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“THE SUPERCHARGED IPO”

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SCHEDULE FOR 2014 NYU TAX POLICY COLLOQUIUM

(All sessions meet Thursday 4:00-5:50 p.m., Vanderbilt-208, NYU Law School)

1. January 21 – Saul Levmore, University of Chicago Law School, “From Helmets to Savings and Inheritance Taxes: Regulatory Intensity, Information Revelation, and Internalities.” (Main discussion paper); and “Internality Regulation Through Public Choice.” (Background paper).
2. January 28 – Fadi Shaheen, Rutgers-School of Law, Newark, “The GAAP Lock-Out Effect and the Investment Behavior of Multinational Firms.”; “Evaluating Investments of Locked-Out Earnings (An Outline).
3. **February 4 – Nancy Staudt, University of Southern California, Gould School of Law, and Victor Fleischer, University of San Diego Law School, “The Supercharged IPO.”**
4. February 11 – Thomas J. Brennan, Northwestern University School of Law, “Smooth Retirement Accounts.”
5. February 25 – Chris Sanchirico, University of Pennsylvania Law School.
6. March 4 – James R. Hines, University of Michigan Economics Department and Law School.
7. March 11 – Stephanie Sikes, Wharton School, Accounting Department, University of Pennsylvania.
8. March 25 – Matthew C. Weinzierl, Harvard Business School, “Revisiting the Classical View of Benefits-based Taxation.”
9. April 1 – Andrew Biggs, American Enterprise Institute, “The Risk to State and Local Budgets Posed by Public Employee Pensions.”
10. April 8 – Susannah Camic Tahk, University of Wisconsin Law School, “Charity Governance Patterns: Empirical Evidence.”
11. April 15 – Nirupama Rao, NYU Wagner School,
12. April 22 – Kimberly Clausing, Reed College, Economics Department, “Lessons for International Tax Reform from the U.S. State Experience under Formulary Apportionment.”
13. April 29 – David Gamage, Berkeley Law School, “On Double-Distortion Arguments, Distribution Policy, and the Optimal Choice of Tax Instruments.”
14. May 6 – Mitchell Kane, NYU School of Law, “Reflections on the Coherence of Source Rules in International Taxation.”

THE SUPERCHARGED IPO

By
Victor Fleischer*
Nancy Staudt**

A new innovation on the IPO landscape has emerged in the last two decades, allowing owner-founders to extract billions of dollars from newly-public companies. These IPOs—labeled supercharged IPOs—have been the subject of widespread debate and controversy: lawyers, financial experts, journalists, and Members of Congress have all weighed in on the topic. Some have argued that supercharged IPOs are “brilliant, just brilliant,” while others have argued they are “underhanded” and “bizarre.”

In this article, we explore the supercharged IPO and explain how and why this new deal structure differs from the more traditional IPO. We then outline various theories of financial innovation and note that the extant literature provides useful explanations for why supercharged IPOs emerged and spread so quickly across industries and geographic areas. Theory provides support for both legitimate and opportunistic uses of the supercharged IPO.

With the help of a large-N quantitative study—the first of its kind—we investigate the adoption and diffusion of this new innovation. We find that the reason parties have begun to supercharge their IPO is not linked to a desire to steal from naïve investors, but rather for tax planning purposes. Supercharged IPOs enable both owner-founders and public investors to save substantial amounts of money in federal and state taxes. We conclude our study by demonstrating how our empirical findings can be used to 1) advance the literature on innovation, 2) assist firms going public in the future, and 3) shape legal reform.

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SUPERCHARGED IPOs

INTRODUCTION.....	2
II. INITIAL PUBLIC OFFERINGS.....	7
A. <i>The Traditional IPO</i>	8
B. <i>The Supercharged IPO</i>	10
C. <i>Company Disclosures and Risk Projections</i>	15
III. COMPETING THEORIES OF FINANCIAL INNOVATION	17
A. <i>Innovation and Discovery: Five Competing Models</i>	18
B. <i>Use and Diffusion: Four Competing Models</i>	27
IV. THE EMPIRICAL INVESTIGATION.....	29
A. <i>The Data and the Models</i>	29
B. <i>Competing Theories of Supercharged IPOs: Empirical Findings</i>	34
C. <i>Summary</i>	43
V. IMPLICATIONS FOR PARTIES AND LEGAL REFORMERS.....	43
A. <i>Implications for Transactional Lawyers</i>	44
B. <i>Policy Implications</i>	45
C. <i>Implications for the Literature on Financial Innovation</i>	47
CONCLUSION.....	49
APPENDIX.....	51

INTRODUCTION

Suppose you make an offer to purchase a new home. While reviewing the offer, the seller sees that you plan to get a home mortgage, which in turn means that you may qualify for the home mortgage interest tax deduction.¹ This deduction is potentially quite valuable and could save you tens of thousands of dollars in taxes over the period in which you make interest payments.² Recognizing this value, the seller counter-offers, proposing a deal whereby you give her 85% of your tax savings. If your mortgage interest deduction saves you \$1000 in taxes each year, this deal would require that you make annual transfers of \$850 to the seller as you obtain that tax break. Put differently, the proposed deal would require you to make an up-front payment for the purchase of the property in the year of the sale, along with an additional \$850 every year thereafter while you maintain your mortgage and take advantage of the mortgage interest tax deduction.

¹ Dean Stansel and Anthony Randazzo, *Unmasking the Mortgage Interest Deduction: Who Benefits and By How Much*, 394 POL'Y STUD. (July 2011), http://reason.org/files/mortgage_interest_deduction.pdf (IRS estimates 20-25% of tax returns claim a home mortgage interest deduction) (last visited Feb. 17, 2013)

² *Id.* (average annual tax saving from mortgage interest deduction is between \$96 and \$2221).

SUPERCHARGED IPOs

Why would you ever agree to share your tax benefits with the seller?³

As it turns out, tax sharing agreements, often labeled “tax receivable agreements” (TRAs), are common in many corners of the legal and financial landscape.⁴ TRAs, for example, routinely emerge between partners in small businesses,⁵ employers and employees,⁶ and corporations and their shareholders.⁷ These sharing agreements come in many different forms but they all involve the same underlying feature: the parties apportion tax benefits (and sometimes tax liabilities) according to a pre-agreed upon formula.

In this article, we focus on TRAs that have made their way into an entirely new arena: initial public offerings (IPOs). Owners of private companies who sell their business assets in a public offering now sometimes demand that the new public company share the value of various underlying tax benefits, such as tax deductions and tax credits, well after the deal has been completed. These types of IPOs—deals supercharged with post-sale payments—were unseen and unheard of prior to 1993.⁸ Today, they involve the

³ After all, it is commonly believed that the tax benefit of the home mortgage interest deduction is capitalized into the price of residential property. See e.g., Richard Voith, *Does the Federal Tax Treatment of Housing Affect the Pattern of Metropolitan Development?*, BUS. REV. 1, 6 (Mar. 1999). In the IPO context, the focus of this paper, it is less clear whether the tax benefits associated with the deal are fully capitalized into price. See *infra* notes 64-65 and accompanying text.

⁴ That the sharing of tax benefits and liabilities occurs both implicitly and explicitly is widely understood and extensively studied. See e.g., Dan Dhaliwal, Merle Erickson & Shane Heitzman, *The Effect of Seller Income Taxes on Acquisition Prices: Evidence from Purchases of Taxable and Tax-Exempt Hospitals*, 26 J. AM. TAX. ASSOC. 1-21 (2004) (large tax liabilities generated by sale increase the price of assets); Douglas Shackelford & Terry Shevlin, *Empirical Tax Research in Accounting*, 31 J. ACCT. & ECON. 321-87 (2001) (tax sharing agreements studied extensively in accounting literature); Merle Erickson & Deward Maydew, *Implicit Taxes in High Dividend Yield Stocks*, 73 ACCT. REV. 435-58 (1998) (implicit tax sharing when tax favored preferred stock produce lower returns); Anne Beatty, *The Cash Flow and Informational Effects of Employee Stock Ownership Plans*, 38 J. FIN. ECON. 211-40 (1994); Douglas Shackelford, *The Market for Tax Benefits: Evidence from Leveraged ESOPS*, 14 J. ACCT. & ECON. 117-145 (1991) (competitive market more likely to cause companies to share tax benefits with investors).

⁵ J. WILLIAM CALLISON AND MAUREEN A. SULLIVAN, *PARTNERSHIP LAW AND PRACTICE: GENERAL AND LIMITED PARTNERSHIPS* § 4.15 (2012) (partners share tax benefits and tax liabilities).

⁶ Shackelford & Shevlin, *supra* note 4 at 331 (companies tradeoff higher salaries for tax deductions).

⁷ Lynda Livingston, Amy Kast, and Kyle M. Benson, *Investigating the DARPS Meltdown Through an Investments Project*, 2 BUS. EDUC. & ADMIN. 77 (2010) (non-taxable companies issue stock with the explicit purpose of enabling fully taxable corporate investors to share benefits of tax breaks); Merle M. Erickson and Shiing-wu Wang, *Exploiting and Sharing Tax Benefits: Seagram and DuPont*, 21 J. AM. TAX. ASSOC. 35 (1999) (tax benefits shared between corporation and corporate shareholder in widely admired tax plan).

⁸ The first supercharged IPO emerged in 1993, and then did not appear again until 2004. See Amy S. Elliot, *IPO Agreements that Shift the Basis of Step-Up to Sellers Proliferate*, TAX NOTES 334 (July 25, 2011) (brief history of TRAs in IPO context).

SUPERCHARGED IPOs

transfer of billions of dollars back to the original owners on an annual basis,⁹ and they have become more than a little controversial.¹⁰

Commentators and analysts have argued these payments are “a little bit underhanded,”¹¹ “unusually one-sided,”¹² a “pure gravy,”¹³ and a “bizarre siphoning off of cash.”¹⁴ Skeptics argue that insiders are taking advantage of the great uncertainty associated with IPO pricing, which may not reflect the post-sale TRA payments made to the original owner-founders. At the same time, advocates argue that financial innovators have devised a useful means to compensate founders for the company they created and the costs of going public. There is “nothing nefarious about it,”¹⁵ notes Robert Willens, a leading tax expert and the one who coined the term “supercharged IPO.”¹⁶ The agreements are “all disclosed” to the public well before the IPO takes place.¹⁷ Notwithstanding the vocal skepticism over the deals’ rationale and underlying fairness, many experts describe supercharged IPOs as “masterful,”¹⁸ works of “artistry,”¹⁹ and “brilliant, just brilliant.”²⁰

Supercharged IPOs have generated substantial notice, debate and controversy, but no commentator has posed the question: why now? After all, owners and founders have

⁹ Reuters, *Blackstone Partners May Avoid Tax on IPO Gains* (July 13, 2007) (citing Lee Sheppard) (one 2007 deal enabled sellers to roughly \$900 million in post-sale payments), <http://www.reuters.com/article/2007/07/13/us-blackstone-tax-idUSN1325038320070713> (last visited Feb. 17, 2013).

¹⁰ Tax Receivable Agreements (TRAs) invite suspicion for a couple of reasons. First, the founders appear to take advantage of a tax arbitrage: payments received under the TRA are treated as capital gains—as a portion of the sales proceeds from the IPO—while the public holding company takes deductions at the higher ordinary income rate. See *infra* notes 58-60 and accompanying text. Second, when the dust settles, the selling founders are effectively reimbursed for any taxes they have paid to the government. As a New York Times reporter noted, “these guys have figured out how to turn paying taxes into an annuity.” David Cay Johnston, *Blackstone Devises Way to Avoid Taxes on \$3.7 billion*, N.Y. TIMES (2007) (critiquing TRAs as fundamentally unfair).

¹¹ Elliott, *supra* note 8 at 334 (citing Robert Willens).

¹² See Reuters, *supra* note 9 (citing Lee Sheppard).

¹³ Elliott, *supra* note 8 at 337.

¹⁴ PEU Report, *Carlyle's "Cash Tax Savings" Won't Go to Unit Holders* (May 5, 2012), <http://peureport.blogspot.com/2012/05/carlyles-cash-tax-savings-wont-go-to.html> (last visited Feb. 17, 2013).

¹⁵ Elliott, *supra* note 8 at 339.

¹⁶ Robert Willens, *General Electric 'Supercharges' the Genworth Financial IPO*, TAX NOTES 661 (2004).

¹⁷ Elliott, *supra* note 8 at 339; see also Debevoise & Plimpton, *Monetizing the Shield: Tax Receivable Agreements in Private Equity Deals*, 11 PRIVATE EQUITY REP. 9 (Fall 2010) (TRAs have risks and drawbacks, but some argue they have a “certain symmetry because existing owners receive tax benefits associated with a tax liability they have borne”).

¹⁸ Allan Sloan, *GE Perfects the Fine Art of Tax Savings*, WASH. POST (Dec. 13 2005), <http://www.washingtonpost.com/wp-dyn/content/article/2005/12/12/AR2005121201510.html> (last visited Feb. 17, 2013).

¹⁹ *Id.*

²⁰ *Id.* (citing Robert Willens).

SUPERCHARGED IPOs

taken companies public for well over four hundred years,²¹ yet these unusual payout schemes emerged just two decades ago. Moreover, this new-style IPO has spread across industries and geographic areas, a process that raises the question of how and why financial innovations diffuse. Finally, and perhaps most importantly, the supercharged IPO raises the question of who actually benefits: the owner-founders, the public investors, or both? In this study, we seek to answer these questions with the help of a large database of IPO transactions—the first of its kind—and one that includes both conventional and supercharged deals over the course of the last several decades.

Our study begins, in Sections IIA and B, by comparing and contrasting traditional IPOs with the new supercharged version of taking a company public.²² We note that supercharged IPOs come in different forms and have gone through a series of complex iterations over the course of time, but they all contain one key component: a TRA that requires the new public company to transfer large sums of cash to the owner-founders in the post-IPO period. After describing supercharged IPOs as an important financial innovation, Section IIC then outlines the means by which companies disclose the details of the payout schemes to their investors, highlighting the various risks that each party undertakes.²³

In Section III, we turn to the theoretical literature to understand how and why financial innovations, such as supercharged IPOs, enter the market.²⁴ We focus first on the drivers of the financial innovation. We observe that the incentive to generate new strategies is not a discoverer's passion and zeal, but a desire to solve specific problems that arise in the transactional context, like risk aversion, information asymmetry, and regulatory costs.²⁵ We then explore the underlying theories for how and why innovations diffuse across markets and industries and find that many theorists associate this process with factors such as elite financial intermediaries, professional networks, firm culture,

²¹ Bill Baue and Marcy Murningham, *The Accountability Web: Weaving Corporate Accountability and Interactive Technology*, CORPORATE SOCIAL RESP. INITIATIVE WORKING PAPER 58, available at http://www.hks.harvard.edu/m-rcbg/CSRI/publications/workingpaper_58_baue murningham_full.pdf (last visited Feb. 17, 2013) (Dutch East India Trading Company conducted world's first IPO in 1602).

²² See *infra* notes 34-68 and accompanying text.

²³ See *infra* notes 69-73 and accompanying text.

²⁴ Quite a few scholars have investigated financial innovation from both a theoretical and qualitative perspective. Many historical and sociological studies, for example, have cataloged significant inventions throughout history, and economists have proffered a variety of theories for why inventions emerge and proliferate. See Darrell Duffie, *Financial Market Innovation and Security Design: An Introduction*, 65 J. ECON. THEORY 1, 5-7 (1993) (listing economic events and innovations that followed between 1971-86); see also, Symposium Issue on Financial Market Innovation and Security Design in 93 J. ECON. THEORY (1993) (articles investigating innovation from various perspectives).

²⁵ MYRON S. SCHOLES ET AL., *TAXES & BUSINESS STRATEGY* (4th ed. 2008) (outlining various factors that drive innovation); David M. Schizer, *Frictions as a Constraint on Tax Planning*, 101 COLUM. L. REV. 1312 (2001) (innovations emerge to address problem with market frictions); EVERETT M. ROGERS, *DIFFUSION OF INNOVATIONS* (1995) (establishing framework to describe how innovations spread); see *infra* notes 74-110 and accompanying text.

SUPERCHARGED IPOs

and media coverage.²⁶ Sections III presents a series of interconnected theories and thus throughout this Section we present a series of hypotheses that explain the rise and the spread of the supercharged IPO, thereby framing our empirical investigation in Section IV.²⁷

Few scholars have attempted an empirical exploration of financial innovations,²⁸ and no scholar or team of scholars has sought to explain the emergence of the supercharged IPOs. In this study, we seek to fill these surprising gaps. Section IVA outlines our data collection process and explains our statistical models.²⁹ Section IVB presents our findings vis-à-vis the rise and proliferation of the supercharged IPO. We find the initial motivation for pursuing this new deal structure relates to tax planning, not opportunism as some critics has alleged. More specifically, our data indicate that supercharged IPOs are highly correlated with the existence of a tax arbitrage opportunity, namely the ability to sell the company's assets (and pay tax at a low capital gains rates) while the new public company amortizes that same asset at higher ordinary income rates.³⁰ By contrast, we find little evidence of devious planning by owner-founders to profit from naïve investors. If the desire to sneak money away from shareholders was the motivating force, we would expect to find more supercharged IPOs in the absence of tax arbitrage, and we would expect it to be more frequent in deals where information costs are high and shareholders more vulnerable.³¹ With respect to the diffusion of new ideas in the financial sector, we find that the diffusion process is best explained by two factors: elite lawyers and professional networks—especially those located in New York City.³²

Finally in Section V, we note that our findings have important implications for transactional lawyers, legislators, and the theoretical literature on financial innovation generally.³³ Our qualitative analyses indicate that supercharged IPOs enable the parties to save substantial amounts of money in taxes when the parties are subject to different tax

²⁶ See *infra* notes 111-122 and accompanying text.

²⁷ See *infra* notes 74-122 and accompanying text.

²⁸ See Mahbrouk Abir and Mamoghli Chokri, *Dynamic Financial Innovation and Performance of Banking Firms: Context of an Emerging Banking Industry*, 51 INT'L RES. J. FIN. AND ECON. 17, 18 (2010) ("in spite of extensive descriptive literature on financial innovation, there is a paucity of empirical studies"); Josh Lerner, *The New New Financial Thing: The Origins of Financial Innovations*, 79 J. FIN. ECON. 223, 224 (2006) (despite the importance of financial innovation, only 39 empirical studies exist on the topic); Jala Akhavein, W. Scott Frame, and Lawrence J. White, *The Diffusion of Financial Innovations: An Examination of the Adoption of Small Business Credit Scoring by Large Banking Organizations*, 78 J. BUS. 577, 578 (2005) (7 quantitative studies investigating the process by which innovation diffuses). This gap in the literature is not surprising: it is often difficult to identify the specific time and place of most innovations, and diffusion patterns depend on data that is obscure and frequently unavailable to outside private firms. Fortunately, these hurdles do not exist for our study in large part because federal securities laws require public companies to disclose details of the post-IPO payouts, and for this reason we are able to track both the emergence and the diffusion of the supercharged IPO.

²⁹ See *infra* notes 123-31 and accompanying text.

³⁰ See *infra* notes 132-50 and accompanying text.

³¹ See *infra* notes 132-50 and accompanying text.

³² See *infra* notes 153-55 and accompanying text.

³³ See *infra* notes 155-88 and accompanying text.

SUPERCHARGED IPOs

rates, making tax arbitrage a possibility. We highlight the specific means by which transactional lawyers and deal planners can achieve these results, given the findings of our study. This tax avoidance opportunity, however, raises the normative question of whether the revenue losses from these innovative deals reduce overall social welfare. Congress has proposed legislation to eliminate their tax benefits, but our analysis indicates the extant proposals are under-inclusive and may not achieve the stated goals. We propose alternative routes that would enable legal reformers to close the perceived loophole both in the IPO context, and more broadly. Finally, our study advances the existing literature on financial innovation. The literature is largely theoretical and often presents a series of competing explanations for any given innovation. Our approach builds on this scholarship and demonstrates how scholars can use empirical data to test the competing theories and shows that it is possible to extricate the value of each theory for explaining financial innovation.

