

Law and Tunneling

Law Working Paper N° 178/2011

December 2011

Vladimir Atanasov
College of William and Mary

Bernard Black
Northwestern University and ECGI

Conrad S. Ciccotello
Georgia State University

© Vladimir Atanasov, Bernard Black and Conrad S. Ciccotello 2011. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
http://ssrn.com/abstract_id=1444414

www.ecgi.global/content/working-papers

ECGI Working Paper Series in Law

Law and Tunneling

Working Paper N° 178/2011

December 2011

Vladimir Atanasov
Bernard Black
Conrad S. Ciccotello

We thank Kate Litvak for comments on earlier drafts. A earlier, shorter version of this Article was published as Vladimir Atanasov, Bernard Black & Conrad Ciccotello, *Self-Dealing by Corporate Insiders: Legal Constraints and Loopholes*, in *RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW* (Brett McDonald & Claire Hill eds., forthcoming 2011), available at <http://ssrn.com/abstract=1714591>.

© Vladimir Atanasov, Bernard Black and Conrad S. Ciccotello 2011. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

Insiders (managers and controlling shareholders) can extract (tunnel) wealth from firms using a variety of methods. This article examines the different ways in which U.S. law limits, or fails to limit, three types of tunneling – cash flow tunneling, asset tunneling, and equity tunneling. We examine how U.S. corporate, securities, bankruptcy, and tax law, accounting rules, and stock exchange rules impact each form of tunneling, and identify important weaknesses in these rules. Using case studies, we show how tunnelers exploit these gaps. Decisions to tunnel reflect both legal and informal constraints. We conclude that even though the overall level of tunneling in the U.S. is limited, complex asset and equity transactions and excessive equity compensation can escape both legal and informal constraints.

Keywords: tunneling, dilution, freezeout, controlling shareholders

JEL Classifications: K22, K40, G34

Vladimir Atanasov

Professor

College of William and Mary, Mason School of Business

P.O. Box 8795

Williamsburg, VA 23187, United States

e-mail: vladimir.atanasov@mason.wm.edu

Bernard Black*

Nicholas J. Chabraja Professor

Northwestern University, Law School and Kellogg School of Management

375 East Chicago Avenue

Chicago, Illinois 60611, United States

e-mail: bblack@northwestern.edu

Conrad S. Ciccotello

Associate Professor

Georgia State University, Department of Risk Management and Insurance

35 Broad Street

Atlanta, GA 30303, United States

phone: +1 404 413 7462

e-mail: cciccotello@gsu.edu

*Corresponding Author

Law and Tunneling

Vladimir Atanasov*

Bernard Black**

Conrad S. Ciccotello***

I. INTRODUCTION	2
II. UNBUNDLING TUNNELING.....	5
A. <i>Cash Flow Tunneling</i>	6
B. <i>Asset Tunneling</i>	7
C. <i>Equity Tunneling</i>	8
III. PRINCIPAL LAWS AND RULES THAT AFFECT TUNNELING.....	9
A. <i>Cash Flow Tunneling</i>	11
B. <i>Asset Tunneling</i>	14
C. <i>Equity Tunneling</i>	16
1. <i>Equity Offerings</i>	16
2. <i>Freezeouts</i>	19
3. <i>Sales of Control</i>	21
4. <i>Insider Trading and Market Manipulation</i>	22
D. <i>An Overview of Gaps in Anti-Tunneling Rules</i>	24
E. <i>Case Studies of Tunneling in the United States</i>	25
1. <i>Cash Flow Tunneling Examples</i>	25
a. <i>Williams Sonoma and CEO Howard Lester</i>	25
b. <i>Excessive Perquisites at Buca, Inc.</i>	27
c. <i>Enron and Enron Global Power and Pipelines</i>	28
2. <i>Asset Tunneling Examples</i>	28
a. <i>Asset Tunneling In: Coca Cola and Coca Cola Enterprises</i>	29
b. <i>Investments in Affiliates: Ronald Perelman and M&F–Panavision</i>	31
3. <i>Equity Tunneling Examples</i>	33
a. <i>Executive Compensation at Fairchild Corporation</i>	33
b. <i>Dilutive Equity Offerings: Enron’s Rhythms Transaction</i>	35

IV. INFORMAL MECHANISMS THAT LIMIT TUNNELING	36
A. <i>Equity Ownership of the Tunneler</i>	36
B. <i>The Controller's Reputational Concerns</i>	37
C. <i>Actions by Other Shareholders</i>	38
D. <i>Organizational Transparency</i>	39
E. <i>Liquid Stock Markets</i>	39
F. <i>Remaining Gaps</i>	39
V. IMPLICATIONS DESIGN AND ENFORCEMENT OF LAW	40
A. <i>Reduce Legal and Accounting Arbitrage Opportunities</i>	40
B. <i>Shareholder Power to Approve or Challenge Self-Dealing</i>	40
C. <i>Disclosure of Self-Dealing Transactions</i>	41
D. <i>Gatekeeper Review for Fairness</i>	41
VI. SUMMARY.....	42

I. INTRODUCTION

Managers and controlling shareholders (insiders) can extract (tunnel) wealth from firms using a variety of methods. Tunneling occurs across both developed¹ and developing² markets, and impacts both trading prices and premia paid for corporate

* Mason School of Business, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187, vladimir.atanasov@mason.wm.edu, 757-221-2954. This Article is available on SSRN at <http://ssrn.com/abstract=1444414>. We thank Kate Litvak for comments on earlier drafts. A earlier, shorter version of this Article was published as Vladimir Atanasov, Bernard Black & Conrad Ciccotello, *Self-Dealing by Corporate Insiders: Legal Constraints and Loopholes*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW (Brett McDonald & Claire Hill eds., forthcoming 2011), available at <http://ssrn.com/abstract=1714591>.

** Corresponding author. Nicholas J. Chabreja Professor at Northwestern University Law School and Kellogg School of Management, bblack@northwestern.edu, 312-503-2784.

*** Georgia State University, Department of Risk Management and Insurance, 35 Broad Street, Atlanta, GA 30303, cciccotello@gsu.edu, 404-413-7462.

1. For a discussion of tunneling in the United States, see Elizabeth A. Gordon et al., *Related Party Transactions and Corporate Governance*, in 9 ADVANCES IN FINANCIAL ECONOMICS 1 (2004); Thomas W. Bates et al., *Shareholder Wealth Effects and Bid Negotiation in Freeze-Out Deals: Are Minority Shareholders Left Out in the Cold?*, 81 J. FIN. ECON. 681 (2006); Conrad Ciccotello et al., *Impact of Employee Stock Options on Cash Flow*, 60 FIN. ANALYSTS J. 39 (2004).

2. For a discussion of tunneling in developing markets, see Vladimir Atanasov, *How Much Value Can Blockholders Tunnel? Evidence from the Bulgarian Mass Privatization Auctions*, 76 J. FIN. ECON. 191 (2005); Vladimir Atanasov et al., *How Does Law Affect Finance? An Examination of Equity Tunneling in Bulgaria*, 96 J. FIN. ECON. 155 (2010); Jae-Seung Baek et al., *Business Groups and Tunneling: Evidence from Private Securities Offerings by Korean Chaebols*, 61 J. FIN. 2415 (2006); Marianne Bertrand et al., *Ferretting Out Tunneling: An Application to Indian Business Groups*, 117 Q. J. ECON. 121 (2002); Yan-Leung Cheung et al., *Tunneling, Propping and Expropriation: Evidence from Connected Party Transactions in Hong Kong*, 82 J. FIN. ECON. 343 (2006); Guohua Jiang et al., *Tunneling through Intercorporate Loans: The China Experience*, 98 J. FIN. ECON. 1 (2010); Henk Berkman et al., *Expropriation Through Loan Guarantees to Related Parties:*

control.³ This Article studies how effectively United States' rules limit tunneling by insiders of public companies. We consider three broad types of tunneling: cash flow tunneling, in which insiders extract some of the firm's current cash flows; asset tunneling, in which insiders buy (sell) assets from (to) the firm at below (above) market prices; and equity tunneling, in which insiders acquire equity at below market price, either from the firm through an equity issuance or from other shareholders, often in a freezeout.

