optimal leapfrogging governance level for J_3 is $x_3 = 0.3298$, yielding profits of $-0.02108 < 0$. As before, the laggard would not have an incentive to leapfrog the leader. Finally, it is necessary to check whether the laggard might attempt to leapfrog only the middling jurisdiction. In this case, the laggard would set $x_3 = 0.081887$, yielding profits of $-0.01029 < 0$. Once again, it is not optimal for the laggard to leapfrog the middling's position.

APPENDIX B: ANNOUNCED INVERSION TRANSACTIONS INVOLVING U.S.
TARGETS BETWEEN 1994 AND 2014²¹⁷

U.S. Target Name	Target Jurisdiction	Foreign Acquirer Name	Destination Jurisdiction	Ann.	Closed	U.S. Target Ownership % of Survivor	3-Day CAR of U.S. Target
Helen of Troy Corp.	TX	Self	Bermuda	Dec-93	1994	100%	-0.05%
Triton Energy Corp.	DE	Self	Cayman Is.	Feb-96	1996	100%	-0.59%
Loral Space & Commun. Inc.	NY	Self	Bermuda	Jan-96	1996	100%	25.99%
Tyco International Ltd.	MA	ADT Ltd.	Bermuda	Mar-97	1997	64%	-4.34%
Playstar Corp.	DE	Self	Antigua	May-98	1998	100%	N/A
Xoma Ltd.	DE	Self	Bermuda	Nov-98	1999	100%	-4.18%
Gold Reserve Corp.	WA	Self	Canada	Feb-99	1999	100%	6.13%
Fruit of the Loom, Inc.	DE	Self	Cayman Is.	Mar-99	1999	100%	-3.13%
Transocean Off-shore Inc.	DE	Self	Cayman Is.	May-99	1999	100%	-5.98%
White Mountains Insurance Group, Inc.	DE	Self	Bermuda	Oct-99	1999	100%	-2.87%
PXRE Corp.	DE	Self	Bermuda	Oct-99	1999	100%	1.38%
Trenwick Group, Inc.	DE	LaSalle Re Holdings Ltd.	Bermuda	Dec-99	1999	46%	-9.72%
Everest Reinsurance Holdings, Inc.	DE	Self	Bermuda	Sep-99	2000	100%	0.97%
Applied Power Inc.	WI	Self	Bermuda	Jul-00	2000	100%	-1.94%

²¹⁷ Source: SEC Edgar Filings (URLs on file with author). The criteria for identifying an outbound inversion were (1) the transaction involved an acquisition of a publicly traded U.S. company; (2) the surviving entity was incorporated abroad; (3) the surviving entity remained traded in at least one public securities market; and (4) owners of the U.S. target retained at least 45% ownership (by value) of the surviving entity. Cumulative abnormal returns were estimated with available CRSP data, using a boot-strapped market model estimated prior to the event window; the event window consists of the trading day immediately before announcement plus the following two trading days.

2015]

Corporate Inversions

1749

U.S. Target Name	Target Jurisdiction	Foreign Acquirer Name	Destination Jurisdiction	Ann.	Closed	U.S. Target Ownership % of Survivor	3-Day CAR of U.S. Target
Arch Capital Group Ltd.	DE	Self	Bermuda	Sep-00	2000	100%	-1.55%
Foster Wheeler Corp.	NY	Self	Bermuda	Dec-00	2001	100%	13.76%
Global Marine Inc.	DE	Santa Fe Int'l Corp.	Cayman Is.	Sep-01	2001	50%	N/A
Ingersoll-Rand Co.	NJ	Self	Bermuda	Oct-01	2001	100%	0.91%
Cooper Industries, Inc.	OH	Self	Bermuda	Jun-01	2002	100%	-2.04%
Noble Drilling Corp.	DE	Self	Cayman Is.	Jan-02	2002	100%	7.65%
Weatherford Int'l Inc.	DE	Self	Bermuda	Jun-02	2002	100%	-9.71%
Nabors Industries Inc.	DE	Self	Bermuda	Jun-02	2002	100%	4.64%
Luna Gold Corp.	WY	Self	Canada	Oct-05	2005	100%	N/A
Lazard LLC	DE	Self	Bermuda	Dec-05	2005	100%	-2.39%
Patch International Inc.	NV	Damascus Energy Inc.	Canada	Dec-06	2006	64%	N/A
Star Maritime Acq. Corp.	DE	Star Bulk Carriers Corp.	Marshall Is.	Mar-07	2007	100%	2.03%
Argonaut Group Inc.	DE	PXRE Group Ltd.	Bermuda	Mar-07	2007	73%	1.18%
Ascend Acquisition Corp.	DE	e.Pak Res. (S) Pte. Ltd.	Bermuda	Jul-07	2007	50%	N/A
Vantage Energy Services, Inc.	DE	Offshore Group Inv. Ltd.	Cayman Is.	Aug-07	2007	100%	1.54%
Lincoln Gold Corp.	NV	Self	Canada	Sep-07	2007	100%	N/A
Western Goldfields Inc.	ID	Self	Canada	May-07	2007	100%	N/A
Hungarian Tel. & Cable Corp.	DE	Invitel Holdings	Denmark	Nov-08	2009	96%	-10.02%
Energy Infrastructure Acquisition Corp.	DE	Self	Marshall Is.	Jun-08	Failed	100%	-0.10%
InterAmerican Acquisition	DE	Self	BVI	Jul-08	2008	100%	N/A