II. INITIAL PUBLIC OFFERINGS

Initial public offerings (IPOs) are transactions where privately-held companies register and sell stock to the public for the first time. A successful IPO infuses the company with substantial cash, thereby making it possible to expand and diversify the business, increase research and development, retire debt obligations, and so forth.³⁴ By creating a public market in a company's shares, IPOs often also provide liquidity and exit options for the founders, investors, and employees who own shares in the company. Indeed, for many insiders, the true benefit of going public is the monetization of the pre-IPO owners' interest in the company: founders often realize a sizable return by selling shares directly to the public, or by selling shares in a secondary offering a few months after the IPO.³⁵

Pricing a company for sale to the public is, however, a complex endeavor that involves consideration of many factors including the underlying company assets, trends in sales and earnings, adequacy of present and projected capital and cash flow, and the experience, integrity, and quality of management.³⁶ The first factor—the company's underlying assets—often includes a category labeled “tax assets,” which are simply the tax deductions, credits, and exemptions that generate tax savings for the company in the future just like the home mortgage interest deduction works for individuals.³⁷ For

³⁴ Companies that go public file a prospectus that includes a description of the business along with the growth plans. See, e.g., Fortress Investment Group LLC, Form S-1 (Feb. 2, 2007), <http://www.sec.gov/Archives/edgar/data/1380393/000095013607000635/file1.htm> (last visited Feb. 17, 2013). For a useful review of the IPO process and theories for why companies go public, see PATRICK J. SCHULTHEIS, ET AL., *THE INITIAL PUBLIC OFFERING: A GUIDEBOOK FOR EXECUTIVES AND BOARDS OF DIRECTORS* 1-12 (2004); CARL W. SCHNEIDER, JOSEPH M. MANKO, ROBERT S. KANT, *GOING PUBLIC: PRACTICE, PROCEDURE AND CONSEQUENCES* 1-5 (2002); Jay Ritter and Ivo Welch, *A Review of IPO Activity, Pricing and Allocations*, 57 J. FIN. 1795, 1816 (2002).

³⁵ Andrew W. Needham, *Private Equity Funds*, 735 TAX MGMT. PORTFOLIO 2d A-90 (2010).

³⁶ SCHULTHEIS, ET AL., *supra* note 34 at 31.

³⁷ For a useful and detailed discussion of tax assets, see generally ANJA DE WAEGENAERE, RICHARD SANSING, AND JACCO L. WIELHOUWER, *VALUATION OF DEFERRED TAX ASSETS FROM A NET*

SUPERCARGED IPOs

example, if a company purchases goodwill (an item associated with corporate identity, customer relationships, and so forth) for \$15 million and ratably amortizes the cost of that asset over fifteen years on its tax return, it would take a deduction of \$1 million a year. At a 35% tax rate, this deduction could save the company a total of \$5,250,000 in taxes over fifteen years.³⁸ Because the ability to reduce the corporate tax burden is valuable to a corporation's bottom line, future tax deductions—or deferred tax assets as they are more formally known—are accounted for on a company's balance sheet, just as future tax liabilities are.³⁹ This information, in turn, can play a role in the valuation process when companies go public in an IPO: as the value of net tax assets increase, so should a company's market value.

Tax assets are routinely tracked and valued by companies on their balance sheets, but there is some debate as to whether and how well these assets are priced into the stock at the time of an IPO. The value of a deferred tax asset, for example, is a function of the company's future profits and future tax rate, factors that force managers and accountants to exercise some discretion in valuing the tax assets.⁴⁰ Indeed many argue that the valuation process is more art than science given the inherent unpredictability of profits and tax rates.⁴¹ Moreover, and perhaps more alarming, there is some reason to think that IPO stock analysts pay little attention to tax assets, focusing instead on the valuation of comparable companies that already trade on the public markets.⁴² As we discuss below, the presence of tax assets, and the uncertainty of their role in IPO pricing are prime motivators for the supercharged IPO deals.

A. The Traditional IPO

To understand the supercharged IPO as a financial innovation, it is useful to consider the traditional IPO. To begin, assume that Founders Co., a privately-held corporation, operates its business through a subsidiary. Assume also that the assets of the company include real property that can be depreciated (such as a building)⁴³ and intangible property that cannot be depreciated (such as self-created goodwill).⁴⁴ This

OPERATING LOSS CARRYOVER (2001), Gregory Miller and Douglas J. Skinner, *Determinants of the Valuation Allowance for Deferred Tax Assets under SFAS No. 109*, 73 ACCT. REV. 213 (1998).

³⁸ $\$15,000,000 \times .35 = \$5,250,000$

³⁹ See generally, Miller and Skinner, *supra* note 37.

⁴⁰ Robert Willens, *Accounting for Deferred Tax Assets and Liabilities—Citigroup*, 7 WILLENS REPORT 1 (Jan. 9, 2013) (realization of future tax benefits depend on many factors and decisions); Miller and Skinner, *supra* note 37 at 218-19 (same).

⁴¹ Miller and Skinner, *supra* note 36 at 218-19.

⁴² See Robert Stammers, *What Does an IPO Price Mean?* FORBES (Sept. 16, 2011), <http://www.forbes.com/sites/cfainstitute/2011/09/16/what-does-an-ipo-price-mean/> (last visited Feb. 17, 2013) (discussing the asset-based, income, and market approaches for valuing companies in an IPO); Sanjeev Bhojraj and Charles M.C. Lee, *Who is My Peer? A Valuation-Based Approach to the Selection of Comparable Firms*, J. ACCT. RES. 407, 407-435 (2002) (the comparable firm approach is widely used and success depends on the identification of appropriate peer firms).

⁴³ I.R.C. §§ 167-68 (2006).

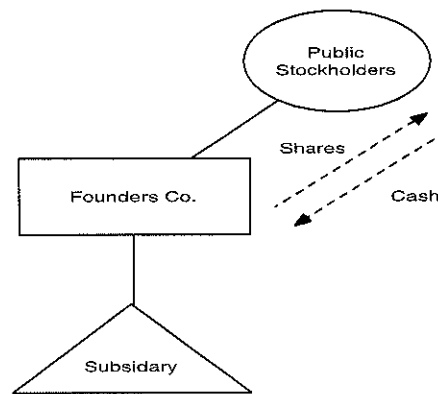
⁴⁴ Congress defines goodwill as “the value of a trade or business that is attributable to the expectancy of continued customer patronage, whether due to the name of a trade or business, the reputation of a trade or business, or any other factor.” Treas. Reg. § 1.197-2(b)(1) (2007). In the

SUPERCHARGED IPOs

company, in short, has three assets: the building, the goodwill, and a tax asset linked to the future depreciation tax deductions—all of which will be listed on the company's balance sheet.

If Founders Co. chooses to go public in a traditional IPO, it will sell newly issued shares of stock to the public for an agreed upon price as depicted in Figure 1, a structure that reflects a simplified version of the IPO. The public offering infuses Founders Co. with substantial cash based on the value of the underlying assets (or possibly based on comparable firms trading on the market, as just noted). From a tax perspective, however, the IPO is a non-event—typically, none of the parties will pay any tax on the deal.⁴⁵

Figure 1: The traditional IPO



Note: Founders Co. sells stock to the public and obtains substantial cash, but the transaction does not generate any tax costs for any of the parties.

The traditional IPO generates substantial cash for the company and avoids tax costs, but many commentators view the transaction as inefficient and wasteful for at least two reasons. First, the deal could have been structured to accomplish the parties' goals

accounting context, the term is an indication on the balance sheet that the whole is greater than the sum of its parts. See Note, *Treatment of Goodwill by the Seller Under I.R.C. Section 197*, 43 KAN. L. REV. 903, 903 (1995). Many corporate assets give rise to amortization and depreciation tax deductions, thereby enabling the company to recover its costs and save substantial monies in taxes over the course of years. Goodwill, however, is subject to a unique rule: if the asset is *self-generated* it cannot be amortized, but if it is *purchased*, the tax laws allow the purchaser to amortize the cost of the asset over a fifteen-year period. I.R.C. § 197 (2006). As we will see, acquired goodwill—along with the tax benefits this asset provides—is a key factor underlying many of the recent supercharged IPOs.

⁴⁵ See I.R.C. § 1032(a) (2008) ("No gain or loss shall be recognized to a corporation on the receipt of money or other property in exchange for stock (including treasury stock) of such corporation"). If the founders sell some of their own stock in connection with or after the IPO, they will typically pay tax at long-term capital gains rates, see I.R.C. §§ 1(h), 1221-1223 (2012), but these sales will typically have no effect on the tax profile of the company.

SUPERCHARGED IPOs

while reducing taxes.⁴⁶ Second, experts believe that IPO investors routinely undervalue companies given the arcane nature of the “tax assets” that reside inside the company, and thus founders are under-compensated for their companies.⁴⁷ A tax receivable agreement (TRA) could address these twin problems, enabling the parties to capture most of the value lost by the overpayment of taxes and/or the undervaluation of the stock price.⁴⁸

B. The Supercharged IPO

A supercharged IPO differs from a traditional IPO for one key reason: it *always* involves a TRA that calls for the parties to share the value of the company’s underlying tax assets. Recall from above that tax assets are simply deductions, credits, or exemptions that allow a company to reduce its tax liability down the road. Since 1993, when the first supercharged IPO appeared, several different formulations of the deal have emerged, but each new generation has built on the basics of the earliest deals. For this reason we limit our discussion to two iterations of these new deal structures to illustrate the key features. As we note below, experts justify each new wave with a different underlying rationale ranging from legitimate and efficiency-enhancing to pure thievery on the part of the founders.

The most typical supercharged IPO deal structure enables the parties to reduce future taxes by *creating* new tax assets for the company. To accomplish this feat, the parties add some additional steps to the deal. First, Founders Co. transfers its subsidiary to a newly created corporation, Public Co., in exchange for Public Co.’s stock. Founders Co. and Public Co. then sell a large percentage of Public Co. stock to a third party (the investing public).⁴⁹ This arrangement depicted in figure 2 below, is an alternative to that

⁴⁶ See *infra* notes 49-57 and accompanying text.

⁴⁷ See *infra* notes 36-42 and accompanying text for an explanation of tax assets, see *infra* notes 61-67 and accompanying text for a discussion of investor undervaluation of companies with tax assets.

⁴⁸ Willens, *supra* note 16 at 661 (outlining ways in which the TRA addresses inefficiencies of traditional IPO).

⁴⁹ Actually, Founders Co. sells the shares to an investment bank, which then sells to the public. SCHULTHEIS, ET AL, *supra* note 34 at 35-45; SCHNEIDER, ET AL, *supra* note 33 at 20-30. From a tax perspective, this arrangement can have important consequences. The deal can be structured to fail the so-called “control” test, turning the deal from a tax non-recognition event into a mere taxable exchange without tax consequences. I.R.C. §§ 351, 338(h)(3)(A)(iii) (2006). In the lexicon of tax lawyers, this means that the deal is a “busted 351 transaction,” as such, qualifies as a taxable transaction. The tax treatment is important here because it determines the basis of Public Co.’s assets. The tax basis in an asset is the amount that generates depreciation deductions, I.R.C. §§ 167-68, and is adjusted as depreciation tax deductions are taken. I.R.C. § 1011 (2006). Thus if Public Co. inherits a “carry-over basis” in an ordinary 351 transaction, it would obtain assets with a low basis that has been depreciated down in the hands of Founders Co. Of course, Public Co. does not want the carry-over basis but prefers a “stepped-up basis” that reflects the fair market value of the asset (and allows for substantially more depreciation down the road). Public Co. will thus want the parties to make a section 338(h) election and treat the transaction as sale. I.R.C. § 338(h) (2008). This election enables Public Co. to obtain a stepped-up basis in the underlying assets reflecting their current fair market value. For a description of these rules, see Rev. Rul. 79-70, 1979-1 C.B. 144; Rev. Rul. 79-194, 1979-1 C.B. 145 (Aug. 1979); TAM 9747001 (July 1, 1997); PLR 9541039 (July 20, 1995), as modified by PLR 9549036 (Sept. 12, 1995); PLR 9142013 (July 17, 1991).

SUPERCHARGED IPOs

presented in figure 1, and has the advantage of not only transferring Founders Co.'s pre-existing tax assets to Public Co.—but also generating new tax assets.

It is easy to understand the role of pre-existing tax assets in the deal: these assets are listed on the company's balance sheet and, like all the other company assets, they are transferred to Public Co., thereby enabling Public Co. to use them to reduce taxes down the road.⁵⁰ But how are new tax assets created in the deal? The answer to this question has to do with an unusual provision found inside the tax code: after taking the steps just described, Founders Co. and Public Co. can elect to treat the transaction as a "sale" of assets.⁵¹ While our goal in this study is not to explain the tax-related intricacies of going public, it is useful to understand that the parties have control over the size and extent of the tax assets that will reside inside the new Public Co. If the parties elect to treat the transaction as a sale, they literally create new tax assets for Public Co.⁵² Recall from above, for example, that Founders Co. has goodwill that it could not amortize because it was self-created, but if Public Co. is viewed as having purchased that goodwill then the latter will be permitted to amortize the value of the asset.⁵³ Public Co.'s new tax assets—the amortization tax deductions permitted due to the elected sale—are far from inconsequential. The new company stands to save millions of dollars *each* year well into the future.⁵⁴ These deductions were not available to Founders Co. and would not be available to Public Co. absent the steps described above and the election to treat the transaction as a sale in the supercharged deal structure.

Public Co. and its investors, obviously, reap valuable benefits in this new-style deal (they have access to new tax assets absent in the traditional IPO), but there is also a major drawback. The deal is likely to generate substantial taxes on Founders Co. and its owners.⁵⁵ The important take-away for purposes of this article is the fact that in the

⁵⁰ Pre-existing tax assets residing inside the company may include items such as deductible net operating losses, tax credits and so forth. Willens, *supra* note 40 at 1.

⁵¹ The parties make a Section 338(h)(10) election to treat the transfer of subsidiary stock as an asset sale, triggering a step-up in basis. See *supra* note 49 discussing the details of the I.R.C. § 338(h)(10) election. In this supercharged IPO structure, the selling founders must sell at least 50% of the Public Co. stock within 2 years, which may force a quicker exit than intended. See *supra* noted 49; PLR 200427011 (Sept. 12, 1995) (private letter ruling regarding GE/Genworth IPO discussing the election); Willens, *supra* note 16 at 661 (same). Furthermore, the Founders effectively pay tax on all the built-in gain up front, albeit at the lower capital gains rate. I.R.C. §§ 1(f), 1221-23. Recall from above, that the traditional IPO involved only the company's sale of stock to the public, no transfer of assets. See *supra* note 45.

⁵² See *supra* notes 49-50.

⁵³ See *supra* notes 42-43 and accompanying text; *supra* note 47.

⁵⁴ Robert Willens, *ILFC Will Exit the AIG Family with a Valuable "Basis Step-Up"*, WILLENS BULL. (Sep. 2, 2011) (basis step-up can save companies billions in taxation, if not eliminate the tax bill altogether).

⁵⁵ This double tax is associated with the fact that the parties elected to treat the deal as a sale of assets and not a mere contribution of property to a controlled corporation. See *supra* note 49. Founders Co. may suffer a taxable gain at the subsidiary level, depending on a number of factors such as the amount of unrealized gain and the availability of net operating losses. Moreover, to the extent that Founders Co. has appreciated in value, the original owner-founders may still have to pay a second level of tax when they sell or liquidate Founders Co. MARTIN D. GINSBURG AND JACK S. LEVIN, *MERGERS, ACQUISITIONS, AND BUYOUTS* ¶ 405 (2011) (discussing tax consequences); Willens, *supra* note 16 at

SUPERCHARGED IPOs

traditional IPO structure there were no new tax assets created but there were also no immediate tax burdens triggered. These two factors—new tax assets plus new tax liabilities—are the reasons for the emergence of IPOs supercharged with a TRA.

Founders Co. must pay tax on the sale in the supercharged IPO, but Public Co. agrees to compensate Founders Co. for incurring this tax with a TRA. The typical TRA requires Public Co. to pay Founders Co. 85% of the tax benefits realized as a result of the tax savings that were not be available in the traditional IPO. Above we noted that if Public Co. amortized its new asset, say goodwill, worth \$15 million ratably over fifteen years, it would take a deduction of \$1 million a year and would save \$5,250,000 in taxes over the amortization period.⁵⁶ If the parties executed a TRA, Public Co. would be required to pay the founders 85% of this amount, or \$4,462,500. The timing of the individual payments corresponds to the deductions as they are used to reduce the corporate tax burden. Public Co., in other words, makes the TRA payments to the founders as it realizes the tax savings and not before this time.⁵⁷ Figure 2 is a simplified depiction of an early-supercharged IPO where Founders Co. exacts payments from Public Co. through a TRA in return for allowing Public Co. to benefit from the tax assets that were transferred and created in the multi-step transaction.

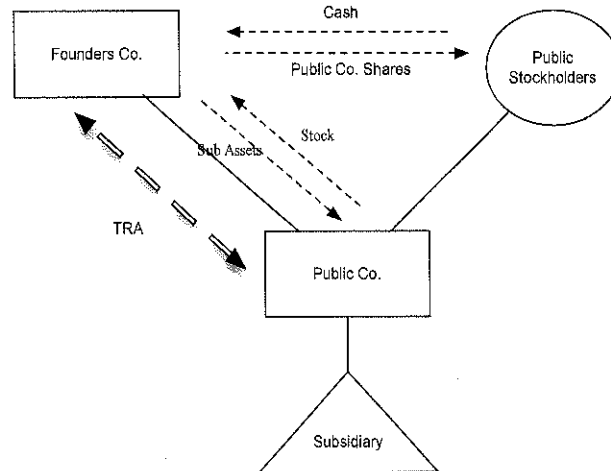
661 (same). The basis step up occurs when Founders Co. contributes stock, assets or subsidiary interests to Public Co. in a “busted” 351 transaction—a strategy that the buyers almost always prefer and gives the sellers’ some initial hesitation. See discussion *supra* note 49; GINSBURG & LEVIN, *supra* at ¶ 405-406; Willens, *supra* note 16 at 661.

⁵⁶ See *supra* notes 37-39 and accompanying text, see also Debevoise & Plimpton, *supra* note 17 at 9.

⁵⁷ Debevoise & Plimpton, *supra* note 17 at 9. The amounts transferred under the TRA are determined on an annual basis comparing Public Co.’s actual tax liability to its notional tax liability as if such deductions were unavailable and makes a payment equal to 85% of that difference per the parties’ TRA; although some agreements indicate that the pre-IPO investors can accelerate the payments. An interesting feature of the TRA payments is linked to the effects of the obligation going forward. Because each TRA payment is viewed as part of the purchase price of the stock or partnership interest by Public Co., every payment causes the basis in the underlying assets to increase, which in turn leads to additional TRA payments to the pre-IPO owners. *Id.*

SUPERCHARGED IPOs

Figure 2: The supercharged IPO: seller extracts more cash with a TRA



Note: As described in the text, Founders Co. first transfers its subsidiary to Public Co. in exchange for stock; then Founders Co. sells the stock to the public and at the same time executes a tax receivable agreement (TRA) with Public Co. Ultimately, Public Co. will make payments to Founders Co. in the post-IPO period per the terms of the TRA.

Many IPO commentators have noted that it may not appear rational for the parties to agree to the supercharged deal because it is possible that the net costs to Founders Co. will equal (or exceed) the net benefits to Public Co.—making the deal complicated without any payoff.⁵⁸ This potential drawback, however, is addressed by the fact that the deals often involve a partnership and a corporation, rather than two corporations.⁵⁹ When Founders Co. is operating as a partnership for tax purposes—Founders LLC—it will be subject to fewer and lower tax liabilities than the tax benefits obtained by Public Co.—a reality that exists due to the differential tax rates applied to these two different types of entities.⁶⁰ We discuss this tax arbitrage opportunity—and the way that the surplus is

⁵⁸ GINSBURG & LEVIN, *supra* note 55 at ¶ 405-406.

⁵⁹ Robert Willens, *Up-C Incorporations Feature “Tax Receivable Agreements,”* 5 WILLENS REP. 1 (2011) (the rules are even more “felicitous” when partnerships sell assets to public corporations in the context of an IPO); Washington National Tax Services, *This Month in M&A*, 2 <http://www.publications.pwc.com/DisplayFile.aspx?Attachmentid=5083&Mailinstanceid=22326> (last visited Feb. 17, 2013) (the new IPO structure involving partnerships and corporations can provide selling partners with up to 30-40% more in compensation).