We also examine how a broad set of rules, including corporate, securities, accounting, tax, and creditor protection rules, impact each type of tunneling. Prior law and finance literature discuss the potential anti-tunneling role of these sources, but not how they affect particular types of tunneling. Also, creditor protection rules have been seen as important only to protect creditors. However, as we develop below, they also have an important role in indirectly protecting minority shareholders.⁴

Prior research on the strengths of anti-tunneling protections in the United States is usually limited to a single type of tunneling. For example, one literature discusses freezeouts,⁵ another discusses executive compensation,⁶ and a third discusses the weak

Evidence from China (Apr. 18, 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=981285>; Jianping Deng et al., Privatization, Large Shareholders' Incentive to Expropriate, and Firm Performance (Aug. 2007) (unpublished manuscript), available at [http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PSS.2/\\$FILE/Deng,+Gan,+He++Privatization.pdf](http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PSS.2/$FILE/Deng,+Gan,+He++Privatization.pdf); Jian Jane Ming & T.J. Wong, *Earnings Management and Tunneling through Related Party Transactions: Evidence from Chinese Corporate Groups* (EFA 2003 Annual Conference Paper No. 549, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=424888; Simeon Djankov et al., *The Law and Economics of Self-Dealing* (Dec. 2005) (unpublished manuscript), available at <http://ssrn.com/abstract=864645>.

3. See generally Bernard Black, *The Corporate Governance Behavior and Market Value of Russian Firms*, 2 EMERGING MARKETS REV. 89 (2001) (discussing tunneling in Russia); Tatiana Nenova, *The Value of Corporate Votes and Control Benefits: A Cross-Country Analysis*, 68 J. FIN. ECON. 325 (2003) (discussing tunneling in many nations comparatively); Alexander Dyck & Luigi Zingales, *Private Benefits of Control: An International Comparison*, 59 J. FIN. 537 (2004) (discussing tunneling in many nations comparatively); Ronen Barak & Beni Lauterbach, *Estimating the Private Benefits of Control from Block Trades: Methodology and Evidence* (Jan. 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=965668> (discussing tunneling in Israel).

4. Creditor contracts can also limit tunneling, although the detailed discussion of them is beyond the scope of this Article. See, e.g., Campbell R. Harvey et al., *The Effect of Capital Structure When Agency Costs are Extreme*, 74 J. FIN. ECON. 3, 4 (2004) (discussing the effect of creditor rights and contract terms on entering debt market); Kose John & Lubomir Litov, *Corporate Governance and Financial Policy: New Evidence I* (Feb. 28, 2010) (unpublished manuscript), available at <http://ssrn.com/abstract=637341> (discussing whether entrenched managers avoid debt or not).

5. See, e.g., Harry DeAngelo et al., *Going Private: Minority Freezeouts and Stockholder Wealth*, 27 J.L. & ECON. 367, 367–71 (1984) (discussing the wealth effect of stockholders in freeze-outs); Guhan Subramanian, *Post-Siliconix Freeze-Outs: Theory and Evidence*, 36 J. LEGAL STUD. 1, 2 (2007) (discussing the impact of the *Siliconix* decision on freeze-outs); Edward L. Rock, *Saints and Sinners: How Does Delaware Corporate Law Work?*, 44 UCLA L. REV. 1009, 1009–20 (1996) (discussing Delaware cases involving buy-outs); Bates et al., *supra* note 1, at 682–84 (discussing empirical evidence in freezeout cases).

6. See LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION ix–x* (2004) (“Our study of executive compensation opens a window through which we can examine our current reliance on boards to act as guardians of shareholders’ interests.”); GRAEF S. CRYSTAL, *IN SEARCH OF EXCESS: THE OVERCOMPENSATION OF AMERICAN EXECUTIVES 96–100* (1991) (addressing the volatility in total shareholder return created by a bias towards aggressive growth); Michael C. Jensen et al., *Remuneration: Where We’ve Been, How We Got to Here, What are the Problems, and How to Fix Them* 22 (Harvard NOM, Working Paper No. 04-28, 2004), available at <http://ssrn.com/abstract=561305>

protections for minority shareholders in *private* companies.⁷ Ronald Gilson and Jeffrey Gordon discuss generally how to limit the power of controlling shareholders, but focus on freezeouts and sales of control.⁸ Most studies also consider only corporate and securities law.⁹

In contrast, this Article studies how a broad set of rules affects a broad range of tunneling transactions. This breadth comes at a cost as we delve less into the details of specific regulations or types of transactions. But this breadth lets us develop a theme that has not been expressly recognized: U.S. rules do not effectively limit the full range of tunneling transactions. We use case studies to illustrate where current rules permit tunneling.

In cash flow tunneling, for example, entire fairness review under corporate law has some bite. Corporate tax law limits pyramid structures, and thus incentives and opportunities for cash-flow tunneling within business groups, but is less effective in limiting cross-border transfers through creative transfer pricing. Securities law and accounting rules ensure some disclosure of related party transactions, but the disclosure can often be generic and leave investors in the dark about transaction fairness. For asset tunneling, disclosure is often limited, and corporate law leaves substantial room for transactions at off-market prices. The principal protection against mispriced transactions is review by independent directors, but if shareholders can do little, the insiders can fool or co-opt them. Bankruptcy law provides some protection against asset tunneling for failing firms. Equity tunneling through freezeouts is relatively well-controlled, but creative insiders can extract value through recapitalizations, and can extract a surprising amount of value over time through equity-based executive compensation. Written broadly, current U.S. rules block some brute-force schemes that might succeed in less developed markets, but often permit more complex schemes to succeed. We propose rule changes to address the principal gaps that emerge from our analysis.

We limit the scope of this project to public companies and U.S. rules. We do not study special rules for particular industries. We do not consider tunneling by equity holders from debt holders, or vice-versa.¹⁰ However, our taxonomy of tunneling is not limited to the United States. Our analysis is whether a broad set of rules, taken together, can control particular forms of tunneling and whether the rules are adaptable to other

(discussing agency problems arising when executive compensation is dictated by a board of directors rather than the shareholders).

7. See generally F. HODGE O'NEAL & ROBERT B. THOMPSON, OPPRESSION OF MINORITY SHAREHOLDERS AND LLC MEMBERS § 2 (2d ed. 2004) (identifying greed, acquiescence, and preventive services as causes of harm to shareholders).

8. Ronald J. Gilson & Jeffrey N. Gordon, *Controlling Controlling Shareholders*, 152 U. PA. L. REV. 785, 786 (2003).

9. See Bernard S. Black, *The Legal and Institutional Preconditions for Strong Securities Markets*, 48 UCLA L. REV. 781 (2001) (discussing the legal and market institutions needed to control self-dealing, but focusing on emerging markets); Mihir A. Desai et al., *Theft and Taxes*, 84 J. FIN. ECON. 591 (2007) (studying how tax enforcement can limit cash flow tunneling).

10. See George A. Akerlof & Paul M. Romer, *Looting: The Economic Underworld of Bankruptcy for Profit*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 1993, at 1 (providing an example of tunneling by equity holders from debtholders); Ariane Lambert-Mogiliansky et al., *Capture of Bankruptcy: Theory and Russian Evidence* (Ctr. for Econ. & Fin. Research, Working Paper No. 38, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=253334 (providing an example of tunneling by debt holders from equity holders).

countries.

The Article proceeds as follows: Part II provides a summary of tunneling types. Part III examines how accounting rules and tax, corporate, and securities law impact various types of tunneling. Part IV uses case studies to illustrate the current gaps in the web of anti-tunneling protections. Part V discusses informal mechanisms that complement the law and limit tunneling. Part VI suggests how legal changes could address those gaps. Part VII concludes.

II. UNBUNDLING TUNNELING

Simon Johnson, Rafael LaPorta, Florencio Lopez-De-Silanes, and Andrei Shleifer define “tunneling” as the “transfer of resources out of a company to its controlling shareholder (who is typically also a top manager).”¹¹ This definition is appropriate for emerging markets, where most firms have a controlling shareholder. Here we use a broader definition that includes transfers to managers who are not controllers. For transfers to managers, tunneling includes executive compensation that exceeds a market rate. We follow the taxonomy of tunneling developed by the authors, and divide tunneling into three basic types: cash flow tunneling, asset tunneling, and equity tunneling.¹² We summarize these here, without pretending to capture all of the creative ways in which insiders can extract value from firms.