1750

Virginia Law Review

[Vol. 101:1649]

U.S. Target Name	Target Jurisdiction	Foreign Acquirer Name	Destination Jurisdiction	Ann.	Closed	U.S. Target Ownership % of Survivor	3-Day CAR of U.S. Target
Arcade Acquisition Corp.	DE	Conbulk Corp.	Marshall Is.	Sep-08	2008	52%	N/A
Foster Wheeler Ltd.	Bermuda	Self	Switzerland	Dec-08	2009	100%	7.64%
Alpha Security	DE	Soya China Pte. Ltd.	Bermuda	Dec-08	Failed	65%	0.76%
Ideation Acquisition Corp.	DE	SearchMedia Int'l Ltd.	Cayman Is.	Apr-09	2009	56%	0.23%
Tim Hortons Inc.	DE	Self	Canada	Sep-09	2009	100%	-4.40%
2020 ChinaCap Acquireco Inc.	DE	Windrace Int'l Co. Ltd.	BVI	May-09	2009	51%	1.69%
ENSCO Int'l Inc.	DE	Self	UK	Nov-09	2009	100%	-8.77%
Plastinum Polymer Tech Corp.	DE	Self	Netherlands	Jun-10	Failed	100%	N/A
Valeant Pharmaceuticals Int'l	DE	Biovail Corp.	Canada	Jun-10	2010	50%	28.10%
Alkermes, Inc.	PA	Elan Corp.	Ireland	May-11	2011	75%	10.77%
Jazz Pharmaceuticals, Inc.	DE	Azur Pharma Ltd.	Ireland	Sep-11	2011	79%	7.19%
Tronox Inc.	DE	Exxaro Res. Ltd.	Australia	Sep-11	2011	62%	N/A
AON Corp.	DE	AON PLC	UK	Jan-12	2012	100%	-0.20%
Pentair, Inc.	MN	Tyco International Ltd.	Switzerland	Mar-12	2012	48%	19.11%
Stratasys Inc.	DE	Objet Ltd.	Israel	Apr-12	2012	55%	17.67%
Eaton Corp.	OH	Cooper Industries PLC	Ireland	May-12	2012	73%	23.86%
Tower Group, Inc.	DE	Canopus Holdings Bermuda Ltd.	Bermuda	Apr-12	2012	78%	1.82%
Liberty Global, Inc.	DE	Virgin Media Inc., UK	UK	Feb-13	2013	64%	-7.04%
Actavis, Inc.	NV	Warner Chilcott PLC	Ireland	May-13	2013	77%	4.11%
Perrigo Co.	MI	Elan, Blisfont Ltd.	Ireland	Jul-13	2013	71%	-4.32%

2015]

Corporate Inversions

1751

U.S. Target Name	Target Jurisdiction	Foreign Acquirer Name	Destination Jurisdiction	Ann.	Closed	U.S. Target Ownership % of Survivor	3-Day CAR of U.S. Target
Omnicom Group Inc.	NY	Publicis Groupe UK	UK	Jul-13	Failed	50%	-0.83%
Applied Materials, Inc.	DE	Tokyo Electron Ltd.	Netherlands	Sep-13	Failed	68%	12.48%
Endo Health Solutions Inc.	DE	Paladin Labs Inc.	Ireland	Nov-13	2013	78%	27.04%
Horizon Pharma, Inc.	DE	Vidara Therapeutics Int'l Ltd.	Ireland	Mar-14	2014	74%	17.71%
Chiquita Brands Int'l, Inc.	NJ	Fyffes PLC	Ireland	Mar-14	2014	51%	11.16%
Theravance Inc.	DE	Self	Cayman Islands	Apr-14	2014	100%	6.37%
Questcor Pharmaceuticals Inc.	CA	Mallinckrodt PLC	Ireland	Apr-14	2014	50%	13.95%
Pfizer	DE	Astrozenica	UK	Apr-14	Failed	74%	3.64%
Mondelez International, Inc.	VA	D.E. Master Blenders	Netherlands	May-14	2014	49%	7.00%
Medtronic Inc.	MN	Covidien PLC	Ireland	Jun-14	2014	70%	0.51%
Mylan Inc.	PA	Abbott Laboratories Non-US Assets	Netherlands	Jul-14	2014	79%	2.25%
C&J Energy Services, Inc.	DE	Nabors Industries Ltd.	Bermuda	Jun-14	2014	53%	1.12%
AbbVie	DE	Shire PLC	UK	Jul-14	Failed	75%	-1.94%
Burger King Worldwide Inc.	DE	Tim Hortons Inc.	Canada	Aug-14	2014	51%	15.67%
Auxilium Pharmaceuticals Inc.	DE	QLT Inc.	Canada	Jun-14	Failed	76%	9.84%
Auxilium Pharmaceuticals Inc.	DE	Endo International	Ireland	Oct-14	2014	76%	0.49%
Wright Medical Group, Inc.	DE	Tornier N.V.	Netherlands	Oct-14	2014	52%	-2.29%
Steris Corp.	OH	Synergy Health PLC	UK	Oct-14	2014	70%	-1.47%