⁶⁰ The basic structure of the deal is the same when “Founders LLC” is organized as a partnership—the founders simply sell their partnership interests to Public Co. in exchange for cash or stock. See Eric Sloan, *Partnerships in the Public Space*, in PLI, THE CORPORATE TAX PRACTICE SERIES: STRATEGIES FOR ACQUISITIONS, DISPOSITION, SPIN-OFFS, JOINT VENTURES, FINANCINGS, REORGANIZATIONS & RESTRUCTURINGS, VOL. 8 (2010); Mark Silverman, et al, *Thinking Outside the Box and Inside the Circle (or Triangle?): Use of LLCs in Consolidated Return Context, in Corporate Acquisitions, and Otherwise, in the Public Space*, PLI, THE CORPORATE TAX PRACTICE SERIES: STRATEGIES FOR ACQUISITIONS, DISPOSITION, SPIN-OFFS, JOINT VENTURES, FINANCINGS, REORGANIZATIONS & RESTRUCTURINGS, VOL. 8 (2010); Willens, *supra* note 59 at 1; Washington National Tax Services, *supra*

SUPERCHARGED IPOs

divided between all the parties—in more detail below and in the appendix and find that it helps to explain the popularity of supercharged IPOs.

In some more recent supercharged IPOs, however, the deal structure begins to look substantially more fishy from the perspective of Public Co. and the investors. In some of the most recent deals, the parties engage in an IPO that looks very much like that presented in figure 2, but they do not elect to treat the transaction as a sale of assets for tax purposes.⁶¹ This eliminates the two effects discussed above. First, while Public Co. inherits Founders Co.'s preexisting tax assets, it does not gain the benefits associated with newly-created tax assets.⁶² Second, foregoing the election to treat the transaction as a sale eliminates the tax liability on Founders Co. and its owners.⁶³ In short, the substance of this deal looks very much like the traditional IPO—in the sense that it does not create new tax assets nor generate a tax burden—and yet the form of the is akin to the supercharged IPO and the parties execute a TRA, enabling the founders to share in the value of the underlying tax assets transferred.

Why the parties would pursue this strategy is related to investors' perceived failure to understand or value tax assets accurately. While tax assets, as we know, are simply the estimated savings associated with deductions and credits and they are listed on company balance sheet, many believe that public investors simply do not account for these types of assets when purchasing stock. The lack of knowledge may be due to the assets' esoteric nature, or perhaps to investment banks' choice to disregard these assets when valuing a company for purposes of an IPO.⁶⁴ Whatever the reason, if investors refuse to pay for the assets that reside inside the company at the time of a stock purchase, then it is rational for Founders Co. to retain this value with the help of a TRA.⁶⁵

note 59 at 2-3.

Because partnerships do not pay an entity-level tax, there is no tax owed at the entity level, nor any tax associated with the distribution of cash to the selling partners. Willens, *supra* note 59 at 1; Washington National Tax Services, *supra* note 59 at 2-3. And generally speaking, the sale of a partnership is treated as the sale of a capital asset, and so selling partners pay tax on any gains at the lower long-term capital gains rate. Willens, *supra* note 59 at 1; Washington National Tax Services, *supra* note 59 at 2-3. On the other side of the transaction, Public Co is still treated as purchasing goodwill, amortizable at the higher ordinary income rate of 35%. Willens, *supra* note 59 at 1; Washington National Tax Services, *supra* note 59 at 2-3. This tax arbitrage—selling goodwill at capital gains rates, while generating deductions at ordinary income rates—made supercharged IPOs especially attractive for companies that operated as partnerships before going public. Willens, *supra* note 59 at 1; Washington National Tax Services, *supra* note 59 at 2-3.

⁶¹ Robert Willens, *Is an NOL "Personal" to the Shareholders?*, WILLENS BULL. 1 (Oct. 2010) (new trend is to execute a TRAs without the elections to treat the transaction as a sale).

⁶² See *supra* notes 47-56 and accompanying text.

⁶³ See *supra* notes 47-56 and accompanying text.

⁶⁴ Debevoise & Plimpton, *supra* note 17 at 9.

⁶⁵ To understand the justification for this newer wave of supercharged IPOs more fully, suppose Founders Co. owns exactly one asset: an oyster with a valuable pearl that cannot be harvested for three years. Also imagine that Founders Co. would like to sell the entire asset but the investors value only the shell and not the pearl (either because the purchaser does not understand the nature of the hidden gem or because it simply desires to own the shell itself and nothing else). Founders Co. has several options: 1) refuse to sell, 2) sell but demand an up-front price that reflects the value of the hidden pearl, or 3) sell the shell and retain the rights to the pearl when it becomes available three years hence. If Founders

SUPERCHARGED IPOs

Owners of private companies, in short, have adopted a complex series of steps to take their businesses public, and now routinely demand large payments from public companies in the post-IPO period. One justification for these innovative IPOs relates to the tax liability that the owners suffer in order to generate new tax assets and the opportunity for tax arbitrage; a second justification revolves around the idea that investors fail to pay for the pre-existing tax assets that the new public company inherits.⁶⁶ Various commentators argue that owners are simply enhancing the efficiency of the deals and assuring they receive a fair price for their business, while others argue owners are nothing more than thieves taking advantage of new companies and public investors.⁶⁷ We empirically investigate these theories below,⁶⁸ but first note that all companies going public divulge the details of the TRA well before the IPO takes place.

C. Company Disclosures and Risk Projections

While supercharged IPOs are controversial and subject to widespread debate, a company that goes public must disclose the details of the TRA in the prospectus and attach a copy of the TRA to its SEC filings.⁶⁹ Not only are the terms of the TRA and the cash payments disclosed to investors at the time of the IPO,⁷⁰ the potential risks of

Co. selects the third option, the parties will execute a supplemental contract provision that supercharges the deal with a “pearl receivable agreement.”

The key question that must be asked with respect to this newer wave of supercharged IPOs is this: does the purchase price reflect the true value of the company—along with its tax assets—at the time of the IPO, or are investors refusing to pay for these assets? Finding the answer to this question is important because it will settle a debate among scholars and commentators with respect to the underlying motivation of the second generation of supercharged IPOs. *See supra* notes 10-19 and accompanying text.

⁶⁶ *See supra* notes 48-54 and accompanying text.

⁶⁷ *See supra* notes 10-19 and accompanying text.

⁶⁸ *See* Section IV *infra* notes 123-155 and accompanying text.

⁶⁹ The Securities Act of 1933 requires issuers to disclose material information to investors, and Section 11 of the Act allows investors to sue with respect to material misstatements or omissions in the prospectus or registration statement. 15 U.S.C. § 77(f), (j), (k). This law explains why the IPO innovators cannot keep the details of the deal secret in order to profit from the idea. For a discussion of patented tax advice, see Anish Parikh, *The Proliferation of Tax Strategy Patents: Has Patenting Gone Too Far?*, 7 J. MARSHALL REV. INTELL. PROP. L. 202 (2007).

⁷⁰ To give just one example, Evercore Partners (the owner-founders of the firm) filed documents with the SEC containing language describing the terms of their TRA along with the relevant tax code provisions and the advantages to Evercore, Inc. (Public Co. in our discussion above) associated with the structure of the deal and, by implication, its shareholders in the following language:

The exchanges may result in increases in the tax basis of the tangible and intangible assets of Evercore LP [the owner-founders] that otherwise would not have been available. These increases in tax basis would increase (for tax purposes) amortization and, therefore, reduce the amount of tax that we would otherwise be required to pay in the future... We [i.e. Public Co.] have entered into a tax receivable agreement . . . that provides for the payment by us to an exchanging Evercore partner [i.e. an owner-founder] of 85 percent of the amount of cash savings, if any, in U.S. federal, state and local income tax that we actually realize as a result of these increases in tax basis. We expect to benefit from the remaining 15 percent of cash savings, if any, in income tax that we realize.

SUPERCHARGED IPOs

entering into this agreement are also outlined. Payments under the TRA are contingent on Public Co.'s income; that is to say, absent taxable income the amortization deductions are worthless to Public Co., so the new company *must* operate at a profit to gain the advantage of the tax deductions. This reality poses a risk that neither Public Co. nor the owner-founders will actually receive benefits identified in the TRA.⁷¹ Moreover, the IRS could scrutinize the tax components of the supercharged IPO, jeopardizing the value of the tax assets and the TRA to both Public Co. and the owner-founders.

Because of the amount of money at stake along with the negative view that many experts and commentators have of TRAs as "underhanded," and "one-sided,"⁷² Public Co.'s obligation could also, theoretically, be challenged down the road by angry shareholders who feel cheated.⁷³ This could result in a scenario whereby the company retains the tax asset, and at the same time, eliminates the payment obligation to the owner-founders under the TRA.

In the next section, we explore competing explanations for why the parties would agree to a supercharged IPO, notwithstanding the deals' complexity, bad optics, and risks. As our discussion illustrates, some explanations suggest that supercharged IPOs are a very good way for the parties to reduce tax costs, while others imply opportunism on the part of the owner-founders.

Evercore Investment Group LLC, Form S-1 (Feb. 18, 2009), <http://www.sec.gov/Archives/edgar/data/1360901/000119312507086555/ds1.htm> (last visited Feb. 17, 2013).

⁷¹ These risks, and others, were identified by Fortress Investment Group at the time of their supercharged IPO, and outlined in the SEC filings:

Although we [i.e. Public Co.] are not aware of any issue that would cause the IRS to challenge a tax basis increase, our principals [i.e. the owner-founders] will not reimburse the corporate taxpayers for any payments that have been previously made under the tax receivable agreement. . . . The corporate taxpayers' ability to achieve benefits from any tax basis increase, and the payments to be made under this agreement, will depend upon a number of factors, including the timing and amount of our [i.e. Public Co.'s] future income.

Fortress Investment Group LLC, Form S-1 (Feb. 2, 2007), <http://www.sec.gov/Archives/edgar/data/1380393/000095013607000635/file1.htm> (last visited Feb. 17, 2013).

⁷² See *supra* notes 10-17 and accompanying text.

⁷³ We have not identified any litigation involving supercharged IPOs. In other contexts, however, TRAs have been the subject of litigation. See, e.g., *Third National Bank in Nashville v. Wedge Group Incorporated*, 882 F.2d 1087 (1989) (defendant denies liability under the TRA). Shareholders have also sued in the IPO context, although not with respect to the existence of the TRAs that were involved. See, e.g., Peter Lattman, *Court Revives Suit over Blackston IPO*, DEALBO%K, <http://dealbook.nytimes.com/2011/02/10/court-revives-shareholder-suit-over-blackstone-i-p-o/>, (last visited Feb. 18, 2013).

III. COMPETING THEORIES OF FINANCIAL INNOVATION: DISCOVERY AND DIFFUSION

Innovation in the financial context is not new; historians have documented creative solutions to financial problems for centuries.⁷⁴ For the most part, scholars and policymakers have applauded these efforts as important means for making markets complete and efficient. When it comes to policymaking choices, Ben Bernanke noted in 2007, “we should always keep in view the enormous economic benefits that flow from a healthy and innovative financial sector; the increasing sophistication and depth of financial markets promote economic growth by allocating capital where it can be most productive.”⁷⁵ Two years after making this statement, and in the wake of the 2008 financial collapse, Bernanke acknowledged that financial innovation also has its drawbacks. “Indeed innovation once held up as the solution is now more often than not perceived as the problem . . . we have seen only too clearly during the past two years, innovation that is inappropriately implemented can be positively harmful.”⁷⁶

Good and bad, financial innovators are part of the economic landscape and for this reason it is useful to understand the environment that fosters creative financing, the factors that enable its diffusion, and the chosen allocation of costs and benefits between and among the parties. Scholars have set forth a range of theories that address these issues,⁷⁷ and the goal in this section is to provide a brief outline of the extant literature as it applies to supercharged IPOs. We then offer hypotheses with respect to why supercharged IPOs emerged and why they spread across geographic zones and industries.

⁷⁴ Political and religious organizations, for example, have long barred or extensively limited bankers’ ability to charge interest, but these restrictions have never eliminated the active market for credit. Instead, lenders have found novel ways to obtain interest payments, sometimes at usury rates, with the help of third parties, unusual contracts, and a variety of other means. See, Michael Knoll, *The Ancient Roots of Modern Financial Innovation: The Early History of Regulatory Arbitrage*, 87 OR. L. REV. 93 (2008); see also Jonathon Barron Baskin, *The Development of Corporate Financial Markets In Britain and the United States, 1600–1914: Overcoming Asymmetric Information*, 62 BUS. HIST. REV. 199 (1988); Larry Neal, *Trust Companies and Financial Innovation, 1897–1914*, 45 BUS. HIST. REV. 35 (1971). KRISTEN STILT, *ISLAMIC LAW IN ACTION AUTHORITY, DISCRETION, AND EVERYDAY EXPERIENCES IN MAMLUK EGYPT* (2011), Knoll, *supra* at 101–13.

⁷⁵ Chairman Ben S. Bernanke, *To the Federal Reserve of Atlanta’s 2007 Financial Markets Conference*, Sea Island, Georgia (May 15, 2007), <http://www.federalreserve.gov/newsevents/speech/bernanke20070515a.htm> (last visited Feb. 17, 2013); see also, M. Watson, D. Mathieson, R. Kincaid, E. Katler, *International Capital Markets: Developments and Prospects*, INTERNATIONAL MONETARY FUND, Paper No. 43 at 15, Feb. 1986 (on balance the innovations have been almost certainly beneficial for the system as a whole).

⁷⁶ Chairman Ben S. Bernanke, *Financial Innovation and Consumer Protection*, Speech Given at the Federal Reserve System’s Sixth Biennial Community Affairs Research Conference, Washington, D.C., April 17, 2009, <http://www.federalreserve.gov/newsevents/speech/bernanke20090417a.htm> (last visited Feb. 17, 2013).

⁷⁷ See e.g., Peter Tufano, *Financial Innovation* in THE HANDBOOK OF ECONOMICS OF FINANCE, GEORGE CONSTANTINIDES, MILT HARRIS AND RENE STULZ, EDS. (2002) (outlining theories of financial innovation); W. Scott Frame and Lawrence J. White, *Financial Studies of Financial Innovation: Lots of Talk, Little Action*, 42 J. ECON. LIT. 116 (2004) (same); Robert C. Merton and Zvi Bodi, *The Design of Financial Systems: Towards a Synthesis of Functions and Structure*, NBER WORKING PAPER 10620 (discussing financial innovation, neo-classical finance, frictions, and behavioral economics).

SUPERCHARGED IPOs

A. Innovation and Discovery: Five Competing Models

In a perfectly efficient world, free of taxes, regulations, and transaction costs, financial innovation would provide little or no benefit and would likely play an insignificant role in the economy.⁷⁸ Markets, however, are neither perfectly efficient nor free from regulation and, as we know, financial innovation is pervasive. The extant theoretical literature has converged on a range of factors, often believed to operate simultaneously, that motivate financial experts to innovate.⁷⁹ While the mainstream account often assumes that financial innovation is driven primarily by investor demand,⁸⁰ we will see that questionable and self-serving motives can also inspire financial engineers to the detriment of shareholders and investors.

1. Taxes, regulations, and accounting standards

Taxes, regulations, and formal industry standards are widely viewed as an impediment to market activities, but they also operate as a major incentive to innovation.⁸¹ Milton Merton, along with many other scholars in a wide range of fields, have discussed and debated financial creativity,⁸² but all agree that financial engineers spend significant time and energy avoiding taxes,⁸³ maneuvering around regulations,⁸⁴ and devising creative accounting and reporting strategies.⁸⁵

⁷⁸ Tufano, *supra* note 77 at 5 (financial innovation in a world free of “imperfections” would benefit no one).

⁷⁹ Bruno Rossignoli and Francesca Arnaboldi, *Financial Innovation: Theoretical Issues and Empirical Evidence in Italy*, 56 J. INT. REV. ECON. 275, 280–81 (2009) (various drivers of innovation exist and tend to work simultaneously); Tufano, *supra* note 77 at 10 (all the stimuli operate together to promote innovation).

⁸⁰ FRANKLIN ALLEN AND DOUGLAS GALE, FINANCIAL INNOVATION AND RISK SHARING 5-10 (1994) (demand drives innovation); Nicola Gennailoli, Andrei Shleifer, and Robert Vishny, *Neglected Risks, Financial Innovation, and Financial Fragility*, 104 J. FIN. ECON. 452, 452 (2012) (episodes of financial innovation share a common narrative and it begins with investor demand); Josh Lerner and Peter Tufano, *The Consequences of Financial Innovation: A Counterfactual Research Agenda*, NBER WORKING PAPER 16780 at 10 (2001) (same).

⁸¹ Darrell Duffie and Rohit Rahi, *Financial Market Innovation and Security Design: An Introduction*, 65 J. ECON. THEORY 1, 2 (1995) (“new securities are often designed in response to accounting standards, regulations and tax codes”).

⁸² Merton Miller, *Financial Innovation: The Last Twenty Years and the Next*, 21 J. OF FIN. & QUANT. ANAL. 459 (1986) (“the major impulses to successful financial innovation over the last twenty years have come . . . from regulations and taxes”); Michael Carter, *Financial Innovation and Financial Fragility*, 23 J. ECON. ISSUES 779, 783 (1989) (tax and regulation drive innovation).

⁸³ See generally, Charles Pouncy, *Contemporary Financial Innovation: Orthodoxy and Alternative*, 15 SMU L. REV. 505 (2009) (discussing time and energy devoted to innovation in financial context); Edward Kleinbard, *Equity Derivative Products: Financial Innovation's Newest Challenge to the Tax System*, 69 TEX. L. REV. 1319 (1990) (same); Alvin C. Warren, *Financial Contract Innovation and Income Tax Policy*, 107 HARV. L. REV. 460 (1993) (same).

⁸⁴ Scholars have noted that innovators often create means to avoid regulation by designing investment opportunities in unregulated or minimally regulated industries. Banking policy, for example, long limited banks' ability to pay interest on savings accounts and this led non-bank intermediaries who operated outside the jurisdiction of the banking regulators to devise money market and mutual fund accounts that mimicked the attributes of savings deposits but could pay interest. Pouncy, *supra* note 82 at 546–48 (2009); Joseph C. Shenker and Anthony J. Colletta, *Asset*

SUPERCHARGED IPOs

Tax rules addressing goodwill may have played an important role in the rise of the supercharged IPO. Prior to 1993, the cost of creating *or* acquiring goodwill could not always be amortized, but with the adoption of Section 197, acquirers are not able to amortize the cost of this asset ratably over a fifteen-year period.⁸⁶ Because goodwill is often the most valuable asset sold in an IPO, the change in the law effectively enabled investors to “recover” (through tax deductions obtained by the company) a portion of their investment if the deal was structured as a “sale” to give Public Co. the ability to amortize its assets. In short, due to Section 197, the true cost of buying shares of stock in an IPO would be substantially less than the nominal or “headline” price in light of the cash savings down the road associated with the tax deductions for goodwill.

The 1993 tax reform was followed by a major change in accounting standards, making goodwill even more valuable to the company. Prior to 2001, companies were required to charge a portion of the amortized goodwill to their income statement—signaling the depletion of an asset, and having the effect of reducing earnings and showing smaller company profits. In 2001, the Financial Accounting Standards Board (FASB) issued FAS 142,⁸⁷ eliminating this mandate. The importance of this reform should not be underestimated: it led to a vast increase in many companies’ annual reported profits, often by billions of dollars.⁸⁸ In short, the current tax and accounting

Securitization: Evolution, Current Issues and New Frontiers, 69 TEX. L. REV. 1369 (1990); Henry T.C. Hu, *Swaps, The Modern Process of Financial Innovation and the Vulnerability of a Regulatory Paradigm*, 138 U. PENN. L. REV. 333 (1989); Carter, at 782–84; James Tobin, *Financial Innovation and Deregulation in Perspective*, 3 MONETARY AND ECON. STUD. 19 (1985).

⁸⁵ Many have argued that accounting firms are uniquely positioned to engage in financial innovation given the background expertise in accounting, taxation, and regulations and numerous firms now market themselves as experts not only in accounting services but in the design of “structured investment vehicles” that enable firms to creatively avoid the limits of accounting standards and tax rules. Patricia Arnold, *Global Financial Crisis: The Challenge to Accounting Research*, 34 ACCT. ORG. & SOC’Y 803 (2009); Norio Sawaabe, *Co-Evolution of Accounting Rules and Creative Accounting Instruments—The Case of a Rules-Based Approach to Accounting Standard Setting*, 1 EVOL. INST. ECON. REV. 177 (2005); Eric R. Hake, *Financial Illusion: Accounting for Profits in an Enron World*, 39 J. ECON. ISSUES 595, 603 (2005); Atul K. Shah, *Creative Compliance in Financial Reporting*, 21 ACCT., ORGS. & SOC’Y 23–39 (1996); Atul K. Shah, *Regulatory Arbitrage through Financial Innovation*, 10 ACCT., AUDITING & SOC’Y 85–104 (1996); Atul K. Shah, *Exploring the influences and constraints on creative accounting in the United Kingdom*, 7 EUR. ACCT. REV. 83–104 (1998); see also D. MACBARNET, AND C. WHELAN, *CREATIVE ACCOUNTING AND THE CROSS-EYED JAVELIN THROWER* (1999).