“Cash flow tunneling removes a portion of the current year’s cash flow, but does not affect the remaining stock of long-term productive assets, and thus does not directly impair the firm’s value to all investors, including the controller.”¹³ “Cash flow tunneling can repeat year after year, but the fraction of cash flow which is tunneled can change over time.”¹⁴ Often, cash flow tunneling transactions are not directly with insiders, but instead with firms that the insiders control (or simply have a larger percentage economic ownership than in the subject firm).¹⁵

“Asset tunneling involves the transfer of major long-term (tangible or intangible) assets from” (to) the firm for less (more) than market value.¹⁶ It includes overpriced asset or equity purchases in affiliated firms and underpriced asset sales to affiliated firms.¹⁷ Asset tunneling differs from cash-flow tunneling because the transfer has a permanent effect on the firm’s future cash-generating capacity.¹⁸ Transfers out of (into) the firm may also affect the profitability of the firm’s other assets if the transferred assets have positive (negative) synergy with the firm’s other assets.¹⁹

“Equity tunneling increases the controller’s share of the firm’s value, at the expense

11. Simon Johnson et al., *Tunneling*, 90 AM. ECON. REV. 22, 22 (2000) (offering a simpler tunneling taxonomy than the one developed here, in which both cash-flow and asset tunneling are labeled as “self-dealing transactions”).

12. Vladimir Atanasov et al., *Unbundling and Measuring Tunneling 2* (Univ. Tex. Sch. of Law, Law & Econ. Res. Working Paper No. 117, 2008), available at <http://ssrn.com/abstract=1030529>.

13. *Id.* at 4.

14. *Id.* at 2–3.

15. *Id.*

16. *Id.* at 3.

17. Atanasov et al., *supra* note 12, at 3.

18. *Id.*

19. *Id.*

of minority shareholders, but does not directly change the firm's productive assets" or cash flows.²⁰ Examples of equity tunneling include dilutive equity issuances and freeze-outs of minority shareholders.

If one describes a firm as a grove of apple trees, which grow better together than apart, these tunneling techniques can be described as follows: cash flow tunneling can be seen as stealing some of this year's crop of apples; asset tunneling out of the firm involves stealing some of the trees which could potentially make the remaining trees less valuable; and equity tunneling would involve stealing claims to ownership of the grove.

Cash flow tunneling primarily affects the income statement and statement of cash flows and captures the *flow* of firm value.²¹ In contrast, asset and equity tunneling "principally affect items on the balance sheet, and involve the transfer of the *stock of firm value*."²² Equity tunneling often does not affect the firm's financial statements at all.²³ "In terms of operational impact, asset tunneling directly affects the company's future operations and profitability, while equity and cash flow tunneling do not."²⁴

This Part dissects tunneling into our three main types: cash flow, asset, and equity. We begin by summarizing which types of transactions and activities fall within each type, and then discuss transactions that do not fit cleanly within our typology. Transactions between a firm and related parties can sometimes be intended to benefit the firm—sometimes called propping.²⁵ One firm investing in a troubled affiliate is a common example. The transaction both props the affiliate and is a form of asset tunneling for the investing firm. We do not discuss here the argument that tunneling and propping transactions within business groups can sometimes reflect efficient risk-sharing in an inefficient capital market.²⁶

A. Cash Flow Tunneling

Cash flow tunneling can be defined as "transactions which divert what would otherwise be operating cash flow from the firm to insiders. . . ."²⁷ There are several stylized attributes of cash flow tunneling: "(1) it can potentially recur indefinitely, but may or may not do so in fact; (2) it leaves the firm's long-term productive assets unchanged; (3) it leaves ownership claims over the firm's assets unchanged; and (4) if limited in extent, it may not significantly affect the firm's long-term cash-generating ability."²⁸

One major form of cash flow tunneling involves transfer pricing, where the firm

20. *Id.*

21. Gilson & Gordon, *supra* note 8, at 787–89 (arguing, using our terminology, that equity tunneling is more damaging to minority shareholders than cash flow tunneling because it extracts the present value of a stream of income, rather than just this year's flow).

22. Atanasov et al., *supra* note 12, at 4.

23. *Id.*

24. *Id.* at 6.

25. See, e.g., Eric Friedman et al., *Propping and Tunneling*, 31 J. COMP. ECON. 732, 732–35 (2003) (discussing ways in which controlling shareholders can use their private funds to benefit minority shareholders).

26. Randall Morck & Masao Nakamura, *Business Groups and the Big Push: Meiji Japan's Mass Privatization and Subsequent Growth* 543 (Nat'l Bureau of Econ. Res., Working Paper No. 13171, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=989883.

27. Atanasov et al., *supra* note 12, at 7.

28. *Id.* at 9.

either sells outputs to insiders for below-market prices, or purchases inputs from insiders at above-market prices.²⁹ The inputs can be either goods or services.³⁰ A second major form is above-market current-year executive salaries, bonuses, or perquisites (we treat above-market equity-based compensation as equity tunneling).³¹ Cash flow tunneling also includes small-scale sales or purchases of replaceable assets at off-market prices.³²

Some transactions cannot be neatly classified as a single type of tunneling. For example, loans to insiders involve cash flow tunneling if, as is often the case, the loan is at a below-market interest rate. Loans that are large enough to significantly affect the firm's cash resources, where the firm may have difficulty finding other sources of cash in bad economic times, reflect, in part, asset tunneling. If loans to insiders will not be repaid in bad economic times, as is often the case, they have aspects of equity tunneling: the insider receives a valuable embedded put option or, equivalently, a larger share of firm value in bad times. Guarantees of loans to insiders by third parties can be analyzed similarly to direct loans to insiders.³³

"While cash flow tunneling does not directly affect the firm's expected future cash flows, it can have indirect effects, especially if it occurs on a large scale."³⁴ If controllers remove enough cash from the firm, this can reduce the internal capital or borrowing capacity the firm needs to purchase productive assets. The resulting increase in the firm's cost of capital might then impact future profitability.³⁵

B. Asset Tunneling

"Asset tunneling involves self-dealing transactions which either (i) remove significant, productive assets from the firm for less than fair value, [for the benefit of insiders] (tunneling 'out'); or (ii) add overpriced assets to the firm (tunneling 'in')."³⁶ "Asset tunneling can include both tangible and intangible assets . . ."³⁷ In addition, the "tunneled" assets can be either on or off the firm's balance sheet.³⁸

"Tangible asset tunneling includes sales (purchases) of significant assets, often falling within the property, plant, and equipment (PPE) or investments lines on the balance sheet. . . ."³⁹ One common form, especially outside the United States, involves

29. *See id.* (providing specific examples of cash flow tunneling).

30. *Id.*

31. *Id.*

32. Atanasov et al., *supra* note 12, at 7.

33. If an insider's control is strong enough, one can understand him as holding an option to borrow money in bad times and not repay it, even if the company currently has lent him no money. Thus, Bernard Ebbers borrowed \$415 million from WorldCom on the way down. Deborah Solomon & Jared Sandberg, *Leading the News: WorldCom's False Profits Climb—Telecom Firm's Latest Tally May Exceed \$9 Billion; SEC Files More Charges*, WALL ST. J., Nov. 6, 2002, at A3. For a more recent example in which insider borrowing in an economic downturn drove a Russian firm into bankruptcy, see Guy Chazan, *Russian Tycoon's Fall Spurs Money Hunt*, WALL ST. J., Sept. 8, 2009, at A1 (chronicling the fall of a Russian oil producer that lent hundreds of millions of dollars to its billionaire top shareholder).

34. Atanasov et al., *supra* note 12, at 8.

35. *Id.*

36. *Id.*

37. *Id.* at 9.

38. *Id.* at 11.

39. Atanasov et al., *supra* note 12, at 9.

investing in an affiliate on terms the affiliate could not obtain from outside investors.⁴⁰ Intangible assets offer fertile ground for tunneling because they are often not directly recorded on a firm's balance sheet, so the tunneling leaves fewer traces.⁴¹ Valuation of intangible assets is often difficult, so it is hard for minority shareholders to prove off-market pricing. Examples include "providing trade secrets or other intellectual property to related parties at a discount (buying them from related parties at a premium) and diverting business opportunities to related parties."⁴² Investing in a troubled affiliate (propping) is a common form of asset tunneling "in." Repurchases of shares from insiders for above market value is also a form of asset tunneling "in" because the insider gets more cash than their shares are worth.

"We treat asset tunneling as separate from cash flow tunneling for several main reasons. First, tunneling out of assets diverts all future cash flows associated with [an] asset."⁴³ "In contrast, diverting cash flows is an ongoing process, which can be modified in the future."⁴⁴ For example, an executive might receive an excessive salary in one year, but not the next. Second, if "there is synergy between different aspects of a firm's business, diverting productive assets may reduce the value of the firm's remaining assets and thus the firm's overall profitability. . . ."⁴⁵ In contrast, cash flow and equity tunneling are closer to being purely redistributive—they do not directly affect a firm's future operating performance.⁴⁶ Third, asset tunneling and cash flow tunneling affect different aspects of financial performance (as captured by standard financial metrics), "and need to be addressed through different legal and accounting rules."⁴⁷ "One can [] think of asset tunneling as [primarily] impacting the balance sheet first . . . while cash flow tunneling [primarily] affects the income statement and [cash flow statement]."⁴⁸

The classification of some transactions will be unclear. Consider a lease of company assets from a related party for more than fair value. If the lease term is short, relative to the life of the asset, the transaction looks like cash flow tunneling. If the lease term is long, relative to asset life, the transaction looks more like asset tunneling. Accounting rules struggle with the distinction between short-term "operating" leases and long-term "capital" leases; our taxonomy will do no better than they do. An assets-for-equity transaction [] can involve both asset and equity tunneling.⁴⁹

C. Equity Tunneling

"The core characteristic of equity tunneling is that it [increases the insiders'] ownership claims over the firm's assets, [at the expense of] minority shareholders,

40. See, e.g., Baek et al., *supra* note 2, at 2416 (exploring Korean firms belonging to business groups that maintain "ties with other firms in the group, bound together by a nexus of explicit and implicit contracts").

41. See Atanasov et al., *supra* note 12, at 9.

42. *Id.* at 11.

43. *Id.* at 8.

44. *Id.*

45. *Id.* at 8–9.

46. Atanasov et al., *supra* note 12, at 9.

47. *Id.*

48. *Id.*

49. *Id.*

without directly affecting the firm's operations."⁵⁰ Equity tunneling can take a variety of forms, including: dilutive equity offerings (issuance of shares or securities convertible into shares, to insiders for below fair value); freezeouts (transactions in which insiders take the firm private) for less than fair market value; loans from the firm to insiders (which will not be repaid in a bad economy, and hence act partly as put options); sale of a controlling stake (without an offer to buy minority shares); repurchase of shares from insiders for more than fair value (diluting the value of the minority shares); and equity-based executive compensation that exceeds a market rate for services.⁵¹ Within business groups, equity investments in or loans to affiliates can involve [both] tunneling from the investing firm and propping of the investee firms."⁵²

III. PRINCIPAL LAWS AND RULES THAT AFFECT TUNNELING

"There is broad consensus that better legal rules are associated with stronger financial markets, but much less on which rules matter," or how they matter.⁵³ Some rules directly control tunneling, some do so indirectly, and some do so incidentally but still importantly. We discuss here the principal laws and rules that are likely to do the bulk of the work in controlling tunneling (anti-tunneling rules), and how effective they are against different forms of tunneling. We build on the taxonomy of tunneling developed in Part II to link specific laws and institutions to specific forms of tunneling.

The tunneler's job is often to find a way through or around the web of anti-tunneling rules. Similar to tax planning, if there are several paths to a given goal, and law blocks only some of them, tunnelers can often follow the path less-regulated. Thus, we attend both to the paths that legal rules block, and those they leave open. In Part IV, we use case studies to provide evidence that the gaps we identify in this section are indeed exploitable.

We limit our analysis to U.S. laws, stock exchange rules, and accounting rules. A similar analysis can be applied to other countries whose rules have different strengths and weaknesses in controlling tunneling. We consider the following principal sources of law and related rules: corporate law, securities law, bankruptcy law, tax law, accounting rules, and stock exchange listing rules.

To assess which rules affect which types of tunneling, we need a taxonomy of rules

50. *Id.* at 10.

51. Atanasov et al., *supra* note 12, at 10.

52. *Id.*

53. *Id.* at 6. On the finance side of law and finance see generally Thursten Beck et al., *Law, Endowments, and Finance*, 70 J. FIN. ECON. 137 (2003); Thursten Beck et al., *Law and Finance: Why Does Legal Origin Matter?*, 31 J. COMP. ECON. 653 (2003); Asli Demircuc-Kunt & Vojislav Maksimovic, *Law, Finance, and Firm Growth*, 53 J. FIN. 2107 (1998); Rafael La Porta et al., *Legal Determinants of External Finance*, 52 J. FIN. 1131 (1997); Rafael La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113 (1998); Rafael La Porta et al., *Investor Protection and Corporate Valuation*, 57 J. FIN. 1147 (2002); Rafael La Porta et al., *What Works in Securities Laws?*, 60 J. FIN. 1 (2006); Ross Levine, *The Legal Environment, Banks, and Long-Run Economic Growth*, 30 J. MONEY, CREDIT & BANKING 596 (1998); Ross Levine, *Law, Finance, and Economic Growth*, 8 J. FIN. INTERMEDIATION 8 (1999). On the law side, see generally John Armour et al., *Private Enforcement of Corporate Law: A Comparative Empirical Analysis of the UK and US*, 6 J. EMPIRICAL LEGAL STUD. 687 (2009); Dan Berkowitz et al., *Economic Development, Legality, and the Transplant Effect*, 47 EUR. ECON. REV. 165 (2003); Mark Roe, *Legal Origins and Modern Stock Markets*, 120 HARV. L. REV. 460 (2006); Holger Spamann, *Law and Finance Revisited*, 23 REV. FIN. STUD. 467 (2010); Black, *supra* note 9.

that does not depend on the idiosyncratic decision to place a rule of type A in a statute of type B. For example, the boundary between corporate and securities law is indistinct—important parts of U.S. securities law address matters that are often thought of as involving internal corporate governance. We will use the following taxonomy:

Corporate governance rules: rules that principally regulate the relations among shareholders and between shareholders and managers, including rules that create shareholder rights (such as preemptive and appraisal rights), specify transaction approval requirements, specify internal structure (independent directors, audit committees, and so on), specify procedures for corporate decision making, or, occasionally, ban particular types of transactions. These rules are located primarily in state corporate law, but important parts are also located in securities law (for example, the Securities Exchange Act regulates insider trading, shareholder voting, and corporate takeover bids),⁵⁴ the Sarbanes–Oxley Act (which regulates audit committees and bars corporate loans to directors and executive officers),⁵⁵ and in stock exchange rules (for example, rules on audit committees and independent directors, and rules requiring firms to have a shareholder vote for a large equity issuance or limiting the issues on which record holders can vote).

Disclosure rules (wherever located): rules that specify the content of the disclosure that public companies must make to shareholders and investors. These are located primarily in securities law and accounting rules, but also partially in corporate law, stock exchange rules (such as rules requiring disclosure of new corporate developments), and other places. We consider here federal securities law, but not state securities law. For accounting rules, we assume U.S. Generally Accepted Accounting Principles apply.⁵⁶ For stock exchange rules, we consider New York Stock Exchange (NYSE) and NASDAQ listing rules.⁵⁷

Tax rules: rules which affect taxes paid by corporations, and by investors on cash flows received from corporations. These rules can indirectly protect minority shareholders against cash flow tunneling by providing an outside monitor with its own interest in keeping cash flows—and thus taxable profits—within the corporation. Tax rules can also affect incentives to create pyramid or circular ownership structures, which provide tunneling opportunities and incentives.⁵⁸ We consider here federal income tax law but not state law.