⁸⁶ I.R.C. §197 (2006). For a good discussion of how and why the change in the tax rules associated with goodwill has led to the proliferation of IPOs, see, Romina Weiss, *Fifteen Years of Antichurning: It’s Time to Make Butter*, TAX NOTES 227, 234–36 (January 12, 2009) (tax and accounting rules motivate innovate deals); see also Robert Willens, *Depreciating (Not Depreciating) Matt Kemp*, 6 WILLENS REP. (May 31, 2012) (same).

⁸⁷ Goodwill and intangible assets are not presumed to be wasting assets; instead, they are presumed to have indefinite useful lives and are tested periodically for impairment. See Financial Accounting Standards Board, *Summary of Statement No. 142: Goodwill and Other Intangibles* (2001), <http://www.fasb.org/summary/stsum142.shtml> (last visited Feb. 17, 2013)..

⁸⁸ Ronad J. Huefner and James A. Largay, *The Effects of the New Goodwill Accounting Rules on Financial Statements*, THE ONLINE CPA JOURNAL, <http://www.nysscpa.org/cpajournal/2004/1004/essentials/p30.htm> (last visited Feb. 17, 2013).

SUPERCHARGED IPOs

rules together permit companies to reduce their *taxable* income through amortization deductions, while at the same time keeping their *reported* income to investors high. A company that is able to take advantage of Section 197 and FAS 142, in effect, straddles the best of both worlds. Because the supercharged IPO enables Public Co. to do just this (it gives the company the ability to deduct the cost of goodwill but these deductions do not offset earnings reported to investors), the reforms create a powerful incentive to undertake this type of deal when substantial goodwill exists inside Founders Co.

The opportunity for tax arbitrage provides a second reason for the supercharged IPO. Recall the deal generates new tax assets for Public Co., but at a tax cost to Founders Co. If the costs and benefits are exactly equal, say Public Co. amortizes an asset at a 35% tax rate and Founders Co. pays tax at a 35% rate on the TRA payments, it would not make sense to supercharge the IPO. If Public Co., however, is able to take tax deductions at a higher tax rate than that imposed on the taxable income received by Founders Co., then a supercharged IPO is tax-efficient. A tax rate differential, if it exists, is a second possible explanation for the emergence of the supercharged IPO.⁸⁹ The table presented in the appendix provides numbers that confirm the idea that tax arbitrage opportunities are an essential component to the supercharged IPO.

The tax and accounting theories of financial innovation generate two testable hypotheses: the parties will supercharge the IPO if 1) Founders Co. has substantial goodwill or 2) an opportunity to engage in tax arbitrage exists. In Section IV below, we investigate these two hypotheses with empirical data and find that tax arbitrage plays a much stronger role in the parties' choice to supercharge the IPO than the presence of goodwill.⁹⁰

2. Information Asymmetry

A second theory of financial innovation relates to information asymmetry: circumstances in which one party has more or better information than the other, creating an imbalance of power and setting the stage for opportunistic behavior. This situation often motivates the less informed party to find creative solutions to limit unfair advantages and/or equalize available information.⁹¹ The less informed parties in the IPO context, of course, are the public investors. The owner-founders of the company have better information with respect to the value of the underlying assets, especially the tax assets.⁹²

⁸⁹ Willens, *supra* note 59 at 1.

⁹⁰ See *infra* notes 132-55 and accompanying text.

⁹¹ Paul Healy and Krishna G. Palepu, *Information Asymmetry, Corporate Disclosure and the Capital Markets: A Review of the Empirical Disclosure Literature*, 31 J. ACCT. & ECON. 405 (2001) (discussing solutions to information asymmetry).

⁹² See, e.g., Peter Lattman, *Court Revives Suit over Blackstone IPO*, DEALBOOK, <http://dealbook.nytimes.com/2011/02/10/court-revives-shareholder-suit-over-blackstone-i-p-o/>, (last visited Feb. 18, 2013) (shareholders suing Blackstone because company allegedly withheld information from public investors at the time of the IPO).

SUPERCHARGED IPOs

Recall that in many supercharged IPOs, Public Co. is able to amortize goodwill. The amortization deductions are linked to the fair market value of the goodwill, but high deductions could also attract unwanted scrutiny by IRS auditors who could challenge the claimed fair market value, thereby reducing the deductions. Public Co. and the shareholders, therefore, have an incentive to link the payments to the actual tax deductions obtained, thereby assuring that the owner-founders have a stake in the deductions as well as the accuracy of the underlying fair market value reported to the IRS at the time of the sale. An up-front payment by Public Co., un-tethered to the tax savings actually received down the road, would incentivize the owner-founders to overstate the value of the tax assets in an effort to convince the company to overpay for the tax assets obtained in the IPO. The TRA operates to assure that relevant information is shared between the parties and at the same time restricts opportunism.

The information asymmetry, however, may also work to the disadvantage of the owner-founders. Investors, as discussed above in the context of the second wave of supercharged IPOs, may suffer an information deficit with respect to the company's tax assets whether they are newly-created by the deal, or pre-existing and transferred in the deal. If investors simply do not account for the value of these assets at the time of the stock purchase, then owner-founders rationally choose to supercharge the IPO with a TRA to assure they are compensated for all the assets transferred. In short, if investors refuse to pay for a portion of the company's assets due to the lack of information, owner-founders sensibly extract payment for those assets down the road with the help of the TRA. Absent the TRA, owner-founders would not be able to obtain a fair price for the company as it goes public under this theory of the deal.

The supercharged IPO theoretically cures the problem of information asymmetry in both the contexts just noted, but there is also a third possibility: the innovation may *create* informational problems. Commentators and critics have argued that supercharged IPOs are "underhanded," "one-sided," and "bizarre," on the grounds that they are complicated and virtually incomprehensible.⁹³ Indeed one commentator notes that in analyzing a recent IPO, he "missed the major thrust of The Carlyle Group's byzantine 'cash tax savings'" plan associated with the TRA. This commentator noted that he "mistakenly thought Carlyle's co-founders were being indemnified against any future tax increase on carried interest. Instead it's a co-founder cash bleeding of affiliates."⁹⁴ The allegation stated most directly is this: owner-founders are deceptively adding complex provisions into the IPO, thereby enabling the owner to steal from unsuspecting and confused public investors through large TRA payments.⁹⁵ In short, it is argued, the supercharged IPO is not a means to compensate founders for the tax costs they incur for

⁹³ See *supra* notes 10-17 and accompanying text.

⁹⁴ PEU Report, *Carlyle's "Cash Tax Savings" Won't Got to Unit Holders* (May 5, 2012), <http://peureport.blogspot.com/2012/05/carlyles-cash-tax-savings-wont-go-to.html> (last visited Feb. 17, 2013).

⁹⁵ Nigle Jenkinson, Adrian Penalver, and Nicholas Vause, *Financial Innovation: What Have We Learnt*, 2008 Q. BULL. 330 (2008) (financial engineering can improve options for households and companies, but can also create market imperfections and unexpected information asymmetries).

SUPERCHARGED IPOs

creating and transferring valuable tax assets or for assets left unvalued by the investors—it is mere theft.

Some leading practitioners share this dark view of supercharged IPOs and TRAs in particular. As one explained, “I view TRAs as much less about tax innovation and much more about improper accounting and investor unsophistication.” He elaborated, “[t]he main feature of TRAs is that selling shareholders have convinced the public that they are indeed transferring a benefit to the IPO company and have obfuscated the potential cost to the IPO company.” The sellers explain the supercharged IPO in published documents, but investors may not account for the future TRA payments in the stock pricing. “In my experience,” he explained, “except in extraordinarily unusual situations, there is no real negotiation because, at the end of the day, despite extensive disclosure, the TRA doesn’t affect the IPO price.” [cite to Interview with NYC Practitioner, on file with the authors]

The critics may have a point: if the experts fail to detect and understand the TRA, the investing public will surely fail to comprehend the nature of the agreement, making it a perfect vehicle for owners to quietly and unfairly extract money from the company. Owners have long rationalized supercharged IPOs on the ground that they incur costs in creating tax assets for Public Co, or, alternatively, investors refuse to pay for pre-existing tax assets—but if these justification do not hold up empirically, then the owners may have adopted an underhanded scheme as suggested by the critics.

The information asymmetry theory of innovation leads to two distinct hypotheses associated with information deficits and founders’ opportunism. Specifically, this theory suggests that 1) investors’ information deficits vis-à-vis existing tax assets will lead owner-founders to include the TRA in the IPO documents to assure they receive compensation for assets transferred, and 2) even in the absence of investors’ information deficit, owner-founders may opportunistically slip the TRA into the IPO documents on the theory that investors will not focus on the minor details of the deal. In the empirical component of our paper, we find surprising results with respect to information asymmetry and opportunism.⁹⁶

3. *Risk aversion*

Students of financial innovation argue that risk is a key motivator for creativity.⁹⁷ Financial risk is often associated with market fluctuation, but the threat of political,

⁹⁶ See *infra* notes 132-55 and accompanying text.

⁹⁷ Frame and White, *supra* note 77 at 8 (risk is a key factor in motivating innovations); Tufano, *supra* note 76 at page 20 (same); VOLKER SCHMID, FINANCIAL INNOVATION WITH A PARTICULAR VIEW ON THE ROLE OF BANKS 4–6 (2004) (same); C. SMITH, C. SMITHSON, AND D. WILFORD, MANAGING FINANCIAL BUSINESS, THE INSTITUTIONAL INVESTOR SERIES IN FINANCE 20 (1990) (same); MILIKEN INSTITUTE, FINANCIAL INNOVATIONS FOR CATASTROPHIC RISK: CAT BONDS AND BEYOND (2008), <http://www.milkeninstitute.org/publications/publications.taf?function=detail&ID=38801147&cat=finla> b (last visited Feb. 17, 2013) (discussing mechanism to insure against earthquakes, hurricanes, terrorism, and so forth).

SUPERCHARGED IPOs

social, and legal change may also pose unwanted and undesirable risks.⁹⁸ Inventions enabling individuals and entities to manage these risks are ubiquitous and often involve complex products, instruments, and processes.⁹⁹

There are various risks associated with supercharged IPOs. First, if tax arbitrage motivates the deal, the parties risk legal reform that removes the tax rate disparity. Indeed, various Members of Congress have critiqued the current rate differentials as unfair and inappropriate and have proposed legislation that would force recognition of income by owner-founders at a higher tax rate, eliminating the arbitrage opportunity.¹⁰⁰ This risk—tax costs will exceed benefits down the road—provides an incentive for the owner-founders to negotiate an *immediate* payout (through an increased stock price at the time of the IPO or a lump sum payment simultaneous with the IPO). A TRA tied to the company's amortization deductions over the course of fifteen years, by contrast, subjects the owners to potential and unwanted tax increases.

There are, however, competing reasons for Public Co. to prefer the TRA over an up-front payment. The tax benefits to Public Co. are associated with the so-called basis step-up that occurs with the purchase of goodwill and other assets, but it is possible that IRS will disallow or limit that increase in basis in the context of an audit as discussed above. Moreover, and perhaps more important, because tax assets are linked to a reduction in a company's tax burden associated with its taxable income, the company

⁹⁸ In fact, the regulators' response is often an expected feature of innovation. Robert C. Merton, *A Functional perspective of Financial Intermediation*, 24 FIN. MGMT. 23, 30 (1995) (discussing the innovation-regulation dialectic); Zachary J. Gubler, *The Financial Innovation Process: Theory and Application*, 36 DEL. J. CORP. L. 55 (2011) (exploring various ways to regulate financial innovation with the help of new institutional economics); Samuel M. Kidder, *What's Your Position? Amending the Bankruptcy Disclosure Rules to Keep Pace with Financial Innovation*, 58 UCLA L. REV. 803 (2010) (exploring the problem of "empty creditors" and appropriate policy reform); Frank Partnoy, *Financial Innovation in Corporate Law*, 31 J. CORP. L. 799, 819–20 (2006) (exploring how corporate law might address the problem of hybrid financial instruments); see also Dionisis Th. Philippas and Costas Siriopoulos, *Influence of Financial Innovation to Validation of Operational Risk*, 35 MANAGERIAL FIN. 940, 941 (2009) (risk can be associated with failed processes, people, systems, or external events).

⁹⁹ Scholars have noted that foreign exchange futures, swaps, options, interest rate futures, and so forth all emerged due to perceived uncertainty in the markets and the desire to eliminate it. A widely admired and relatively new form of catastrophic insurance, often labeled "cat bonds," for example, is an innovation that enables individuals to protect against hurricanes, earthquakes, and even terrorism. J. David Cummins, *CAT Bonds and Other Risk-Link Securities: State of the Market and Recent Developments*, 11 RISK MGMT. & INS. REV. 23 (2008) (many types of CAT bonds available); Neil A. Doherty, *Financial Innovation in the Management of Catastrophe Risk*, 10 J. APP. CORP. FIN. 84 (1997) (various design issues associated with successful innovation in this area of insurance); Tufano, *supra* note 77 at 20–21 (same). Of course, financial innovation can also create risk for investors. Susanne Trimbath, *Financial Innovation: Wall Street's False Utopia*, 5 J. ACCT. & ORG. CHANGE 108–111 (2009) (collateral mortgage obligations were created to spread risk and reduce agency costs but had the opposite effect).

¹⁰⁰ See H.R. Rep. 3996 pt 10 (2007) (provision related to increased rates was not part of the final legislation enacted into law); see also, GINSBURG & LEVIN, *supra* 55 note at 10 (noting Congress may unwind benefits of the TRA sometime down the road); Johnston, *supra* note 10 (critiquing TRAs and fundamentally unfair to taxpayers).

SUPERCHARGED IPOs

must earn sufficient income to take advantage of the tax assets. Absent sufficient company income the tax asset (be it a deduction or credit) could become partially or fully useless. These risks make it sensible for Public Co. to agree to make payments contingent on the actual rather than forecast value of the tax assets, insuring that Public Co. and its investors pay for what that they actually receive.

If the deal is supercharged not because the owner-founders created new tax assets, but because they transferred pre-existing assets which investors do not adequately value, then the TRA is sensible from both Founders Co.'s and the investors' viewpoint. The TRA assures that the owner founders will get paid for the assets and, at the same time, the investors need not incur the risk of paying for assets they do not understand.

The idea that risk aversion plays an important role in the choice to innovate is widely accepted and our analysis implies it has indeed played a role in the use of TRAs. Ideally, we would like to compare deals that involved large up-front compensation to the owner-founders versus down-the-road payments pursuant to a TRA to assess which party has the greater aversion to risk. Empirically, however, we are unable to examine the parties' level of risk because *every* supercharged IPO contains a TRA with virtually identical terminology and no alternative payout plans exist—thus we cannot use statistics and data to investigate whether the parties' aversion to risk plays a role in the design of supercharged IPOs. Given that 100% of the deal structures include post-IPO payouts and the parties explicitly refer to the risks and hazards associated with TRAs in the SEC filings, it is reasonable to infer that Public Co. and the shareholders' distaste for risk plays the stronger role in the design of supercharged IPOs.

Of course, supercharged IPOs generate their own risks. As discussed above, commentators are widely critical of the supercharged IPOs deal and many have noted the bad optics alone may make them a bad idea. If the extensive condemnation and disapproval emerging in the media ultimately has an effect on the value of the company, the benefits of the TRAs may not be worth the cost. In short, the number of companies that theoretically could supercharge their IPO—but who choose not to—may be linked to the risk associated with the bad press. This is a qualitative viewpoint that our data cannot confirm because companies going public through a traditional IPO do not announce the reasons for their chosen deal structures.

4. Information Costs

A fourth theory of financial innovation relates to information costs. Here we focus on the costs of searching for, understanding, and negotiating the terms of an investment. (Our second theory, by contrast, focused on the asymmetry of information between the buyer and seller.) Quite a few scholars have argued that the presence of these costs provide a critical motivation for financial innovation,¹⁰¹ and empirical studies have found

¹⁰¹ Tufano, *supra* note 77 at 4–16 (information costs play key role in innovation); R.C. Merton, *On the Application of the Continuous Time Theory of Finance to Financial Intermediation and Insurance*, 14 GENEVA PAPERS ON RISK AND INSURANCE 225 (1989) (same).

that transaction costs are the causal mechanism for many innovations.¹⁰² In the IPO context, experts argue that TRAs are an excellent means to simplify the sale of a company, thereby limiting information costs.¹⁰³ In traditional transactions, the share price must account for the value of tax assets and valuing these assets requires parties to make numerous assumptions associated with a potential IRS audit, the company's future profitability, legal reform down the road, and the use of other types of tax planning strategies in order to identify the true value of the tax asset to Public Co. Negotiation and bargaining leads to delays, and may kill the deal altogether.¹⁰⁴ TRAs eliminate these hurdles, making the transaction considerably more straightforward and simple to execute.¹⁰⁵

While many law and accounting experts believe that TRAs simplify IPOs, critics have argued that TRAs *create* complexity and confusion for investors who are unable to decipher the purpose or meaning of the agreement.¹⁰⁶ A complicated deal may, in turn, lead IPO investors to discount the price they are willing to pay given the extra time and energy spent analyzing documents or, alternatively, if they simply do not understand fully the agreement, foregoing the purchase altogether. These transaction costs raise the question of why owner-founders would risk market punishment in the form of a lower price paid for the IPO shares. At the same time, IPOs tend to be complex deals by nature. If the investors have already taken a leap of faith despite this complexity, or have already discounted the price as a form of market punishment for the complexity, then adding an additional nuance in the form of a TRA may be rational on the theory that the owner-founders are not likely to suffer further penalty by way of an additional purchase price reduction. Embedding a TRA into the deal, in short, may be rational for no purpose other than to extract easy money in the post-IPO period—support for the critics' view that the plan is "underhanded." Stated more directly, the owner-founders may be motivated by the desire to capture the benefits of newly-created tax assets or pre-existing tax assets left undervalued by investors, or simply by the desire to extort money from unsuspecting investors by inserting a TRA into the documents on the theory that investors will not take notice.

¹⁰² J.J. McConnell and E.S. Schwartz, *The Origins of LYONS: A Case Study in Financial Innovation*, 4 J. APP. CORP. FIN. 40 (1992) (case study on transaction costs). A good example of innovation in this context is related to credit scoring, or the process of assigning a single quantitative measure to a potential borrower representing an estimate of the borrower's future loan performance. This innovation allows creditors to lend and monitor loans without meeting the borrower and cheaper, better information that will make it more likely that the lender will price loans based on expected risk rather than refusing to loan monies. Jala Akhavein, W. Scott Frame, and Lawrence J. White, *The Diffusion of Financial Innovations: An Examination of the Adoption of Small Business Credit Scoring by Large Banking Organizations*, 78 J. BUS. 577, 579–80 (2005) (credit scoring innovation decreased transaction costs; Tufano, *supra* note 77 at 16 (ATMs, smart cards, and other examples demonstrate importance of innovation to eliminate transaction costs)).

¹⁰³ Glenn E. Dance, *The Monetization of Tax Benefits Through Tax Receivable Agreements*, 10 J. PASSTHROUGH ENT. 5, 7 (2007).

¹⁰⁴ Robert Willens, *HGSI's "Financial Assets" are Valuable*, WILLENS BULL. 1 (July 2012) (deal killed due to parties' inability to agree on value of tax assets).

¹⁰⁵ *Id.*; Debevoise & Plimpton, *supra* note 17 at 9.

¹⁰⁶ PEU Report, *supra* note 14 (finding deals with TRAs too complex to understand fully).