Creditor protection rules: rules that are principally intended to protect creditors against actions by shareholders and managers. In practice, they can also protect minority shareholders. These rules are principally located in federal bankruptcy law and state insolvency and fraudulent conveyance law but are also found in corporate law rules limiting distributions to shareholders.

54. Securities Exchange Act of 1934, 15 U.S.C. §§ 78a–77kk (2006).

55. Sarbanes–Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (2002) (codified at scattered sections of 11, 15, 18, 28, and 29 U.S.C.).

56. *Authoritative Source of Guidance*, FASAB.GOV, <http://www.fasab.gov/accounting-standards/authoritative-source-of-gaab/> (last visited Oct. 20, 2011).

57. *See Listing Standards–U.S. Standards*, NYSE EURONEXT, <http://usequities.nyx.com/regulation/listed-companies-compliance/listings-standards/us> (last visited Oct. 20, 2011).

58. Randall Morck, *How to Eliminate Pyramidal Business Groups—The Double Taxation of Inter-Corporate Dividends and Other Incisive Uses of Tax Policy*, in 19 TAX POLICY AND THE ECONOMY 135 (2005).

A. Cash Flow Tunneling

Cash flow tunneling involves potentially recurring “related party transactions” (RPTs), between a firm and its controlling shareholders or managers or another firm that the insiders control, at off-market prices.⁵⁹ The firm buys inputs (goods or services) for an above-market price or sells outputs for a below-market price. The principal controls on this behavior are (i) corporate governance rules which specify fiduciary duties of corporate officers and directors, specify approval requirements for RPTs, provide an opportunity for shareholder suits challenging particular transactions, and ban particular transactions; (ii) disclosure rules which require disclosure of these transactions, as well as disclosure of major shareholders, so that shareholders know who the insiders are; (iii) government interest in keeping profits within the firm in order to collect corporate income taxes;⁶⁰ and (iv) creditor protection rules that limit cash distributions and asset transfers from insolvent companies.⁶¹

Corporate governance rules. Corporate law once narrowly restricted related party transactions⁶² but over the course of the 20th century, largely retreated to a process approach: RPTs are lawful if approved through a proper process.⁶³ Usually, approval by non-interested directors satisfies this requirement.⁶⁴ This creates risk to shareholders if the board is co-opted or asleep. Assuming the process meets corporate law requirements, a substantive challenge to fairness is difficult. Save for large, extraordinary transactions (which would involve asset or equity tunneling, rather than cash flow tunneling), such challenges are practically impossible. Challenges are rare, and successful ones, to our knowledge, nonexistent.

The Sarbanes–Oxley Act bans corporate loans to directors and executive officers, previously a common RPT.⁶⁵ But gaps remain. For example, the law does not limit loans to other insiders or affiliated firms.⁶⁶

Disclosure rules. Disclosure rules require companies to disclose the existence of many cash-flow tunneling RPTs. The principal constraint is the federal proxy rules, which require disclosure of executive compensation and transactions between the company and its directors, officers, and affiliates with a low \$120,000 threshold.⁶⁷ Accounting rules are of little help—they require disclosure only of “material” RPTs.⁶⁸

59. See Atanasov et al., *supra* note 12, at 10 (noting that once the transaction is large enough, it could be classified as asset tunneling).

60. Desai et al., *supra* note 9, at 600.

61. We do not consider here the special rules that govern related party transactions involving investment companies (mutual funds), located in the Investment Company Act of 1940, 15 U.S.C. §§ 80a-1–80a-64 (2010).

62. See Harold Marsh, Jr., *Are Directors Trustees? Conflict of Interest and Corporate Mentality*, 22 BUS. LAW. 35 (1966) (discussing self dealing and constructive fraud).

63. See, e.g., William T. Allen et al., *Function Over Form: A Reassessment of Standards of Review in Delaware Corporation Law*, 56 BUS. LAW. 1287 (2001) (examining the evolution of standards of review in corporate litigation).

64. *Id.*

65. Gordon et al., *supra* note 1, at 9.

66. *Id.*

67. Regulation S-K, 17 C.F.R. § 229.404 (1975). Disclosure of RPTs is made annually in a company’s proxy statement.

68. FIN. ACCT. STANDARDS BD., STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 57 ¶ 2 (1982) [hereinafter FAS 57], available at <http://www.fasb.org/pdf/fas57.pdf>.

The principal Securities and Exchange Commission (SEC) rule on financial statements, Regulation S-X, also contains a materiality exception.⁶⁹ Most cash flow tunneling RPTs will be well under the materiality threshold.

In practice, executive compensation aside, disclosure of RPTs is often opaque and gives no guidance to investors as to whether the RPT was in fact on arms-length terms. Enron is a poster child, with its impenetrable disclosures of transactions with special purpose vehicles.⁷⁰ A company that discloses extensive RPTs will likely pay a penalty in its share price, but the penalty may be only loosely related to the degree of self-dealing.

The importance of disclosure in limiting executive compensation is suggested by two examples involving stock options. One involves the option-backdating scandals that became public in 2005–06, in which hundreds of companies issued options at below-market prices, by looking backwards to a date when the price was low and deeming the option granted at that date.⁷¹ Many option plans permit below-market grants. However, the need to disclose that a grant was below-market and record compensation expense, which arose once the SEC required officers to promptly report of option grants under Securities Exchange Act Section 16, stopped most such grants.⁷² The second involves an accounting rule change which required U.S. firms, beginning in 2006, to report compensation expense more generally for granting options to executives.⁷³ Option grants dropped at firms which were formerly above-norm option granters.⁷⁴

Tax rules. The tax authorities will be interested in transactions that move income off-shore, where it may escape U.S. taxation. But in practice, firms retain substantial latitude. For example, the IRS has never succeeded in charging significant taxes on U.S. subsidiaries of foreign parent firms—the foreign parents seem to be able to arrange sufficient transfer pricing transactions to more or less zero out their U.S. taxable income.⁷⁵ As long as the income remains on-shore, the tax authorities have limited interest in where it lands, given the similarity between corporate and individual income tax rates.

Tax rules do indirectly limit controllers' incentives and opportunities to tunnel cash flow. To oversimplify, under U.S. tax law inter-corporate dividends and transactions are partially taxed unless a parent owns at least 80% of a subsidiary and thus is consolidated

69. Regulation S-X, 17 C.F.R. § 210.4-02 (1975).

70. See, e.g., Report of Professor Bernard Black on Behalf of Lead Plaintiff, *In re Enron Securities Litigation*, 2006 WL 2432018 (S.D. Tex. Jan. 17, 2006) (No. H-01-3624) (comparing Enron's disclosures to actual transactions).

71. See *Non-SEC Documents Related to Options Backdating*, SEC.GOV, www.sec.gov/spotlight/optionsbackdating.htm#nonsec (last visited Oct. 20, 2011) (listing over 25 actions for backdating brought by government entities other than the SEC).

72. Randall A. Heron & Erik Lie, *Does Back Trading Explain The Stock Price Pattern Around Executive Stock Option Grants?*, 83 J. FIN. ECON. 271, 294 (2007).

73. For a brief summary of the struggle over the accounting for employee stock options, see Nicholas G. Apostolou & D. Larry Crumbley, *Accounting for Stock Options: Update on the Continuing Conflict*, CPA J. (Aug. 2005), www.nyssepa.org/cpajournal/2005/805/essentials/p30.htm.

74. Yi Feng & Yisong S. Tian, *Option Expenses and Managerial Equity Incentives*, 18 FIN. MARKETS, INST. & INSTRUMENTS 196, 236 (2009).