SUPERCHARGED IPOs

The information cost theory of financial innovation leads to three hypotheses, two of which can be investigated with our data. First, the idea that supercharged IPOs will be utilized in lieu of up-front payments due to the cost advantages of a TRA, cannot be tested because every supercharged IPO includes a TRA. Accordingly we cannot compare different forms of payment schemes. The second hypothesis, that the parties will agree to supercharge their IPO because the benefits (such as tax arbitrage opportunities, reduction in information asymmetries, and so forth) of such a deal will exceed its costs can be tested by examining the hypotheses outlined above that address each of these issues. And the third hypothesis, that owner founders will slip a TRA into the IPO documents for underhanded purposes can also be tested by investigating whether complex deals are more likely to include a TRA. We outline the empirical strategy for testing these hypotheses, and the others outlined above, in detail below.¹⁰⁷

5. *The Macroeconomy*

Up to this point, our analyses have focused on factors that operate in unique ways on the specific parties involved in the transaction, but macro-level variables beyond the parties' control may also affect the choice to supercharge an IPO. Scholars have argued that market factors are important stimuli to financial innovation. Some have argued that a growing economy generates high profit levels along with high levels of *expected* profits, which then impel creative financing, new instruments, and an overall bubble of financial innovation to achieve those profits.¹⁰⁸ Others scholars take the position that whether or not the business cycle is expanding or contracting, market participants will innovate in order to improve performance and maintain a competitive edge—an edge that is maintained only with ceaseless innovation and improvement of products and processes.¹⁰⁹

¹⁰⁷ See *infra* notes 132-55 and accompanying text.

¹⁰⁸ Recently, theorists have argued that an economic expansion and the desire for continually increasing profits led individuals and firms to innovate in the banking industry causing the well-known savings and loans crisis in the 1970s and subprime mortgage in 2007–2008. See Janet L. Yellen, *A Minsky-Meltdown: Lessons For Central Bankers*, President's Speech to the 18th Annual Human P. Minsky conference on the state of the U.S. and World Economics, <http://www.frbsf.org/news/speeches/2009/0416.html> (last visited Feb. 17, 2013). Some theorists suggest a feedback loop may exist: financial innovation responds to volatile markets, which then become less volatile because of the innovation. See Karen E. Dynan, Douglas Elmendorf and Daniel E. Sichel, *Can Financial Innovation Help to Explain the Reduced Volatility of Economic Activity?*, 53 J. MONETARY ECON. 123 (2006).

¹⁰⁹ Mahbrouk Abir and Mamoghli Chokri, *Dynamic Financial Innovation and Performance of Banking Firms: Context of an Emerging Banking Industry*, 51 INT'L RES. J. FIN. AND ECON. 17, 18 (2010) (innovation necessary for competitive advantage); MICHAEL E. PORTER, *COMPETITIVE STRATEGY: TECHNIQUES FOR ANALYZING INDUSTRIES AND COMPETITORS* 10 (2004) (same); P.W. Roberts and R. Amit, *The Dynamics of Innovative Activity and Competitive Advantage: The Case of Australian Retail Banking, 1981–1995*, 14 ORG. SCI. 107 (2003) (innovation key for competitive advantage); David A. Zalewski and Charles J. Whalen, *Incorporating Subsidiary into Macroeconomic Policy*, in FINANCIAL INSTABILITY AND ECONOMIC SECURITY AFTER THE GREAT RECESSION, CHARLES J. WHALER, ED. (2011) (discussing rediscovery of early theorists and the view that innovation is necessary for competitive advantage); HYMAN MINSKY, *STABILIZING AN UNSTABLE ECONOMY* (1986) (innovation necessary for competitive advantage); Hyman Minsky, *Evolution of Financial Institutions*, 20 J. ECON. ISSUES 345 (1986) (same); Irving Fisher, *The Debt Deflation Theory of Great Depressions*, 1

SUPERCHARGED IPOs

In short, the macroeconomic theory of financial innovation posits two hypotheses: 1) a growing economy generates new and creative deals, such as supercharged IPOs, or, in the alternative, 2) that the economy has no effect because financial experts will innovate in all economic contexts to maintain their competitive edge. Our empirical investigation suggests that the business cycle does affect the IPO markets, but in unexpected ways.¹¹⁰

B. Use and Diffusion: Four Competing Models

We now turn from the drivers of financial engineering, to the parties who use and diffuse the innovation. Scholars have noted that successful innovations quickly spread, and have offered theories for how and why this diffusion process takes place. Indeed, notwithstanding the drawbacks associated with their complexity and the criticisms they generate, one prominent commentator has noted that supercharged IPOs along with the attendant TRAs are becoming “almost standard procedure.”¹¹¹ In this section, we discuss the mechanisms by which the supercharged IPOs may have spread across geographic areas and industries since the first deal emerged in 1993.

1. *Elite lawyers and accountants*

TRAs are legal and accounting inventions, coming into widespread use in 2007 after the tax and accounting reforms were firmly in place. The quality of the lawyers and accountants working on the deal may be a strong predictor for the presence of innovative deal structuring on the theory that this group closely tracks any and all reforms that could affect deals and deal structures. More specifically, students of innovation have found that that creative, sophisticated and experienced individuals and firms are apt to understand and promote the use of the most advanced deal structures. Over time, of course, useful innovations will diffuse more widely and become standard among both the elite and non-elite professionals, as with poison pills and other anti-takeover devices, but the early adopters are likely to be elite lawyers and accountants who spend time and energy engineering the best deal possible for their clients.¹¹² We test this theory of diffusion in

ECONOMETRICA 337 (1933) (same); Wesley C. Mitchell, BUSINESS CYCLES (1913) For useful summaries and extensions of Minsky's work, see Michael Carter, *Financial Innovation and Financial Fragility*, 23 J. ECON. ISSUES 779 (1989); Marc Jarsulic, *Financial Instability and Income Distribution*, 22 J. ECON. ISSUES 545 (1988). See also Michael D. Bordo, *An Historical Perspective on the Crisis of 2007–2008*, NBER WORKING PAPER 1459 (Dec. 2008) (arguing that scholars as early as Wesley Mitchell in 1913 argued that business cycle upswings lead to financial innovation), <http://www.nber.org/papers/w14569.pdf> (last visited Feb. 17, 2013); Richard Bookstaber, *Fighting Demons: Addressing the Perils of Financial Innovation*, 29 MULTINATIONAL MONITOR 55, 57 (2008) (hedge fund managers faced with the choice of increasing leverage to meet target returns or see business diminish).

¹¹⁰ See *infra* notes 132–55 and accompanying text.

¹¹¹ Willens, *supra* note 59, at 1.

¹¹² Many have argued that law and accounting firms are uniquely positioned to engage in financial innovation given the background expertise in accounting, taxation, and regulations and numerous firms now market themselves as experts not only in accounting services but in the design of “structured investment vehicles” that enable firms to creatively avoid the limits of accounting standards

the empirical component of our study by investigating the types of lawyers and accountants involved supercharged IPOs.¹¹³

2. Professional networks and geographic clusters

Innovations often spread because individuals and firms locating in geographic clusters share information about exciting new innovations with clients, friends, and colleagues. The legal and accounting professionals involved with supercharged IPOs are especially apt to operate as agents helping to spread ideas across geographic areas, industries, and firm types.¹¹⁴ Indeed, various scholars have found that network ties operate as an especially important diffusion mechanism when the innovators are located in close geographic proximity.¹¹⁵ We explore the network theory of diffusion by examining the use of supercharged IPOs in the major professional networks around the country, including New York, Chicago, Boston and Los Angeles. We uncover data that imply one specific professional network is largely responsible for the bulk of supercharged IPOs, thereby providing support of the network theory of diffusion.¹¹⁶

3. Industry culture

The architects of the supercharged IPO are lawyers and accountants, but it is possible that certain types of clients will be more likely than others to utilize innovative financial discoveries in an effort to retain a competitive edge in the industry.¹¹⁷ Private

and tax rules. Patricia Arnold, *Global Financial Crisis: The Challenge to Accounting Research*, 34 ACCT. ORG. & SOC'Y 803 (2009); Norio Sawaabe, *Co-Evolution of Accounting Rules and Creative Accounting Instruments—The Case of a Rules-Based Approach to Accounting Standard Setting*, 1 EVOL. INST. ECON. REV. 177 (2005); Eric R. Hake, *Financial Illusion: Accounting for Profits in an Enron World*, 39 J. ECON. ISS. 595, 603 (2005); Atul K. Shah, *Creative Compliance in Financial Reporting*, 21 ACCT. ORG. & SOC'Y 23–39 (1996); Atul K. Shah, *Regulatory Arbitrage through Financial Innovation*, 10 ACCT. AUDIT & SOC'Y 85–104 (1996); Atul K. Shah, *Exploring the influences and constraints on creative accounting in the United Kingdom*, 7 EUR. ACCT. REV. 83–104 (1998); see also D. MACBARNET AND C. WHELEN, *CREATIVE ACCOUNTING AND THE CROSS-EYED JAVELIN THROWER* (1999).

¹¹³ See *infra* notes 132–55 and accompanying text.

¹¹⁴ See Jennifer Brown, *The Spread of Aggressive Corporate Tax Reporting: A Detailed Examination of the Corporate-Owned Life Insurance Shelter*, 86 ACCT. REV. 23, 33 (2011) (discussing diffusion of tax shelter activity).

¹¹⁵ *Id.*

¹¹⁶ See *infra* notes 132–55 and accompanying text.

¹¹⁷ Institutional and cultural constraints in general may also help explain why some companies adopt innovative tax structures and some do not. While measuring the precise impact of these factors is challenging, seasoned practitioners often point to variation in corporate culture or managerial sophistication to explain how different clients react to new tax ideas. Some academic research backs this common observation. When the Sarbanes-Oxley legislation changed internal auditing controls—and reined in Enron-style corporate culture—the use of corporate tax shelters declined significantly. Victor Fleischer, *Options Backdating, Tax Shelters, and Corporate Culture*, 26 VA. TAX REV. 1031 (2006). Managerial sophistication matters too: private equity-backed companies tend to be more aggressive in their tax planning. See Sharon P. Katz, Brad Badertscher, *The Impact of Private Equity Ownership on Portfolio Firms' Corporate Tax Planning*, HBS WORKING KNOWLEDGE (August 28, 2009), <http://hbswk.hbs.edu/item/6259.html> (last visited August 29, 2011).

SUPERCHARGED IPOs

equity and asset management firms, for example, are widely viewed to be aggressive planners in both the tax and accounting spheres—and, indeed, qualitative data suggest that the innovation spiral that occurred on the IPO landscape was engineered with the help of private equity firms seeking to enhance the benefits of the early-supercharged IPO. The principals of these firms often have substantial experience structuring deals, and for this reason have a deep understanding of the stakes involved in the deal. Because of their chosen line of work, private equity and hedge fund managers exhibit a high level of tax sophistication and thus the theory of industry culture as a diffusion mechanism leads to the hypothesis that irrespective of geography, the firms will be early adopters of good innovations in the IPO context.¹¹⁸ We find that these groups do affect the likelihood of supercharging an IPO—but not the positive way anticipated by the theory.¹¹⁹

4. Media attention

Supercharged IPOs have received substantial attention in the popular journals, including the New York Times, the Wall Street Journal, Forbes, and many others.¹²⁰ At the same time, extensive commentary on this new-style deal has appeared in specialized legal, tax, and accounting outlets.¹²¹ This widespread attention and interest, both positive and negative, works to educate firms, lawyers, and financial intermediaries on the latest and most innovative deal structures and raises awareness of an alternative to the traditional approach to going public.¹²² Irrespective of whether the innovation is advantageous to all the parties or solely to the owner-founders of the company, the media theory of diffusion leads to the hypothesis that as media attention increases—so too the use of the supercharged IPO along with the complex TRAs.

IV. THE EMPIRICAL INVESTIGATION

Supercharged IPOs have emerged amidst controversy, but they have also spread fast across the financial landscape. In this section, we turn from the theoretical literature to empirical data in an effort to understand and explain why some parties choose to supercharge their IPO while others pursue conventional deal structures. We begin, in Section IVA, with a description of our data and an explanation of our models. In Section IVB, we present our empirical results. Section V investigates the implications of our findings for the parties involved in IPOs and for legal reformers.

¹¹⁸ This prediction is analogous to predicting that when a cutting-edge oncologist is a patient herself, she will tend to choose a more aggressive form of cancer treatment than the average patient would choose. *Checking Up on the Doctor: What Patients Can Learn from the Ways Physicians Take Care of Themselves*, WALL ST. J. (May 25, 2010), <http://online.wsj.com/article/SB10001424052748704113504575264364125574500.html> (last visited Feb. 17, 2013).

¹¹⁹ See *infra* notes 132-55 and accompanying text.

¹²⁰ See Johnston, *supra* note 10 (New York Times); Stammers, *supra* note 42 (Forbes), Sloan, *supra* note 18 (Washington Post); Reuters, *supra* note 8 (Reuters).

¹²¹ Dance, *supra* note 103 (publication devoted to passthrough entities); Debevoise & Plimpton, *supra* note 17 (law firm publication); Elliot, *supra* note at 8 (Tax Notes).

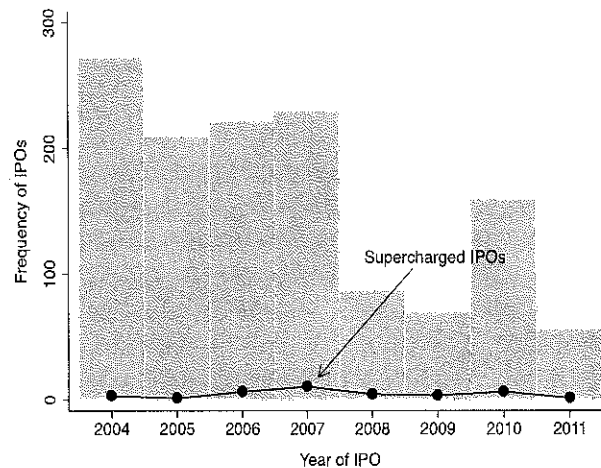
¹²² See Nancy Staudt, *Taxpayers in Court: A Systematic Study of a Misunderstood Doctrine*, 52 EMORY L.J. 265 (2003) (public attention to a legal issues prompts lawyers and clients to follow suit).

SUPERCHARGED IPOs

A. The Data and the Models

This study investigates IPOs that took place between January 1, 2004 and May 1, 2011. We selected this time period because supercharged IPOs were rare prior to 2007, but began to flourish after that time. By including time periods both before and after that year, we are able to identify the factors that help to explain the rise and diffusion of the innovative deals. To identify the population of interest, we obtained the registration statements under the Securities and Exchange Act of 1933, also known as the SEC form S-1, for each new securities offering.¹²³ This process generated 1326 IPOs between the years 2004-2011. Only a small portion of the IPOs—just 2%—were supercharged with a TRA. Figure 1 below depicts the distribution of the IPOs, the grey bars indicate conventional IPOs and the black line at the bottom of the graphs depicts the supercharged IPO adoption curve. Every year between 2004 and 2011, owner-founders supercharged between one and six IPOs, with the exception of 2007 when the parties supercharged ten of their IPOs.

Figure 1: IPOs: traditional and supercharged



¹²³ We identified all S-1s from the Knowledge Mosaic database, <http://www.knowledgemosaic.com/net/home/kmhome.aspx> (last visited Feb. 17, 2013). Because we are interested in initial public offerings of equity securities where the investors implicitly price the assets and liabilities of the issuer (including tax assets and liabilities), we excluded all debt offerings, secondary offerings, SPACs, offerings that would trade on OTCBB, Pink Sheets, penny stock offerings (\$1 or under), 401k plan offerings, and offerings of non-operating companies (mutual funds, ETFs, commodity pools). We are not interested in secondary offerings, private or PORTAL offerings, and do not care whether the IPO was successful or not.

We searched each form S-1 for the specific terms: *tax receivable agreement*. This approach excluded similar economic arrangements styled “tax matters agreements” or “tax sharing agreements.” This approach also excluded one observation in which the issuer was a payee (AMC).

SUPERCHARGED IPOs

Note: Grey bars indicate the total number of traditional IPOs per year and the black trend line depicts the supercharged IPO adoption curve. Between 2004 and 2011, companies supercharged between 1 and 10 IPOs per year.

For purposes of investigating and comparing traditional and supercharged IPOs, we devised three statistical models. The first model explores the theories outlined above with respect to the rise of the supercharged IPO, including tax and accounting regulations, information asymmetry, transaction costs, and the business cycle. To understand how we put our theory and hypotheses to work, consider the following model:

$$\begin{aligned} \Pr(\text{SuperIPO}_i = 1) \\ = b_0 + b_1 \text{TaxArbitrage}_i + b_2 \text{Goodwill}_i + b_3 \text{ExistingTaxAssets}_i \\ + b_4 \text{NeedlesslyComplex}_i + b_5 \text{Macroeconomy}_i + \sum b_j C_{ij} + e \end{aligned} \quad (1)$$

where SuperIPO_i in equation (1) is the parties' decision to supercharge the IPO with a tax receivable agreement (TRA), and is coded equal to 1 if the deal is supercharged and equal to 0 otherwise.¹²⁴ As discussed above, our first hypothesis relates to the parties' ability to take advantage of tax and accounting rules. Because tax rates imposed on many of the relevant parties were constant and unvarying between 2004-2011,¹²⁵ we used a proxy to test our arbitrage theory. We know that many IPOs involve individuals who sell partnership shares to Public Co. and this sale generates a 15% capital gains rate on subsequent TRA payments, while Public Co. will take deductions at a 35% rate.¹²⁶ Accordingly, we created Arbitrage_i , a variable that is binary and equal to 1 if Founders Co. was a partnership and equal to 0 otherwise. Our second hypothesis relates to the extent of the parties' ability to utilize the advantageous tax and accounting rules vis-à-vis goodwill. This ability will vary depending on the underlying value of the goodwill asset at the time of the IPO, a number that we cannot directly observe. As a proxy, we created the variable, Goodwill_i , which is a continuous measure of the market value of the Public Co. (based on post-IPO trading) less the net book value of Founders Co. immediately prior to the IPO in \$1 billion increments.¹²⁷ If the IPO is structured as a taxable deal, this amount will correlate well with the amount of the potential basis step-up attributable to goodwill, often the most valuable asset in an IPO.

¹²⁴ We included all the IPOs with a TRA, but took a random sample of all other IPOs. See JEFFERY M. WOOLBRIDGE, *INTRODUCTORY ECONOMETRICS: A MODERN APPROACH* 327-28 (2006) (discussing stratified sampling techniques).

¹²⁵ See The Tax Foundation, *U.S. Federal Income Tax Rates History, 1913-2013 (Nominal and Inflation-Adjusted Brackets)*, (2011), <http://taxfoundation.org/article/us-federal-individual-income-tax-rates-history-1913-2013-nominal-and-inflation-adjusted-brackets>, (last visited Feb. 18, 2013) (presenting data on rates over the course of time).

¹²⁶ *Id.*

¹²⁷ We gathered data from the CRSP database (Daily Stock File) where possible, <http://www.crsp.com> (last visited Feb. 17, 2013) and from the website YCharts for firms where CRSP data was missing. See YCharts, <http://ycharts.com> (2013) (last visited Feb. 18, 2013). Some firms in the sample withdrew their IPO offerings because of market conditions or other reasons, and so no measure of market value is available.

SUPERCHARGED IPOs

To test our information asymmetry theory and the idea that investors do not value tax assets due to an information deficit, we created the variable *Existing TaxAssets_i*, a continuous variable that captures the value of Founders Co.'s net tax assets in \$10 million increments at the time of the IPO and listed on the company's balance sheets. A positive correlation between existing tax assets and the decision to supercharge an IPO would lend support to the theory that investors disregard tax assets when purchasing shares and thus owner-founders rightfully seek to extract this value with the help of a TRA. In an effort to dig deeper into our theory of information asymmetry and, specifically, owner-founders' misconduct, we created the variable, *NeedlesslyComplex_i*, which is continuous and measures the number of pages in ten page increments in the IPO public filings. As the page number increases, the temptation to include a TRA will increase on the theory that public investors will neither observe nor understand the additional material imbedded in the deal. We expect a pre-existing complicated deal structure to enable owner-founders to add a TRA without incurring market sanctions associated with a decrease in the price paid for Public Co.'s shares.

Finally, one group of theorists argues that economic growth will inspire financial innovation, but another argues that market factors will have no affect at all. We test these theories with the help of *Macroeconomy_i*, a dichotomous variable that measures whether the economy is growing or shrinking as measured by the NBER.¹²⁸ Finding a positive correlation between upswings in the economy and the supercharged IPOs would support the first group of theorists while a null finding would support the second group.