75. Profit margins for foreign-controlled companies are generally less than those for otherwise comparable US companies. See, e.g., Harry Grubert, *Another Look at the Low Taxable Income of Foreign-Controlled Companies in the United States*, in NATIONAL TAX ASSOCIATION PROCEEDINGS 157 (1999).

with the subsidiary for tax purposes.⁷⁶ As Randall Morck notes, this imposes a substantial penalty on pyramidal and circular ownership structures.⁷⁷ These structures are common in other countries and provide both incentives and opportunities for the controller to tunnel profits up to the top level of the pyramid.⁷⁸

Creditor protection rules. Creditor protection rules constrain cash flow tunneling when a firm is insolvent or soon will be. Both state fraudulent conveyance law and federal bankruptcy law permit courts to examine RPTs involving insolvent companies, and reverse transactions in which the company does not receive value “reasonably equivalent” to what it pays.⁷⁹ Bankruptcy law also allows the bankruptcy court to retrieve payments by the firm to creditors within three months of the filing (one year if the creditor is an insider).⁸⁰ Creditors are the principal beneficiaries of these rules, but minority shareholders will also benefit if the firm retains positive equity value (without the tunneling that would occur without these rules).

Still, on the whole, if the insiders of a solvent firm are so inclined, and can find cooperative outside directors, U.S. law neither strongly limits the power of insiders to tunnel cash flows, nor ensures full disclosure of the transactions that occur.⁸¹ To be sure, U.S. rules and norms tilt strongly toward board independence.⁸² Companies without a majority shareholder must have a majority of independent directors under NYSE rules,⁸³ and Delaware law gives greater deference to decisions by board with a majority of outside directors.⁸⁴ In practice, many large firms have a substantial majority of independent directors. Often, these directors will resist gross self-dealing. But independent directors have been notably lax on executive compensation, and more than occasionally lax in other areas, as our case studies suggest.⁸⁵ Enron and WorldCom are again poster children. Both had highly independent boards but self-dealing by insiders was still rampant.⁸⁶ They are scarcely alone.

76. See Morck, *supra* note 58, at 135–43 (demonstrating the impact of taxes).

77. See *id.* (James Poterba in 2005, complaint discussing pyramid rules in various circumstances). We refer to these rules below as “anti-pyramid rules.”

78. See, e.g., Lucian Ayre Bebchuk et al., *Stock Pyramids, Cross-Ownership, and Dual Class Equity: The Mechanisms and Agency Costs of Separating Control from Cash-Flow Rights*, in CONCENTRATED CORPORATE OWNERSHIP 295, 296 (Randall K. Morck ed., 2000) (analyzing how stock pyramids produce a separation of control from cash flow rights).

79. Uniform Fraudulent Transfer Act §§ 4(a)(2), 5(a) (1984); Federal Bankruptcy Act, 11 U.S.C. § 548 (1994) (providing a one-year lookback period).

80. Federal Bankruptcy Act § 547(b).

81. See Gordon, *supra* note 1, at 1–27.

82. For a discussion of board independence in S&P 500 firms, see Sharon Lee & Loring Carlson, *The Changing Board of Directors: Board Independence in S&P 500 Firms*, 11 J. OF ORGANIZATIONAL CULTURE, COMM. & CONFLICT 31 (2007).

83. NYSE, LISTED COMPANY MANUAL § 303A.01 (2009) [hereinafter NYSE LISTED COMPANY MANUAL], available at <http://nysemanual.nyse.com/lcm/> (providing the general rule); *id.* § 303A.00 (providing the exception for controlled companies).

84. See, e.g., WILLIAM T. ALLEN ET AL., COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION ch. 10, 11 (3d ed. 2009) (outlining examples including the duty of care and the use of the business judgment rule by courts to evaluate board actions in a conflict of interest scenario).

85. The detailed case studies presented in Part III.E illustrate tunneling in its various forms.

86. “Independent” in this case refers to the legal notion of that director status.

B. Asset Tunneling

Asset tunneling is different from cash flow tunneling in several ways. Asset tunneling involves the transfer of productive assets, as opposed to simply cash. Asset tunneling also tends to involve larger transaction size and be more of a one-time event, as opposed to recurring. Asset tunneling can also go in two directions: tunneling “out” (sale of assets for below fair value) and tunneling “in” (purchase of assets for above fair value, loans to insiders, and investments in related firms).⁸⁷

Corporate governance rules. Sale of all or substantially all of a firm’s assets aside, the corporate law rules governing approval of RPTs do not depend on transaction size, and thus are the same for cash-flow and asset tunneling, and for asset tunneling in or out.⁸⁸ The transaction can be approved by noninterested directors, regardless of size.⁸⁹ If so approved, it is nearly immune from shareholder attack. The shareholders would have to persuade a court that the transaction was on terms so grossly unfair that the directors must not have satisfied the notoriously lax business judgment rule.⁹⁰ One case study in Part III.E.2.b involves a rare exception in which a court reversed a mixed asset and equity tunneling transaction involving MacAndrews and Forbes’s (M&F) purchase of overpriced assets from controller Ronald Perelman. However, challenges to asset tunneling often fail, as in the Coca-Cola case study discussed in Part III.E.2.a or the frequent entrepreneur claims that venture capitalists have tunneled away the firm’s assets.⁹¹

U.S. law never requires shareholder approval for asset tunneling “in.” The law requires approval for asset tunneling “out” only if the transaction is so extraordinary that it involves sale of “all or substantially all assets.”⁹² Even then, the interested insider can vote in favor of the transaction, and minority shareholders have no appraisal rights.⁹³

Disclosure rules. Turning to disclosure of asset tunneling, the proxy rules, discussed above for cash flow tunneling, still apply. U.S. law requires additional disclosure only if the transaction is material. Firms can hide so much by staying below the materiality threshold.

Even for material RPTs, disclosure is often weak or absent. The principal accounting rule which requires disclosure of material RPTs, SFAS 57, contains a suitably broad

87. For loans to insiders or investments in related firms, one can see the asset acquired as the obligation of the insider to repay, or the securities issued by the related firm.

88. In this sense, cash flow and asset tunneling are similar.

89. *Id.*

90. The discussion below oversimplifies the rather complex corporate law rules governing such suits, and in particular, collapses the problem of bringing a derivative suit in the face of demand requirements with the need to win such a suit on the merits, if it can be brought. *See, e.g., ALLEN ET AL., supra* note 84, at 255–59, 383–95 (explaining duty of care, business judgment rule, and demand requirements for derivative suits). For details, see *id.* ch. 8 (duty of care and business judgment rule); ch. 10 (demand requirements for derivative suits).

91. Atanasov et al., *The Effect of Litigation on Venture Capitalist Reputation* (2009) (unpublished manuscript), available at <http://www.efa2009.org/papers/SSRN-id1343981.pdf>.

92. The threshold for “substantially all” is unclear, but a recent Delaware case suggests that it is more than a majority of assets by market value. *Hollinger Inc. v. Hollinger Int’l, Inc.* 858 A.2d 383 (Del. Ch. 2004).

93. DEL. CODE ANN. tit. 8, § 271 (2011); *Hariton v. Arco Elecs., Inc.*, 182 A.2d 22, 25 (Del. Ch. 1962), *aff’d*, 188 A.2d 123 (Del. 1963). In contrast, the MODEL BUSINESS CORPORATION ACT § 13.02(a)(3) does provide appraisal rights in this situation.

definition of what parties are related.⁹⁴ But there are exceptions for executive compensation and other “ordinary course of business” transactions.⁹⁵ Moreover, parties need not disclose even material RPTs if they are within a group which is consolidated for accounting purposes (accounting consolidation generally kicks in at 50% ownership).⁹⁶ Under Regulation S-X, companies should disclose material RPTs that “affect the financial statements,” including the transaction amount.⁹⁷ This implicitly contains the same exception for transactions within a consolidated group.⁹⁸

When firms disclose transactions, details can be scant or opaque. There is no requirement that the accountants verify that the transaction was on arms-length terms, unless the insiders so claim as part of the RPT disclosure (in which case the accountants must test this claim).⁹⁹ We offer a case study in Part III.E.2.a below involving Coca-Cola’s recurring asset sales to its majority owned subsidiary, Coca-Cola Enterprises (Enterprises), which totaled \$15 billion over 1985–2001, largely to pay for intangible franchise rights. By 2001, these rights represented over two-thirds of the book value of Enterprises’ assets. There was no disclosure of how the purchase price for the acquired assets was determined, and no outside market that would let shareholders value the franchise rights.¹⁰⁰ Hence there was no way for shareholders to assess fairness.¹⁰¹ Similarly, for material investments in affiliates, the facts of the investment will be stated, its amount will often be stated, but interest rates on loans or other measures from which investors could assess fairness will often be absent.¹⁰²

Tax rules. For cash flow tunneling, tax law had two potential impacts: tax authorities want to keep income within firms, and tax rules discourage pyramids.¹⁰³ The “anti-pyramid rules” constrain asset tunneling as well.¹⁰⁴ However, tax authorities will have limited interest in asset tunneling as such. For asset tunneling “out,” the tax authorities normally won’t care as long as the assets move from one taxable firm to another. They will care if assets move offshore, but similarly to cash flow tunneling, they have had limited success in policing transactions within a business group. Determining the fair value of a long-lived asset can be complex, especially for intangible assets. Some assets-for-equity transactions will be tax-free, as will all transactions within a tax-consolidated group (80% threshold).¹⁰⁵

Tax enforcement has even less effect on asset tunneling “in.” These transactions will lead to higher depreciation and hence lower taxable income by the acquirer. However,

94. FAS 57, *supra* note 68, at ¶ 1.

95. *Id.* at ¶ 19.

96. *Id.* at ¶ 1 (defining RPTs); *id.* at ¶ 2 (explaining an exception for transactions which are eliminated in consolidated financial statements).

97. Regulation S-X, 17 C.F.R. § 210.4-08 (1933).

98. *Id.*

99. FAS 57, *supra* note 68, at ¶ 3.

100. See Gordon et al., *supra* note 1, at 1–27 (outlining case studies involving asset sales).

101. *Id.*

102. *Id.*

103. See Morck, *supra* note 58 (illustrating that cash moving to and from un-consolidated subsidiaries could trigger tax and thus discourage a pyramid structure).

104. Asset tunneling moves the asset across a firm boundary. If pyramids are discouraged, there are fewer firm boundaries.

105. Regulation S-X, 17 C.F.R. § 210.4-08 (1933).

this will often be offset by higher capital gains taxes paid by the seller, so the net impact on tax revenue is not clear.¹⁰⁶ We are unaware of IRS efforts to challenge transactions for being overpriced.

Creditor protection rules. The bankruptcy and fraudulent conveyance rules discussed above for cash flow tunneling also apply to asset tunneling by insolvent or soon-to-be-insolvent firms.¹⁰⁷ Larger transactions provide greater incentives for creditor or bankruptcy trustee challenges.¹⁰⁸ A loan or other transfer to an insider will be treated as a preference and reversed if it occurs less than a year before a bankruptcy filing, but will be hard to challenge after that.¹⁰⁹

C. Equity Tunneling

The effect of legal rules on equity tunneling depends on the type of transactions. We consider here, as non-exhaustive examples, dilutive equity offerings, freezeouts, and sales of control. We also discuss insider trading, which fits our equity tunneling typology for purchases, but not for sales.¹¹⁰

1. Equity Offerings

Corporate Governance Rules. Corporate governance rules provide protection against dilutive offerings, but only partial protection.¹¹¹ Under corporate law, boards must approve equity offerings, including grants of options or restricted stock to executives. Under NYSE rules, shareholders must approve equity compensation plans, but have no say over individual grants if below the one percent threshold noted below.¹¹² Votes against option plans are uncommon, but the need to obtain shareholder approval for option plans likely constrains some firms.¹¹³

In the United States, for example, the Dodd–Frank Wall Street Reform and Consumer Protection Act and related SEC rules require shareholder “say on pay” to

106. The net tax benefit will be a function of the spread between ordinary and capital gains tax rates.

107. From this perspective, cash flow and asset tunneling are similar.

108. Larger transactions generally lead to more scrutiny, especially when the parties are going to receive less than their stakes as is often the case in bankruptcy.

109. 11 U.S.C. § 547(b)(4)(B) (2010).

110. There are a myriad of other forms of equity tunneling. One example, for firms that do not go public with two classes of common stock, involves a midstream “dual-class recapitalization.” This happens when a company offers to exchange low-voting shares for regular common shares on terms that non-controlling shareholders will find individually attractive, with the effect of increasing the insiders’ voting control, although not their economic stake. While dual-class structures are less common in the United States than in Canada or Europe, they have been growing in popularity since the 1980s. *See* Thomas Chemmanur & Yawen Jiao, *Dual Class IPOs, Share Recapitalizations, and Unifications: A Theoretical Analysis* (Mar. 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=1108857> (estimating that 10% of U-listed firms have dual-class share structure compared to 20% of all Canadian and Western European firms).

111. The level of protection varies both by the type and size of equity offering.

112. NYSE LISTED COMPANY MANUAL, *supra* note 83, § 312.03(a).

113. Proxy advisory firms typically establish guidelines on when they will recommend that shareholders approve a stock option plan. *See, e.g.*, RISKMETRICS GROUP, 2009 U.S. PROXY VOTING GUIDELINES SUMMARY 32 (2008), available at <http://www.usfunds.com/media/files/pdfs/compliancepolicies/RMG2009SummaryGuidelinesUnitedStates.pdf>.

begin in 2011.¹¹⁴ Shareholders will cast a nonbinding advisory vote, once every three years, on the overall compensation of all executive officers.¹¹⁵ Additionally shareholders can decide every six years whether to require more frequent votes (every one or two years).¹¹⁶ Issues such as how often shareholders will cast no votes, against what levels or types of compensation, and with what responses from companies, are yet unknown. Experience with “vote no” and similar campaigns against corporate directors in the United States, and with a say-on-executive-pay in the United Kingdom suggests that these advisory votes may induce some constraints, but likely not strong ones.¹¹⁷

U.S. corporate law, unlike many other countries, does not require companies to provide preemptive rights for share issuances, and companies rarely include these rights in their charters.¹¹⁸ The maximum number of authorized shares must be stated in a company’s charter, and shareholders approve charter amendments, but most charters authorize far more shares than are currently outstanding so this constraint rarely binds.¹¹⁹ Many company charters also authorize “blank check” preferred shares, which can be issued on any terms the board decides.¹²⁰

NYSE rules require shareholder approval if the company issues common shares (or securities convertible into common shares) exceeding one percent of the previously outstanding common shares for issuances to directors and officers, and five percent for issuances at market value to substantial shareholders.¹²¹ For very large offerings, above 20% of the company’s previously issued common shares, NYSE and NASDAQ rules require shareholder approval, with exceptions for public offerings for cash and “bona fide” private offers at market value.¹²² However, the rule does not cover preferred stock, even if the shares convey economic and voting rights similar to common stock.¹²³

114. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 951, 124 Stat. 1376, 1899 (2010); 17 C.F.R. § 240.14a-21 (2011).

115. 17 C.F.R. § 240.14a-21.

116. *Id.*

117. See Yonca Ertimur et al., *Shareholder Activism and CEO Pay*, REV. FIN. STUD. (forthcoming 2011), available at <http://ssrn.com/abstract=1443455> (explaining just vote no campaigns in the United States); Jie Cai & Robert Walkling, *Shareholders’ Say on Pay: Does it Create Value?*, J. FIN. & QUANTITATIVE ANALYSIS (forthcoming 2011), available at <http://ssrn.com/abstract=1030925> (explaining shareholder proxy proposals); Jeffrey N. Gordon, ‘Say on Pay’: *Cautionary Notes on the U.K. Experience and the Case for Shareholder Opt-In* (Columbia Law & Econ. Working Paper No. 336, 2009), available at http://ssrn.com/sol3/papers.cfm?abstract_id=1262867 (explaining the United Kingdom’s say on pay); Fabrizio Ferri & David Maber, *Say on Pay Votes and CEO Compensation: Evidence from the UK* (Mar. 11, 2011) (unpublished manuscript), available at <http://ssrn.com/abstract=1420394> (explaining the United Kingdom’s say on pay).

118. See REINIER KRAAKMAN ET AL., *THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH* 153–82 (2d ed. 2004) (providing an overview of legal strategies for freezeouts).

119. Shareholder approval of charter amendments is a very time consuming and costly process, so it is common in the United States for the number of authorized shares to greatly exceed the number of outstanding shares.