Our hypotheses forecast a positive correlation between the first three variables of model (1) and the use of supercharged IPOs, thus we expect that b_1 , b_2 , and $b_3 > 0$. If the coefficients on these variables are not positive, then these factors do not play the expected role in the parties' decision to adopt this deal structure. Indeed, if these coefficients are equal to zero or negative, b_1 , b_2 , and $b_3 \leq 0$, the evidence favors the critics' interpretation of these deals: owner-founders are not motivated by a desire to reduce taxes and save investors' money, but perhaps by the desire to extract large sums from Public Co. irrespective of the effect on investors. If bad behavior is present, we expect the coefficient on *NeedlesslyComplex* to be positive, $b_4 > 0$, if the coefficient is negative, $b_4 < 0$, then complex deals discourage the use of the TRAs perhaps out of fear of market punishment or perceived improprieties—a finding that would undermine the claim that owners-founders are acting in an underhanded fashion. We expect the coefficient on *Macroeconomy* to be positive, $b_5 > 0$, if a growing economy generates financial innovation as theorists have argued. If the coefficient on the macroeconomy is negative, $b_5 < 0$, a contracting economy generates innovation, and if it is equal to zero, $b_5 = 0$, macroeconomic factors have no affect on the parties' behavior.

¹²⁸ The NBER business cycle dating committee publishes information with respect the macroeconomy and identifies whether the nation is in a period of growth or contractions. The data is widely available on the internet. See Nat'l Bureau of Econ. Research, Business Cycle Expansions and Contractions, <http://www.nber.org/cycles/recessions.html> (last visited Feb. 17, 2013).

SUPERCHARGED IPOs

Model (1) identifies our strategy for understanding the general incentives for supercharging the IPO. Extant theory, however, also provides an intuition for how and why successful innovations diffuse across industries and geographic zones. Notwithstanding the drawbacks associated with complexity and bad optics, Robert Willens has noted that supercharged IPOs along with the attendant TRAs have become “almost standard procedure in these types of incorporations.”¹²⁹ To investigate this diffusion process, we rely on two models:

$$\begin{aligned} \Pr(\text{SuperIPO}_i = 1) &= b_0 + b_1 \text{EliteLawyers}_i + b_2 \text{EliteAccountants}_i + b_3 \text{NetworkBoston}_i \\ &+ b_4 \text{NetworkNYC}_i + b_5 \text{NetworkChicago}_i + b_6 \text{NetworkBayArea}_i \\ &+ b_7 \text{NetworkLA}_i + b_8 \text{PrivateEquity}_i + b_9 \text{Media}_i + \Sigma b_j C_{ij} + e \end{aligned} \quad (2)$$

where *SuperIPO_i* in equation (2) is the parties’ decision to supercharge the IPO with a tax receivable agreement (TRA), and is coded equal to 1 if the deal is supercharged and equal to 0 otherwise. Our first theory of diffusion relates to the use of elite lawyers and accountants, individuals who are likely to create, track, and use the most up-to-date- and innovative deal structures. To test this theory, we rely on *EliteLawyer_i* and *EliteAccountant_i*, dichotomous variables coded equal to 1 if the lawyer or accountant on the deal is from an elite firm and equal to 0 otherwise.¹³⁰ Our second theory relates to legal networks; we expect corporations that hire lawyers and consultants from shared professional networks are more likely to discover innovative ideas and put those ideas to work. We test this theory with the help of a group of indicator variables indicating whether the lawyers on the deal were located in Boston, New York City, Chicago, the Bay Area, or Los Angeles—the five most popular metropolitan areas for firms doing IPO work. The variables, *NetworkBoston_i*, *NetworkNYC_i*, *NetworkChicago_i*, *NetworkBayArea_i*, and *NetworkLA_i* are all coded equal to 1 if the firm is from that city and equal to 0 otherwise.

Our third theory of diffusion posits that industry culture fosters the dissemination of innovative financial strategies. Private equity and hedge fund firms are widely believed to be particularly innovative and likely to be early adopters of creative financing plans. We test this theory with *PrivateEquity_i*, a dichotomous variable that is equal to 1 if the firm is a private equity firm (not including venture capital), or if the issuer was backed by a private equity firm, and equal to 0 otherwise.

¹²⁹ Robert Willens, *Up-C Incorporations Feature “Tax Receivable Agreements,”* 5 WILLENS REP. 1 (July 15, 2011).

¹³⁰ We used the firm Chambers and Partners’ methodology to identify the law firms in the first tier: Cleary Gottlieb Steen & Hamilton, Davis Polk & Wardwell, Skadden, Arps, Slate, Meagher & Flom, Sullivan & Cromwell, and Wachtell, Lipton, Rosen & Katz, <http://www.chambersandpartners.com/Rankings-Explained> (last visited Feb. 17, 2013). The top law firms in the second tier, using this same methodology, include: Cravath, Swaine & Moore, Debevoise & Plimpton, Kirkland & Ellis, Latham & Watkins, Simpson Thacher & Bartlett, and Weil, Gotshal & Manges., <http://www.chambersandpartners.com/Rankings-Explained>. (last visited Feb. 17, 2013).

SUPERCHARGED IPOs

Finally, we investigate our fourth theory, which posits that media attention will promote the use and diffusion of supercharged IPOs. We test this hypothesis with the variable *Media_i*, a continuous variable that measures the extent of media coverage in national journals (both popular and those geared to tax, accounting, and banking audiences) with respect to supercharged IPOs. In summary, we expect a positive correlation between supercharged IPOs and all the variables in model (2): $b_1 - b_9 > 0$.

Model (3) also investigates the diffusion process, but seeks to identify the “first movers.”

$$\begin{aligned} \text{Date_SuperIPO}_i = & b_0 + b_1 \text{EliteLawyers}_i + b_2 \text{EliteAccountants}_i + b_3 \text{NetworkBoston}_i \\ & + b_4 \text{NetworkNYC}_i + b_5 \text{NetworkChicago}_i + b_6 \text{NetworkBayArea}_i \\ & + b_7 \text{NetworkLA}_i + b_8 \text{PrivateEquity}_i + \sum b_j C_{ij} + e \end{aligned} \quad (3)$$

Our dependent variable in model (3), *Date_SuperIPO*, is the date on which a company filed an S-1 statement with the SEC and included a plan to supercharge the IPO. The eight independent variables are identical to those outlined in model (2),¹³¹ and we expect a positive correlation between the date of the supercharged IPO and all the variables in model. In short, we hypothesize that early movers will be firms that use elite lawyers and accountants, are in key professional networks, and have ambitious firm cultures and organizations: $b_1 - b_8 > 0$.

In addition to the explanatory variables just described in models (1), (2), and (3), we have a control set in each model, which includes the location of Founders Co.’s incorporation, Founders Co.’s market capitalization in \$1 billion increments, and a time trend indicating the filing date of the first S-1 (when relevant). These variables assure that our models account for unexpected or unobservable factors associated with the choice to incorporate domestically or in a tax haven, the value of the company at the time of the IPO, and the time period of the filing. Finally we weighted our data to account for the fact that we used a unique sampling frame for purposes of collecting data. We included every supercharged IPO that took place on the market into our dataset, but took a random sample of the traditional IPOs. By weighting the data to account for the different probabilities of selection, we improve our chances of producing unbiased estimates.

B. Competing Theories of Supercharged IPOs: The Empirical Results

We now turn to our empirical findings. Our dependent variable in models (1) and (2) is the presence of a supercharged IPO. As explained above, this is a binary variable and thus we use probit models for purposes of estimation.¹³² Probit coefficients are

¹³¹ We excluded media coverage in our third model, on the grounds that this coverage would not be expected to explain the first mover status. The media coverage began 3 years after the early movers began supercharging their IPOs.

¹³² Probit models are necessary because the dependent variable is binary. A large literature discusses the advantages of using a probit (or a logit) model over a linear probability model with a binary dependent variable. See, e.g., PETER KENNEDY, A GUIDE TO ECONOMETRICS 259–61 (2003) (using a linear probability model and producing estimated probabilities outside the 0–1 range); J. SCOTT

difficult to interpret,¹³³ so we present our results with respect to models (1) and (2) in an alternative and easy to comprehend form: the tables depict the likelihood that the parties will supercharge their IPO given a unit increase in the independent variable.¹³⁴ Recall that we explained our coding protocols for each variable above—this is important information if our results are to be interpreted correctly.¹³⁵ For example, a positive sign on a coefficient presented in the tables below would indicate that as the independent variable increases (moves from 0 to 1 if it is binary),¹³⁶ the parties are more likely to supercharge the IPO; a negative sign indicates that the parties are less likely to supercharge the deal as the independent variable increases. In model (3) we use a continuous dependent variable, the date a company files an S-1 indicating a supercharged IPO is planned, and consequently we use a linear regression model.¹³⁷ These coefficients are directly interpretable: a positive coefficient indicates that as the independent variable increases, the probability of an early S-1 filing increases, a negative coefficient indicates that as the independent variable increases, the probability of an early S-1 filing decreases.

1. *The rise of the supercharged IPO*

To begin our investigation, we focus on model (1), which presents the competing models for the rise of the supercharged IPO outlined above. Recall model (1) seeks to identify the factors that theorists have identified for innovation generally—tax and accounting rules, information asymmetry, transaction costs, and the macroeconomy. We investigate these factors in an effort to identify how they affect IPOs and the choice to supercharge the deal. Table 1 immediately below presents our results; columns A and B indicate to different specifications of model (1).

LONG, REGRESSION MODELS FOR CATEGORICAL AND LIMITED DEPENDENT VARIABLES 34–84 (1997) (using a linear probability model with a binary dependent variable necessarily violates many of the underlying assumptions of the former, including those associated with heteroskedasticity, normality, and functional form); see generally DAVID COLLETT, MODELING BINARY DATA (2003).

¹³³ See WOOLBRIDGE, *supra* note 124, at 588 (2006) (“[F]rom a practical perspective the most difficult aspect of logit or probit models is presenting and interpreting the results.”); see also JACK JOHNSTON & JOHN DINARDO, ECONOMETRIC METHODS 422 (1997) (noting that probit coefficients are difficult to interpret and arguing that “it is not generally useful merely to report the coefficients from a probit (as it is for a linear probability model) unless only the sign and significance are of interest”); LONG *supra* note 132, at 61–83 (discussing four interpretive approaches).

¹³⁴ We generated these probability estimates by transforming the probit coefficients with the “dprobit” command in STATA. See 2 STATA CORP., STATA BASE REFERENCE MANUAL: RELEASE 9, K–Q, at 475–77 (2005) (discussing dprobit as a useful means for transforming probit coefficients into easily interpreted probabilities). The marginal effects are calculated for each variable, holding all other variables at their mean. The original probit models have an intercept, but we use “dprobit” and thus do not report marginal effects for the intercept on the theory that this would make no sense given all the variables are held at the mean with the “dprobit” command.

¹³⁵ See *supra* notes 124–31 and accompanying text.

¹³⁶ For example, we coded the variable *TaxArbitrage* equal to 1 if the parties are subject to differential tax rates and 0 otherwise. If the coefficient on the *TaxArbitrage* variable is positive (negative) then the possibility of tax arbitrage makes it more (less) likely that the deal will be supercharged with a TRA. See *supra* notes 125–27.

¹³⁷ See *supra* WOOLBRIDGE, *supra* note 132 at 400.

SUPERCHARGED IPOs

Table 1: Competing theories of innovation

The Rise of the Supercharged IPO			
Competing Theories	Variables	Model 1 (A)	Model 1 (B)
Regulatory Arbitrage	Tax Arbitrage	.10 (.03)***	.10 (.03)***
	Goodwill	-.0009 (.007)*	.007 (.002)
	Tax Arbitrage x Goodwill		-.002 (.002)
Information Asymmetry: Investor Info Deficit	Pre-existing Tax Assets	.00006 (.00005)	.00005 (.00006)
Information Asymmetry: Founders' Opportunism	Needlessly Complex	.0001 (.0002)	.0002 (.0002)
Macroeconomy	Business Cycle	-.015 (.01)**	-.016 (.011)**
Control Set	Market Capitalization	.002 (.001)**	.0009 (.002)
	Organized in Delaware	.004 (.003)**	.004 (.003)**
	Organized in Tax Haven	.006 (.01)	.006 (.01)
	Time Trend	.001 (.0007)	.001 (.0007)
Observations		315	315
Pseudo R2		.40	.40

Note: The results depict the likelihood of a supercharged IPO given unit increase in the independent variable. We used dprobit to generate the findings presented in table 1 in STATA. *** indicates the findings are statistically significant at the .01 level, ** indicates statistical significance at the .05 level, and * indicates significance at the .10 level.¹³⁸

Our first theory posits that tax and accounting regulations will affect the choice to innovate in the IPO context. To test this theory, we focus first on tax arbitrage opportunities, this emerges when the owner-founders are taxed at a 15% rate and Public Co. is taxed at a 35 % rate.¹³⁹ As presented in table 2, column A, we find that when the parties have tax arbitrage opportunities, they are 10% more likely to adopt a supercharged IPO. This finding is highly statistically significant, suggesting that when partnerships are present and tax arbitrage opportunities exist, the parties have a strong motivation to supercharge an IPO.¹⁴⁰ This empirical finding is consistent with our theoretical discussion

¹³⁸ To replicate our findings in STATA, contact us for the dataset and use the following code for Model (1) column A: `probit TRA partnership Goodwill_Bill net_taxass_tenmill pages_10 cycle MarketCap_bill StateIncorp_Del StateIncorp_Haven y [pweight=weight]`. For model (1), column B, use the following STATA code: `xi: dprobit TRA i.partnership*Goodwill_Bill net_taxass_tenmill pages_10 cycle MarketCap_bill StateIncorp_Del StateIncorp_Haven y [pweight=weight]`

¹³⁹ See discussion tax rates and coding protocols above, *supra* notes 124-27 and accompanying text.

¹⁴⁰ For a useful discussion of statistical significance and its interpretation for empirical results, see WOOLRIDGE, *supra* note 124, at 133-38.

SUPERCHARGED IPOs

above, which suggested the parties would agree to a supercharged IPO in the context of differential rates but not when the parties suffered the same rate in light of the expected overall net loss in the latter deals.¹⁴¹ We discuss the details of why this is true the appendix.

We also examined the presence of goodwill, which allows the parties to take advantage of the variance in the tax and accounting rules as discussed above.¹⁴² Our findings, surprisingly, show a negative correlation: as Founders Co.'s goodwill increases, the likelihood of supercharging the IPO decreases. More specifically, for every \$1 billion increase in goodwill, the parties are .09% less likely to adopt the innovative IPO structure at statistically significant levels. The size of this coefficient, however, is miniscule, implying that goodwill is having very little and close to zero effect on deal structures.¹⁴³

To investigate the twin findings with respect to tax and accounting in more detail, we created an interaction term—a term that identifies how two variables interact together in affecting the parties' choices. Models with interaction terms are more complex to interpret.¹⁴⁴ The variable tax arbitrage in table 1, column B now indicates how tax rates affect the parties when Founders Co. has no goodwill, and the variable goodwill indicates the role of goodwill in the absence of tax arbitrage opportunities. The interaction term, "tax arbitrage x goodwill," reflects the likelihood of supercharging an IPO when both factors are present. The finding with respect to tax arbitrage in table 1, column B indicates that the parties continue to be 10% more likely to supercharge their IPO even when they have no goodwill. The consistency of the results with respect to tax arbitrage across models strongly suggests they are robust and tax motives are playing a major role in the choice to innovate. With respect to goodwill alone, we find the coefficient changes from negative to positive, but is not statistically significant, suggesting that goodwill alone is not playing a strong role in the parties IPO planning—a result that is also robust across different model specifications.¹⁴⁵ Now consider how tax arbitrage and goodwill interact when simultaneously present—table 1, column B indicates the parties are less likely to supercharge the deal in these circumstance, but not at statistically significant levels. In short, our models suggest that tax arbitrage, and not the book-tax differences associated with goodwill, is the primary motivator for supercharging and IPO. Our

¹⁴¹ See *supra* notes 82-90 and accompanying text.

¹⁴² See *supra* notes 82-90 and accompanying text.

¹⁴³ For example, People's United Financial, Inc. went public in late 2006 with over \$6 billion in goodwill—meaning the probability that the company would supercharge the IPO decreased by .6% -- less than 1%. People's United Financial, Inc., Form S-1 (2006), <http://www.nasdaq.com/markets/spos/filing.ashx?filingid=4480665> (last visited Feb. 17, 2013). We also created an indicator variable with goodwill coded equal to 1 for companies with goodwill over \$500 million and equal to 0 otherwise. The sign of the coefficient in this model changed from negative to positive, but still did not achieve statistical significance.

¹⁴⁴ See Edward C. Norton, Hua Wang & Chunrong Ai, *Computing Interaction Effects and Standard Errors in Logit and Probit Models*, 4 STATA J. 154, 154-67 (2004) (arguing that most applied researchers misinterpret the coefficients on interaction terms and proposing useful interpretive procedures); see also William Greene, *Testing Hypotheses About Interaction Terms in Nonlinear Models*, 107 ECON. LETTERS 291, 291 (2010) (arguing that graphical presentations are the most effective means for presenting the results).

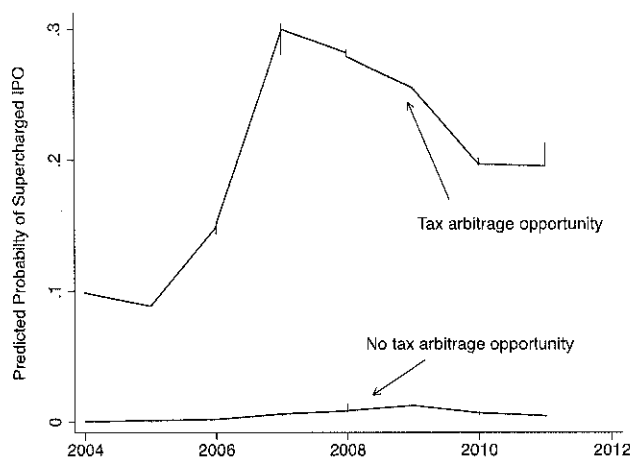
¹⁴⁵ See also note *supra* note 109 exploring the effects of goodwill using an indicator variable.

SUPERCHARGED IPOs

theoretical and quantitative analyses suggest this, and the raw data supports this conclusion: 44% of all the parties capable of engaging in tax arbitrage executed a TRA while only 1% of the parties who had no arbitrage opportunities but had goodwill present adopted a TRA.

Figure 1 below presents our findings with respect to tax arbitrage in visual form. Our model predicts that holding all other variables constant, firms with tax arbitrage opportunities have, on average, a 25% likelihood of supercharging their IPO whereas firms without this capability have a 0.04% likelihood of adopting this innovative deal structure. Figure 1 below depicts the firms' probabilities of supercharging their IPO over the course of years. It is easy to see that those with tax arbitrage opportunities are more likely to supercharge in every year of our data.¹⁴⁶

Figure 2: Predicted probability that firms with and without tax arbitrage opportunities will supercharge their IPO



Note: Figure depicts the probability of a supercharged IPO on the y-axis and the year of the IPO on the x-axis. The graph presents the predicted probability of a supercharged IPO using a locally weighted scatterplot smoothing (Lowess) curve.

We now consider the information asymmetry theory of innovation. Our model, presented in table 1, columns A and B above, indicates that this theory has no role to play in the choice to supercharge an IPO. First, we find that for every \$1 million of tax assets, the parties are .006% more likely to execute TRA. Not only is this size of the coefficient virtually zero, the finding is not statistically significant.¹⁴⁷ This suggests that owner-founders do not use tax assets as a justification for extracting funds in the post-IPO

¹⁴⁶ We generated these graphs with the help of the "graph twoway lowess" syntax in STATA. See STATA, GRAPHICS 217–19 (2005).

¹⁴⁷ For a useful discussion of statistical significance and its interpretation for empirical results, see WOOLRIDGE, *supra* note 124, at 133–38.

SUPERCHARGED IPOs

period on the grounds that investors naively ignore the value of these assets. Moreover, our results indicate that founders are not slipping TRAs into complex IPO documents for opportunistic reasons as suggested by our finding on the variable, needlessly complex. Table 1, columns A and B, indicate that as the S-1 filing increase by 10 pages, the parties have a .01% increase the likelihood of supercharging the IPO, a finding that is both very small substantively and not statistically significant. The null findings that emerge in both specifications of the models with respect to information asymmetry imply this factor does affect IPOs as we theorized above.

The transaction cost theory of IPOs can be assessed indirectly with the series of findings just discussed vis-à-vis tax and accounting regulations and information asymmetry. As we noted above, theorists have argued that TRAs eliminate transaction costs in certain circumstances—they remove the need to negotiate the value of tax assets and reach an agreed upon up front price. Our models suggest that this is only true when tax arbitrage is present; goodwill standing alone is not sufficient reason to supercharge and IPO and will not produce benefits that exceed costs.

Moreover, our models suggest that Founders Co. is not using the supercharged IPO as a means to assure investors pay for tax assets, nor are they slipping TRAs into the IPO in order to surreptitiously extract money from Public Co., indicating that the owner-founders are not acting opportunistically as many have argued.¹⁴⁸ This finding implies that the costs of adopting these strategies exceed their benefits when tax arbitrage is not a possibility. Our models, in short, support the idea that TRAs may eliminate transaction costs when tax arbitrage exists, but are likely to exacerbate costs in other contexts and thus are not worth the effort or the “bad optics.”¹⁴⁹

Finally, the macroeconomic theory of innovation posits two hypotheses: financial experts will innovate with a growing economy or, alternatively, experts will innovate in all periods as a means to maintain a competitive edge. Our findings challenge the extant theoretical literature. We find that as the economy becomes stronger, the parties are less likely to supercharge their IPOs. Both columns A and B in table 1 indicate that in a growing economy, the probability of a supercharged IPO decreases by 16%, and this finding is statistically significant. Although the finding challenges existing theory, it is not altogether surprising in this context. The value of tax assets are linked to the companies’ future profits, which are less certain in periods of down markets. For this reason, a new Public Co. (and its investors) would be less willing to pay for them up front and would prefer to execute a TRA. Figure 2 depicts the likelihood of a supercharged IPO in periods of economic growth and decline. The grey areas represent growth, and the white area represents the “Great Recession” that took place from late 2007 to early 2009.¹⁵⁰ The black trend line in the figure indicates the probability of a supercharged IPO. It is easy to see that the probabilities increase in the recessionary period, and decrease in

¹⁴⁸ See *supra* notes 10-17 and accompanying text.

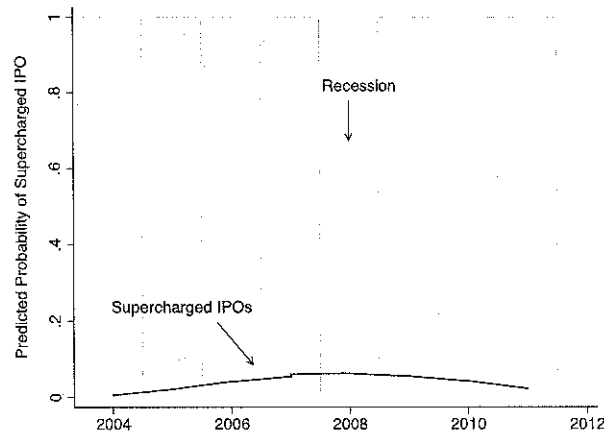
¹⁴⁹ See *supra* notes 81-90 and accompanying text.

¹⁵⁰ The precise start and stop dates of US economic growth and decline is published by Nat’l Bureau of Econ. Research, Business Cycle Expansions and Contractions, <http://www.nber.org/cycles/recessions.html> (last visited Feb. 17, 2013).

SUPERCHARGED IPOs

periods of economic growth though the differential is substantively small. The parties have a 4% likelihood of supercharging their IPO in periods of economy growth, and a 7% likelihood of supercharging in periods of economic decline at statistically significant levels.

Figure 2: The Effects of the macroeconomy on the choice to supercharge an IPO.



Note: The gray and white areas indicate periods of economic growth and stagnation, respectively, as determined by the NBER dating committee. The graph presents the predicted probability of a supercharged IPO using a locally weighted scatterplot smoothing (Lowess) curve. As indicated in the figure, supercharged IPOs are 3% more likely to occur in periods of recession.

Finally, we turn to our control set. We find that companies organized in Delaware are more likely to innovate than those organized elsewhere, including tax havens. Because Delaware is widely viewed as an agreeable place for companies to incorporate for legal reasons—it is not surprising that sophisticated companies choose this state over others.¹⁵¹ Notably, TRAs are not associated with tax havens, implying that owner-founders are willing to push the boundaries of their tax planning but only so far. As we will see below, however, firms organized in tax havens appear to be the early-movers when it comes to adopting the supercharged IPO deal structure.¹⁵² A firm's market capitalization has no effect on the choice to supercharge; and our time trend suggests that TRAs have gotten more popular in recent periods, but not at statistically significant levels.

2. *The early adopters and the proliferation of the supercharged IPO*

We now turn to the factors that explain the use and proliferation of supercharged IPOs. We begin first with model (2), which identifies the parties most likely to adopt the innovative IPO, and then turn to model (3), which explores the “first movers.” Table 2

¹⁵¹ Lucian Bebchuk and Alma Cohen, *Firms' Decisions Where to Incorporate*, 46 J. L. ECON. 283 (2003) (investigating why and where firms incorporate and arguing that Delaware's dominance can be expected to increase in the future).

¹⁵² See *infra* notes 154-55 and accompanying text.

SUPERCHARGED IPOs

presents our findings. The coefficients should all be interpreted as above: a positive coefficient indicates that as the independent variables increase, the likelihood of a supercharged IPO increases (model (2)), or the likelihood of being an early mover increases (model (3)); a negative coefficient indicates that as the independent variables increase these probabilities decrease.¹⁵³

With respect to model (2) and general innovation trends, we present our findings in table 2. Our first theory posits that lawyers will have an impact on deal structures, and we find that elite lawyers increase the likelihood of supercharging an IPO at statistically significant levels, but only by 1.5%. Accountants at the big four firms have an even smaller effect, they increase the likelihood of a supercharged IPO by 0.05% and this finding is not statistically significant. Our second theory posits that irrespective of the elite nature of the legal or accounting advice, professional networks will have the strongest role to play. Our findings support this theory, although again, the effect is small: we find that firms going public in an IPO that hire New York lawyers are 2% more likely to supercharge their deal than firms anywhere else. Our models indicate that the firm networks located in Los Angeles, Chicago, and the Bay Area have little to no effect on deal structure. It is worthwhile to note that the raw data, which must always be taken with a grain of salt given the lack of control, supports this finding: New York City law firms were involved in 74% of the supercharged IPOs. The remaining supercharged deals were sprinkled across the various markets with no market coming in as a close competitor to New York City.

We also theorized that the type of investors sponsoring the IPO would affect the choice to supercharge and IPO. Our model indicates that private equity-backed firms are 2% less likely to supercharge their IPOs, at statistically significant levels. We expected the opposite result given the ambitious and aggressive nature of these types of sponsors, but we were wrong. Finally, we expected that the media frenzy would have a positive effect on the parties' choice to supercharge the deal. While we do uncover a positive coefficient it is very small, and the finding is not statistically significant. Our results indicate that elite law firms and firms located in New York City have the greatest effect on deal structure, and not the culture of the firm going public or media coverage of the innovative nature of the deals.

With respect to the control set, we find that firms with large market capitalizations and those organized in tax havens have little or no effect on the choice to supercharged the IPO. Firms organized in Delaware, however, have an increased likelihood of innovating in the IPO context by 1% at statistically significant levels.

¹⁵³ See *supra* notes 131-35 and accompanying text explaining interpretation of the variables in the models.

SUPERCHARGED IPOs

Table 2: Competing theories of use and diffusion

The Diffusion Process			
Competing Theories	Variables	Model (2) Adoption Any Time	Model (3) Early Adoption
Elite Firms	Elite Law Firm	.014 (.009)**	.91 (.71)
	Big 4 Account. Firm	.005 (.003)	1.14 (.96)
Professional Networks	Network-Boston	No supercharged IPOs	No supercharged IPOs
	Network-NYC	.02 (.1)***	-.31 (.87)
	Network Chicago	-.0006 (.01)	-2.01 (.74)***
	Network-LA	No supercharged IPOs	No supercharged IPOs
	Network-Bay Area	.0001 (.008)	-3.32 (1.85)***
Firm Culture	Private Equity Sponsor	-.02 (.008)***	-.56 (.73)
Media Frenzy	Media	-.006 (.00)	
Control Set	Market Cap	.00004 (.0003)	-.00004 (.0002)
	Organized in DE	.01 (.005)**	2.42 (.99)**
	Organized in Haven	.02 (.03)	4.49 (1.50)***
	Time Trend	.004 (.003)**	
Observations		324	33
Pseudo R2		.24	.48

Note: Results depict the likelihood of a supercharged IPO given unit increase in the independent variable. We used dprobit to generate the findings presented in table 2, column 1 in STATA. *** indicates the findings are statistically significant at the .01 level, ** indicates statistical significance at the .05 level, and * indicates significance at the .10 level.¹⁵⁴

We now turn to model (3) and seek to identify the first movers in the supercharged IPO context. The extant literature argues that first movers tend to be aggressive firm owners who do not shirk from risk and enjoy the prestige and attention of first mover status.¹⁵⁵ This would suggest that private equity-backed firms would be early adopters of the supercharged IPO. Perhaps also those organized in tax havens. As presented in table

¹⁵⁴To replicate our models, contact us for the data and use the following code for Model (2):
dprobit TRA elite_issue_counsel Accounting_Big4 City_IssuerLaw_NYC City_IssuerLaw_Chicago
City_IssuerLaw_BayArea sponsor_VCPE Media_2007 MarketCap StateIncorp_Del
StateIncorp_Haven y [pweight=weight]. For model (3) use the following code: reg neg_month_year
elite_issue_counsel Accounting_Big4 City_IssuerLaw_NYC City_IssuerLaw_Chicago
City_IssuerLaw_BayArea sponsor_VCPE MarketCap StateIncorp_Del StateIncorp_Haven
[pweight=weight] if TRA==1

¹⁵⁵Andrew Metraick and Ayako Yasuda, *Venture Capital and Other Private Equity: A Survey*, 17 EUR. FIN. MNGT. 619 (2011) (venture capitalists invest in innovative firms and push for first mover status); Ravi Ramamurti, *New Players in FDI: Sovereign Wealth Funds, Private Equity, and Emerging-Market Multinationals* in THE FUTURE OF SOVEREIGN DIRECT INVESTMENT AND THE MULTINATIONAL ENTERPRISE (RAVIE RAMAMURTI AND NIRON HASHAI, EDS) (2011) (hedge funds and private equity firms are aggressive first movers on the global stage).

SUPERCHARGED IPOs

2, we find that private equity-backed firms were not the early movers. These firms adopted the supercharged deal structure but only after it other firms tried and tested it. Moreover, elite lawyers and accountants did not take the lead in supercharging IPOs, nor did the professional networks that we identified in Boston, Chicago, Los Angeles, New York, and the Bay Area. Indeed, these firms were all less likely to supercharge a deal early.

The variables that have the strongest ability to predict early mover status are found in our control set. Firms organized in Delaware have an increased likelihood of supercharging their IPO early, but it is the firms located in a tax haven that are the most likely to be the first movers. This latter finding is consistent with the extant literature in the sense that it predicts that aggressive and risk-taking firms will be the most likely to adopt a new – and untested – innovative financial plan. Once tested by the market, other firms will follow.

C. Summary

We specified three models for purposes of understanding the rise, use, and diffusion of supercharged IPOs. With respect to the underlying justification for adopting the supercharged deal structure, we found the primary motivator was the ability to engage in tax arbitrage, and secondarily, a shrinking economy. Our data suggests that owner-founders do not supercharge their deals out of a belief that investors do not understand the value of tax assets or in an effort to squeeze profits out of the new public company for opportunistic reasons. Perhaps these last two justifications, widely discussed in the literature, are simply not worth the cost associated with the more complex deal and the “bad optics.”

Our findings with respect to the use and diffusion of the innovative deal structure indicate that owner-founders going public are likely to be organized in Delaware, and at the same time are likely to hire elite lawyers most likely from the New York City region. We also investigated the identity of the first movers and found that the variable exerting the largest effect is the location where the firm going public is organized. Firms organized in tax havens are the most likely to use aggressive IPO structures before the broader market tests the financial innovation.

V. IMPLICATIONS OF EMPIRICAL FINDINGS FOR PARTIES AND LEGAL REFORMERS

Our study has a number of important implications for transactional lawyers, policy reformers, and scholars interested in financial innovation more generally. We begin by reminding readers that the transactional lawyers involved in supercharging IPOs do so in an effort to reduce the parties’ overall tax costs—a result that causes harm to the federal fisc and has prompted legal reformers to propose new legislation. In short, the success the former group makes the work of the latter group more challenging. After discussing the implications of our findings for lawyers and policy analysts, we turn to the scholarly literature and note that our project builds upon and extends a large body of work focused on financial innovation.

SUPERCHARGED IPOs

A. Implications for Transactional Lawyers

1. *Dividing the costs and benefits of the supercharged IPO*

We have investigated the differences between traditional and supercharged IPOs, the myriad reasons for why supercharged IPOs entered the market, and the explanations for why they diffused across geographic areas and industries. We have not yet, however, addressed a key pending question: who wins and who loses in these innovative deals? Shedding light on this issue will enable owner-founders and public investors to enter deals that most advance their economic interests, and perhaps more importantly, avoid deal structures that undermine their welfare.

The parties jointly profit from the deals if and only if (1) new “tax assets”¹⁵⁶ are created in the deal, (2) the operating company is organized as a partnership pre-IPO,¹⁵⁷ and (3) IPO pricing does not perfectly adjust to the presence or absence of tax assets. New tax assets are critical because the transaction costs associated with a TRA are higher than a deal without a TRA—slicing a pie with a fancy and innovative knife does not make more pie! So there must be some new value that makes a supercharged IPO efficient. Second, there must be some opportunity for tax arbitrage; most commonly, this means that the operating company must be organized as a partnership pre-IPO.¹⁵⁸ Finally, the sharing of tax benefits via the TRA must be necessary to capture the value of the new structure; if IPO pricing were perfect and the new investors agreed to pay for all the underlying tax assets, the founders could simply supercharge the deal and accept a higher purchase price in lieu of a TRA, leaving the full value of the tax assets with the newly public company. We note in the appendix that the benefits of the supercharged IPO, when they exist, are nearly equally divided between the parties (the investors and Public Co. obtain slightly more than the owner-founders).

2. *Innovation is driven by regulatory costs, not transaction costs*

Traditionally, deal lawyers have been perceived as transaction cost engineers: adding value by reducing information costs, reining in agency costs, and aligning incentives between the parties.¹⁵⁹ But our empirical findings, along with the explanation of profit sharing, together suggest that tax lawyers may be driving the innovation in deal structure. More interesting, perhaps, is the implication that you get what you pay for: our data show that firms were more likely to engage in tax arbitrage when they employed elite NY tax counsel.¹⁶⁰ Theoretically, of course, it is also possible that the clients were behind the supercharged IPO, and that more aggressive clients engaged elite tax counsel

¹⁵⁶ See *supra* notes 34-43 and accompanying text.

¹⁵⁷ See *supra* notes 61-63, 81-90, 139-43 and accompanying text.

¹⁵⁸ See *supra* notes 61-63 and accompanying text. If the company is organized as a corporation, then it must have an NOL or some other tax attribute that allows it to avoid entity-level gains on the transfer of assets to the new company. See Willens, *supra* note 61 at 1, and accompanying text.

¹⁵⁹ See SCHULTHEIS, ET AL, *supra* note 34 at 10 (explaining purpose of deal lawyers); SCHNEIDER, ET AL, *supra* note 34 at 20 (same).

¹⁶⁰ See *supra* notes 153-54 and accompanying text.

SUPERCHARGED IPOs

to execute more aggressive transactions. Our empirical findings regarding elite counsel, however, remain significant after controlling for private equity-backed issuers and other types of aggressive financial engineers.¹⁶¹

3. *Why corporations?*

Our empirical results show that tax arbitrage is the key means by which firms are able to achieve large tax savings in the IPO context. Firms that are going public and are organized as partnerships position themselves to take advantage of this opportunity, and indeed are vastly more likely to use a supercharged IPO than firms organized as corporations. The tax arbitrage created when founders sell equity at capital gains rates while generating a tax asset that can be amortized at ordinary rates is, according to our study, the key driver of this innovation.¹⁶² This finding adds to the puzzle of why so many firms organize as corporations rather than partnerships.¹⁶³ Organizing a start-up as a corporation often leaves literally millions of dollars on the table. Savvy tax counsel continue to advise more firms to organize as partnerships, and the availability of exiting by way of a supercharged IPO may entice more founders to choose the partnership form. At the same time, the frictions that steer many founders toward incorporation in the first place are unchanged by the possibility of a supercharged IPO,¹⁶⁴ and it is unclear whether unsophisticated founders will be willing to further complicate the organization of their start-ups.

B. Policy Implications

Our study demonstrates that with the help of a supercharged IPO, companies, their founders, and investors all stand to save millions in taxes. This suggests that while these innovative deals are rational from a planning perspective, they are also enormously costly to the fisc. Put differently, while a small group of private and public investors have found a means to avoid tax costs, they do so to the detriment of the larger taxpaying public. Policymakers who worry about the tax base as well as the progressive rate structure have not overlooked this reality. Indeed, in 2009, in the wake of the highly controversial Blackstone supercharged IPO that involved millions of dollars of post-IPO payment pursuant to a TRA,¹⁶⁵ Congress introduced legislation that targeted the tax arbitrage

¹⁶¹ See *supra* notes 153-54 and accompanying text.

¹⁶² See *supra* notes 61-63, 81-90, 139-43 and accompanying text.

¹⁶³ CARL WARREN, A SURVEY OF ACCOUNTING 3-4 (2009) (roughly 20% of businesses continue to organize as corporations).

¹⁶⁴ For a discussion of frictions in the tax context, see generally Shizer, *supra* note 25.

¹⁶⁵ When Blackstone, a well-known private equity firm, went public in 2007 in a high-profile IPO, Congress focused for the first time on the controversial tax treatment of the profits Blackstone earns for managing its funds, which is known as carried interest. Media attention increased when Stephen Schwarzman, Blackstone's co-founder and CEO, threw himself a lavish birthday party; Schwarzman's largesse invited questions about the favorable tax treatment of not only carried interest, but also about the aggressive structure of Blackstone's IPO, which allows the firm to avoid paying corporate-level income taxes. Blackstone's tax creativity went even further. Blackstone's founders entered into a contract, called a "Tax Receivable Agreement," with the public holding company they created. See Johnston, *supra* note 10; see also Patrick Martin, *The Blackstone IPO: \$4 Billion Payday*

SUPERCHARGED IPOs

driving these types of supercharged deals.¹⁶⁶ The goal of the legislation was to eliminate the rate disparity that currently exists between partnerships and corporations, thereby eliminating the arbitrage opportunities in supercharged IPOs.¹⁶⁷ More specifically, under current law, gain on the sale of property is generally taxed at ordinary income rates if the transferred property is subject to depreciation or amortization in the hands of the purchaser.¹⁶⁸ In this circumstance, there is no arbitrage opportunity. Gain on the sale of a partnership interest, however, is taxed at capital gains rates except to the extent that the value is attributed to so-called "hot assets," like inventory and unrealized receivables—the types of assets that are not often at issue in the supercharged IPOs.¹⁶⁹ The proposed legislation would have extended ordinary income treatment to the sale of partnership interests if the gain was attributable to a depreciable or amortizable asset (such as goodwill, which is often in play in the supercharged IPO) and the parties executed a TRA in the context of a supercharged IPO.¹⁷⁰

The legislation would effectively target the perceived problem associated with supercharged IPOs and the TRAs that accompany them, but it is unclear why legislators should worry about tax arbitrage only in this narrow context. If the legislative approach is restricted to deals with TRAs, it would change the tax treatment associated with the tax benefits of amortization shared through a TRA but would not address deals that accomplished exactly the same outcome with a higher purchase price or an up-front lump sum payment, two alternatives to the TRA. Recall that the TRA is a means by which Public Co. and its investors pay only for what they actually obtain in the form of a future tax savings, the proposed reform would essentially penalize selling partners only if they, rather than the investors, assumed most of the risk that the expected tax benefits may not be realized. The proposed reform, in short, is under-inclusive.

It may be more fruitful for policymakers to reconsider the tax treatment of the sale of a partnership interest more generally and not only in the context of supercharged IPOs. This alternative approach has recently been in the news in the context of the so-called enterprise value tax, which would tax the selling partners of investment services

for Private Equity Bosses, WORLD SOCIALIST WEB SITE, <http://www.wsws.org/en/articles/2007/06/blackstone.html>, (last visited Feb. 18, 2013).

¹⁶⁶ See *supra* note 100 and accompanying text.

¹⁶⁷ The potential effects of the bill were widely discussed among lawyers and deal watchers. See Dechert LLP, *Proposed Legislation Could Affect Blackstone IPO*, DECHERT ON POINT 1-2 (2007), http://www.dechert.com/files/Publication/56a3a41e-f382-44d6-85ae-fc3b9078a4ed/Presentation/PublicationAttachment/5efeb0e5-49ec-44d6-85df-00a4cf0a37d1/Int_Domestic_Tax_1_06_07_Proposed_Legislation.pdf, (last visited Feb. 18, 2013); Victor Fleischer, *The "Blackstone Bill" Could Chill Buyout of Firm I.P.O.'s*, DEALBOOK (2007), <http://dealbook.nytimes.com/2007/06/15/for-buyout-firms-blackstone-bill-is-shot-across-the-bow/>, (last visited Feb. 18, 2013).

¹⁶⁸ I.R.C. §§ 1,1245 (2006).

¹⁶⁹ For a detailed discussion of taxation of partnership shares and "hot assets," see INTERNAL REVENUE SERVICE, PARTNERSHIP AUDIT TECHNIQUE GUIDE, CH. 7 (2008), [http://www.irs.gov/Businesses/Partnerships/Partnership---Audit-Technique-Guide---Chapter-7---Dispositions-of-Partnership-Interest-\(Rev.-3-2008\)](http://www.irs.gov/Businesses/Partnerships/Partnership---Audit-Technique-Guide---Chapter-7---Dispositions-of-Partnership-Interest-(Rev.-3-2008)), (last visited Feb. 18, 2013) (discussing disposition of partnership interests).

¹⁷⁰ See Dechert LLP, *supra* note 167 at 1-2; see also, *supra* note 100 and accompanying text.

partnerships at ordinary income rates.¹⁷¹ Such tax treatment would represent an expansion of the hot asset rules, and is, in the opinion of at least one author, fully justified.¹⁷² If the sale of a partnership interest gave rise to ordinary income, the arbitrage disappears altogether in all contexts, and policymakers need not concern themselves with whether the tax benefits of amortization are shared or not.

C. Implications for the Literature on Financial Innovation

Finally, we turn to the implications of our study for the extant literature on financial innovation. We find that our study builds upon and extends the literature in important ways.

1. *Mixed motive innovation: moving from theory to empirics*

Scholars have long studied financial innovations and have put forth strong theoretical arguments for why and when they come into the marketplace.¹⁷³ Scholars often set forth a range of views on a single innovation, thereby suggesting that multiple motives are present in the context of financial creativity. Some have argued that mortgage derivatives, for example, were designed to better allocate risk,¹⁷⁴ while others have argued that mortgage derivatives were designed to exploit naïve investors.¹⁷⁵ Some argue that hybrid financial instruments provide an efficient allocation of risk to bank investors,¹⁷⁶ while others argue that these innovations are designed to avoid the corporate tax and manipulate bank regulatory requirements.¹⁷⁷ Scholars interested in financial innovation tend to put forth a range of plausible competing theories, but rarely subject them to empirical testing.¹⁷⁸

¹⁷¹ Peter Lattman, *White House Rankles Wall Street With Enterprise Value Tax*, DEALBOOK (2011), <http://dealbook.nytimes.com/2011/09/14/white-house-rankles-wall-street-with-enterprise-value-tax/>, (last visited Feb. 18, 2013); Private Equity Growth Capital Council, *Background on the Enterprise Value Tax* (2011), <http://www.pegcc.org/wordpress/wp-content/uploads/Background-on-the-Enterprise-Value-Tax.pdf>, (last visited Feb. 18, 2013); Matt Glans, *Research and Commentary on the Enterprise Value Tax*, THE HEARTLAND INSTITUTE (2012), <http://heartland.org/policy-documents/research-commentary-enterprise-value-tax>, (last visited Feb. 18 2013).

¹⁷² See generally Victor Fleischer, *Two and Twenty: Taxing Partnership Profits in Private Equity Funds*, 83 NYU L. REV. 1 (2008) (arguing status quo is untenable and Congress should consider adopting a new baseline rule that would treat carried interest distributions as ordinary income).

¹⁷³ See extensive discussion found in Section III, *supra* 74-118 notes and accompanying text.

¹⁷⁴ See citations *supra* notes 99-101.

¹⁷⁵ See GREG FARRELL, *CRASH OF THE TITANS, GREED, HUBRIS, THE FALL OF MERRILL LYNCH AND THE NEAR COLLAPSE OF BANK OF AMERICA* (2011) (exploring causes of the 2008 crash); see generally RICHARD BOOKSTABER, *THE DEMON OF OUR OWN DESIGN: MARKETS, HEDGE FUNDS, AND THE PERILS OF FINANCIAL INNOVATION* (2007) (financial innovations are often opportunistic mechanisms to take advantage of information asymmetries).

¹⁷⁶ SVEN-ERIC BARSCH, *TAXATION OF HYBRID FINANCIAL INSTRUMENTS AND THE REMUNERATION DERIVED THEREFROM IN AN INTERNATIONAL CROSS-BORDER CONTEXT* 13, 15, (2012) (discussing innovation as a means to efficiently share risk).

¹⁷⁷ *Id.* at (21-41).

¹⁷⁸ See Mahbrouk Abir and Mamoghli Chokri, *Dynamic Financial Innovation and Performance of Banking Firms: Context of an Emerging Banking Industry*, 51 INT'L RES. J. OF FINANCE AND ECON. 17, 18 (2010) ("in spite of extensive descriptive literature on financial innovation, there is a paucity of

SUPERCHARGED IPOs

Our study contributes to this theoretical literature by providing an empirical method for rooting out multiple drivers—or the key driver—of a particular financial innovation. By investigating the various theoretical explanations for the supercharged IPO, and then subjecting each of the theories to empirical testing, we were able to locate the primary impetus for the supercharged IPO. And just as important, we were able to eliminate theories that did not hold up under our empirical investigation. Many scholars and commentators have argued that supercharged IPOs are nothing more than a means by which owner-founders steal from naïve investors¹⁷⁹—our study does not support this claim. Instead, our empirical findings show that the financial innovation of the supercharged IPO was engineered to reduce tax costs—to take advantage of a tax arbitrage between the founders of firms organized as partnerships, selling equity at a 15% tax rate, with Public Co. and its investors taking amortization deductions at up to a 35% tax rate.¹⁸⁰ Of course this finding does not eliminate the suspicion that supercharged IPOs are nonetheless inherently unfair and problematic. Unlike innovations that reduce nontax transaction costs, it is less clear that this tax-driven financial innovation increases overall social welfare.¹⁸¹ While one can hypothesize that TRAs reduce information costs by allocating the value of tax assets to the parties in the best position to value the information (the founders),¹⁸² our data suggests that parties actually do this in the IPO context only when the founders can also benefit from a tax arbitrage.

The value of our study is this: it enables scholars and policymakers to identify the true motive underlying an innovation of interest, reject empirically unsupported claims, and shed light on underlying reform issues that are hidden in the controversy but nonetheless important to policymakers. In short, we believe that it is useful to know what drives financial innovation, and while our study is but one example of financial innovation, our methodology of looking at the characteristics of firms that actually adopt new innovations can help researchers distinguish between the various types of financial innovation, both positive and negative.

2. *Diffusion through professional networks*

Our findings suggest that diffusion of financial innovation takes place much like other forms of innovation: through professional networks. In the same way that tacit

empirical studies”); Josh Lerner, *The New New Financial Thing: The Origins of Financial Innovations*, 79 J. FIN. ECON. 223, 224 (2006) (despite the importance of financial innovation, only 39 empirical studies exist on the topic); Jala Akhavein, W. Scott Frame, and Lawrence J. White, *The Diffusion of Financial Innovations: An Examination of the Adoption of Small Business Credit Scoring by Large Banking Organizations*, 78 J. BUS. 577, 578 (2005) (7 quantitative studies investigating the process by which innovation diffuses).

¹⁷⁹ See *supra* notes 10-17 and accompanying text.

¹⁸⁰ See *supra* notes 61-63, 81-90, 139-43 and accompanying text.

¹⁸¹ Many critics and legislators believe the innovation decreases social welfare. See discussion of proposed legislative reforms, *supra* note 100 and accompanying text.

¹⁸² Debevoise & Plimpton, *supra* note 17 at 9.

SUPERCARGED IPOs

knowledge and know-how is transferred across technology firms in Silicon Valley,¹⁸³ knowledge of financial innovation spreads through the New York tax bar, private equity and asset management professionals, and accounting professionals. Spreading technical information related to complex innovations, whether implicitly or explicitly, is substantially easier and faster when individuals work in close proximity, share meals, and attend the same conferences.

3. *Inefficient market pricing of tax assets*

Our study also suggests a larger puzzle: are IPO markets inefficient at pricing tax assets? The mere existence of a TRA suggests that something is amiss, as markets should adjust the price efficiently whether the tax benefits are assigned to the buyer or the seller. It seems that markets do not do this efficiently, but our data cannot explain whether IPO investors are simply indifferent to tax and tax assets (which many people say, but seems implausible), or whether there is some incomplete price adjustment to the presence of tax assets, or whether accounting myopia over current earnings (which are unaffected by a TRA) dominates.¹⁸⁴ Our discussion of transaction costs and risk assessment, however, suggest that IPO markets are not inefficient at pricing tax assets. First, as noted above, in traditional transactions, the share price must account for the value of tax assets and valuing the assets requires parties to make numerous assumptions associated with a potential IRS audit, the company's future profitability, legal reform down the road, and the use of other types of tax planning strategies in order to identify the true value of the tax asset to Public Co.¹⁸⁵ Negotiation and bargaining leads to delays, and may kill the deal altogether and thus a more rational approach is to supercharge the IPO with a TRA, thereby eliminating these risks, delays and costs.¹⁸⁶

VI. CONCLUSION

A new innovation on the IPO landscape has emerged in the last two decades, allowing owner-founders to extract millions of dollars from newly-public companies. These IPOs—labeled supercharged IPOs—have been subject to widespread debate and controversy.¹⁸⁷ In this article, we explore the supercharged IPO and explain how and why this new deal structure differs from the more traditional IPO, and how the innovation developed and spread over time. We then outline the various theories of innovation and note that the extant theoretical literature provides support for both legitimate and

¹⁸³ ALAN HYDE, WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF HIGH-VELOCITY LABOR 27-91 (2003) (exploring sharing of information and various spillovers associated with working in close proximity).

¹⁸⁴ Robert Willens, *How IPO Founders Keep Their Taxes Low*, CFO.COM (July 2011), (last visited Feb. 22, 2013), http://www3.cfo.com/article/2011/7/tax_avoid-capital-gains-with-a-tax-receivable-agreement?curpage=1 ("TRAs may be fully legal; however, the entire import of these agreements in the price of an IPO might not be fully appreciated by all investors. To the extent the TRAs are not taken into account by such shareholders, they may lead to market inefficiencies).

¹⁸⁵ See *supra* notes 43-48, 104-05 and accompanying text.

¹⁸⁶ See *supra* notes 104-05 and accompanying text.

¹⁸⁷ See *supra* note 10-17 and accompanying text.

SUPERCHARGED IPOs

opportunistic uses of the supercharged IPO. With the help of a large-*N* quantitative study, we find that the parties are employing the innovative deal structure not for underhanded reasons, but primarily for tax planning purposes.

The future of the supercharged IPO is unclear. The deal structure is most attractive for companies that operate as partnerships or LLCs before going public, as these firms can take full advantage of the tax arbitrage opportunity when they go public. The primary friction that keeps the supercharged IPO from becoming more widespread, then, is a weak one and fully within the control of the parties: the organization of the start-up company. While venture-capital backed start-ups continue to prefer to organize as corporations, not partnerships or LLCs, there is some evidence that LLCs are becoming more common.¹⁸⁸ And, to an even greater extent, there is evidence that private equity targets are more frequently reorganized as LLCs. We expect that if this shift toward pass-through operating entities continues, the rise of the supercharged IPO structure will continue as well. If that happens, the loss in tax revenue may prompt Congress to act.

¹⁸⁸ See generally Victor Fleischer, *The Rational Exuberance of Structuring Venture Capital Start-Ups*, 57 TAX L. REV. 127 (2004); J. William Callison, *Venture Capital and Corporate Governance: Evolving the Limited Liability Company to Finance the Entrepreneurial Business*, 26 J. CORP. L. 97 (2001).

SUPERCHARGED IPOs

APPENDIX: SHARING THE COSTS AND BENEFITS OF THE SUPERCHARGED IPO

Commentators have divergent views on the question of whether supercharged IPOs work to advantage all the parties in the deal, or are simply a means for owner-founders to sneak money away from public investors and public companies.¹⁸⁹ Our empirical findings indicate that the founders are not taking advantage of naïve public investors, but are using this complex and innovative deal structure to produce benefits for all the parties involved (although to the detriment of the public fisc).¹⁹⁰ We now investigate how these added benefits—the new tax assets—are divided between the parties with the help of a concrete example.

To illustrate the costs and benefits of supercharged IPOs, as well as their allocation across parties, we assume many of the factors discussed above. First, because the most valuable asset in many IPOs is goodwill, we assume Founders Co. has exactly one asset with a fair market value of \$10 million—it is self-created so the asset does not generate tax deductions in Founders Co.'s hands.¹⁹¹ Second, we assume that the parties can pursue either a traditional IPO or a supercharged IPO. If the parties pursue the traditional IPO no tax costs or benefits arise, but if they pursue a supercharged IPO—Founders Co. will be subject to tax costs and Public Co. will obtain tax benefits.¹⁹² Third, with regard to potential *tax benefits*, we assume that Public Co. has profits subject to a 35% tax rate, and thus will be able to amortize the asset it receives from Founders Co. ratably over 15 years with a supercharged IPO.¹⁹³ Fourth, with regard to *tax costs*, we assume that Founders Co. and its owners will be subject either to a 15 or 35% tax rate, meaning they will pay either 15 or 35 cents on each dollar of declared income.¹⁹⁴ Finally, recall from above that if the owner-founders are subject to a lower rate than that imposed on Public Co., tax arbitrage opportunities are present. These assumptions reflect real-world deals, and demonstrate the circumstances in which we can expect supercharged IPOs to emerge.

If the parties pursue a supercharged IPO, Founders Co. will be viewed as having sold the company to Public Co. for \$10 million (the value of the asset) and thus will pay an immediate up-front tax equal to \$1.5 million in taxes (a 15% rate) or \$3.5 million in taxes (a 35% rate). Public Co., in turn, will get two assets in the deal: 1) goodwill and 2) the ability to amortize goodwill. Because the goodwill has a fair market value of \$10 million, Public Co. will be able ratably amortize it over fifteen years at a 35% rate, producing a tax savings of \$3,049,750 (this number and all the numbers in the appendix

¹⁸⁹ See *supra* notes 10-17 and accompanying text.

¹⁹⁰ This new value is created through the generation of new "tax assets." See *supra* notes 133-151 and accompanying text.

¹⁹¹ See *supra* notes 44 and accompanying text.

¹⁹² See *supra* notes 43-68 and accompanying text.

¹⁹³ See *supra* notes 44, 48-68 and accompanying text.

¹⁹⁴ See *supra* notes 58-61 and accompanying text.

SUPERCHARGED IPOs

are presented in present value terms and account for the so-called stacking effect of the payments).¹⁹⁵

The supercharged IPO, of course, also involves a tax receivable agreement (TRA),¹⁹⁶ requiring Public Co. to transfer 85% of the tax savings obtained through the amortization tax deductions back to the owner founders—or \$2,592,290 in present value terms. The founders, in turn, must pay taxes on this amount at either a 15 or 35% tax rate.

Table A1 presents the details. The rows in the table identify each component of the deal, and the columns indicate the effects on the parties given that the IPO is structured as either a traditional or supercharged deal. In the first row, we consider the value of the tax assets associated with the amortization tax deduction in the hands of the owner-founders and the new Public Co. If the parties engage in a traditional IPO, there are no new tax assets created nor tax liabilities generated—the goodwill is of no value to any party.

Now consider the value of the newly-created tax asset in the hands of the parties with a supercharged IPO. The first row of table A1 illustrates the value of the tax asset *in the absence of a TRA*. All of the value—\$3,049,750—resides with Public Co. (and indirectly the investors). But *with a TRA*, requiring Public Co. to transfer 85% of this tax benefit to the founders, the numbers change. Row 2 depicts the effects of the TRA on the parties. The bulk of the tax asset's value now rests with the owner founders—\$2,592,290—and the remaining \$457,460 belongs to Public Co. These numbers account for tax benefits and the deal looks very one-sided in favor of the owner-founders.

¹⁹⁵ For purposes of calculating the present value numbers, we assumed a 5% interest rate. We also assumed that every TRA payment made by the company would then add to the “cost of the goodwill,” thereby increasing the amortization deductions well beyond 15 years. For a discussion of this stacking effect, see Debevoise & Plimpton, *supra* note 17 at 9.

¹⁹⁶ See *supra* notes 49-68 and accompanying text.

SUPERCHARGED IPOs

Table A1: The costs and benefits of a TRA in traditional and supercharged IPOs

Costs and benefits to owner-founders and Public Co. in present value dollars			
Nature of Costs and Benefits	Traditional IPO	The Supercharged IPO	
		Tax Arbitrage	No Tax Arbitrage
1. Value of Tax Assets w/o TRA			
To Owner-Founders	\$0	\$0	\$0
To Public Co.	0	3,049,750	3,049,750
2. Value of Tax Assets w/ TRA			
To Owner-Founders	0	2,592,290	2,592,290
To Public Co.	0	457,460	457,460
3. Tax Costs in Deal w/ TRA			
To Owner-Founders	0	(1,888,840)	(4,407,300)
To Public Co.	0	0	0
4. Net Value of Deal w/ TRA			
To Owner-Founders	0	703,450	(1,815,010)
To Public Co.	0	457,460	457,460
5. Division of Surplus (Owner-Founders : Public Co.)		61:39	Net Loss

* Supercharged IPOs with tax arbitrage entail a 15% tax rate on owner-founders and a 35% tax rate on Public Co.; if the parties have no arbitrage opportunity—this means all the parties are taxed at a 35% tax rate.

So far the table reflects only the benefits to the parties. Now consider the effects of the tax liabilities in the deal. The third row of the table assumes that the founders must pay tax on any and all payments received. Because the owner-founders will receive \$10 million up front for the goodwill along with \$2,592,290 in TRA payments over the course of years—they will pay substantial taxes. At a 15% rate, they will pay \$1,888,840 and at a 35% rate they will pay \$4,407,300 as depicted in the third row of table A1.

Finally, putting the tax benefits and liabilities together in row 4 of the table, we see that in supercharged IPO there is a net surplus if the parties are subject to differential tax rates (\$703,450 + \$457,460) but a net loss if both parties are subject to a 35% (-\$1,815,010 + \$457,460). This result confirms our empirical finding above suggesting that tax arbitrage is a strong motivator for using this financial innovation, and when

SUPERCHARGED IPOs

arbitrage is not possible the parties are unlikely to pursue a supercharged IPO given the net losses that they face.

Finally, and perhaps most importantly, row 5 demonstrates that after all the benefits and burdens of the deal are accounted for, the parties divide the net surplus in a manner that advantages the owner-founders (61% of the surplus goes to the founders and 39% goes to Public Co.). This division indicates that the supercharged IPO advantages Public Co. and thus it is rational to pursue such a deal, even though these advantages are not as great as the benefits that inure to the owner-founders. Our analyses also show, contrary to the critics of the supercharged IPO, that it is not the public investors that stand to lose in these complicated deals—rather it is the federal fisc. Figures A1 and A2 depict the details of the supercharged IPO, highlighting the transfer of the goodwill along with the net benefits to each party

Figure A1: Founders Co. Pre-IPO

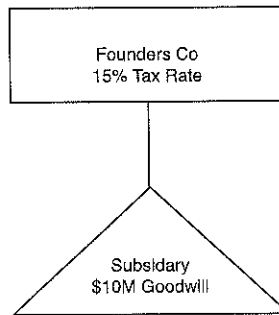


Figure A2: Founders Co. and Public Co. After Undertaking a Supercharged IPO