120. These preferred shares can target a particular type of investor and have a number of purposes, including takeover defense.

121. NYSE LISTED COMPANY MANUAL, *supra* note 83, § 312.03(b) (explaining that the threshold for issuance to a substantial security holder with no other affiliation to the company is five percent if the issuance price is at least the greater of book value or market value).

122. *Id.* § 312.03(c) (explaining the requirements for large offerings).

123. *Id.* (explaining that the rule does not cover preferred stock).

Ronald Perelman exploited this loophole in the M&F case study in Part III.E.2.b.¹²⁴

Disclosure Rules. Disclosure is required for most equity transactions between the company and insiders. For common shares (and options or other securities convertible into common shares), insiders must report all transactions, with the company or anyone else, regardless of size, under Exchange Act Section 16.¹²⁵ Section 16 covers only publicly registered classes of shares.¹²⁶ But transactions with insiders in unregistered shares must also be disclosed, as part of general disclosure of related party transactions, with a \$120,000 threshold.¹²⁷

After a long battle with executives over accounting for stock options ended in 2005, the company must treat issuance of options to executives as a compensation expense.¹²⁸ There is evidence that this change reduced option grants, especially for executives who previously received larger option grants than executives at similar firms.¹²⁹

While the compensation charge to income is now transparent, there remains a hidden tax cost to the company from using option compensation, relative to cash or restricted stock. Some (for “nonqualified” options) or all (for “qualified” options) of the option value becomes capital gain to the executive, with no deduction to the company.¹³⁰ The lost deduction increases the company’s tax liability, but its effective cost is not separately disclosed.

Equity-based compensation through stock options (or restricted stock awards) also affects a firm’s operating cash flow. In the year of grant, there is no cash flow impact. In the year when the restrictions on exercise lapse, the executive recognizes compensation income and the firm gets an offsetting deduction, which reduces tax liability and thus increases after-tax operating cash flow. For some firms, this tax benefit comprises a high percentage of total operating cash flow.¹³¹

Many firms offset dilution due to option grants by repurchasing shares. Imagine a firm that routinely offsets its option-based dilution. One can understand the cost of repurchasing shares as reflecting the cash cost of option compensation. But that is not how it is treated under accounting rules. The repurchase is a negative *financing* cash flow in the year of repurchase but does not offset the positive effect of the compensation deduction on operating cash flow. Thus, a firm which pays executives with options, but

124. See *infra* Part III.E.2.b (discussing the M87–Panavision deal, an example of asset tunneling).

125. Securities Exchange Act of 1934 § 16(a), 15 U.S.C. § 78p(a) (2006).

126. *Id.*

127. Regulation S-K, 17 C.F.R. § 229.404 (2006).

128. FIN. ACCT. STANDARDS BD., STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 123 (revised 2004) [hereinafter FASB 123], available at www.fasb.org/jsp/FASB/Page/PreCodSectionPage&cid=1218220137031#fas125 (replacing Accounting Principles Board Opinion No. 25, which allowed companies to report zero expense for options with an exercise price equal to current market value).

129. Yi Feng & Yisong Tian, *Options Expensing and Managerial Equity Incentives*, 18 FIN. MARKETS, INST. & INSTRUMENTS 195 (2009).

130. The executive normally pays ordinary income on the value of restricted stock, and, for non-qualified options, the “in-the-money” value of options. When the restrictions lapse, the company gets a corresponding deduction for compensation expense. The remaining option value is not taxed; any eventual gain to an executive is capital gain, with no deduction to the company. For “qualified” incentive stock options, the executive pays capital gain when the restrictions lapse and the company receives no deduction at all.

131. See Conrad S. Ciccotello et al., *Impact of Employee Stock Options on Cash Flow*, 60 FIN. ANALYSTS J. 39, 40–41 (2004) (stating that 20% of the operating cash flow of NASDAQ 100 firms during 1999–2001 reflects tax savings related to option grants, versus 3% for S&P 100 firms).

offsets the dilution by repurchasing shares, will report higher operating cash flow than a similar firm which pays executives in cash. It is unclear whether investors fully understand how option compensation affects cash flow.¹³²

Tax and Creditor Protection Rules. Tax and bankruptcy law do not directly affect equity issuances to insiders because equity issuance is not a taxable event. Indirectly, tax law encourages the use of equity compensation and limits its form. Internal Revenue Code Section 162 effectively limits non-incentive compensation to \$1 million per executive; the company can pay more than this but can deduct only \$1 million.¹³³ Restricted stock and stock options are treated as incentive compensation.

With regard to the form of compensation, taxation of stock options and restricted stock grants can be deferred until the restrictions lapse; the executive will then typically sell enough shares to pay the income tax.¹³⁴ As noted above, option compensation has a tax cost relative to cash or restricted stock, which is normally not disclosed.

2. Freezeouts

Corporate Governance Rules. These rules give minority shareholders moderate protection against underpriced freezeouts. Some countries require majority-of-minority approval of the freezeout price, but the United States does not.¹³⁵ Many controllers behave well, for example by creating a special committee of independent directors, negotiating the freezeout price with the committee (quasi arms-length negotiation), or conditioning the freezeout on majority-of-minority approval (or majority-of-minority acceptance of a first-step tender offer).¹³⁶ But some simply make a buyout offer directly to shareholders, which on average is likely at a lower price than the quasi-arms-length process would produce.¹³⁷ Some start by negotiating with a special committee, but switch to a tender offer if the committee insists on a higher price than the controller is willing to pay. And some simply bull ahead, assuming that they will do better in court defending the predictable suit by minority shareholders than by paying a higher price up front. The circumstances under which a first-step tender offer faces entire fairness review remain uncertain.¹³⁸

132. See generally Wayne R. Landsmann et al., *Which Approach to Accounting for Employee Stock Options Best Reflects Market Pricing?*, 11 REV. ACCT. STUD. 203 (2006) (discussing alternate potential accounting treatments of option compensation); Vladimir Atanasov & Eric O'Brien, *Is a CEO Worth Ten Percent of Net Cash Flow? Analysis of CEO Compensation at Nabors Industries (2010)* (unpublished manuscript) (on file with author) (case study of value extraction by insiders at Nabors Industries).

133. I.R.C. § 162 (2006).

134. I.R.C. § 83 (2004).

135. See KRAAKMAN ET AL., *supra* note 118 (providing an overview of legal strategies for freezeouts); see also O'NEAL & THOMPSON, *supra* note 7 (providing an overview of the U.S. regulation). We are deliberately terse in our treatment of this complex area.

136. For evidence on average freezeout prices, see Bates et al., *supra* note 1.

137. For a discussion of recent case law on freezeouts, see Subramanian, *supra* note 5. The buyout offer is typically followed by a freezeout merger, but damages are lower if the controller owns over 90% and can complete a short form merger, for which appraisal is the only remedy, and are lower even if the controller holds less than 90% because there are fewer minority shareholders left. *Id.*

138. Compare *In re CNX Gas Corp. S'holders Litig.*, 4 A.3d 397 (Del. Ch. 2010) (deciding minority stockholders' challenge to a controlling stockholder freeze-out structured as a first-step tender offer and a second-step merger) with *In re Pure Res., Inc. S'holders Litig.*, 808 A.2d 421 (Del. Ch. 2002) (deciding case

As against a hard-nosed controller, shareholders retain appraisal rights, but these are realistically available only for large shareholders. Moreover, they will be based on observable value after other forms of tunneling. Judges tend to trust market prices unless shown to be wrong in a particular case, and so appraised value is often heavily dependent on market price. If a controller is tunneling some of the firm's cash flow, engaging (or expected to engage) in equity tunneling, or simply uses private information about expected future cash flows to conduct a freezeout at an opportune time, then these factors will create a gap between market value and no-tunneling value, which minority shareholders are unlikely to recapture through appraisal.¹³⁹ Also, the same circumstances will apply towards the controller's ability to manipulate its financial reports to reduce market value.¹⁴⁰ In some situations, a class action suit will be available, but the effectiveness of this remedy depends on the uncertain vigor of class action counsel.¹⁴¹

Disclosure Rules. Freezeouts are affected by general public disclosure as well as freezeout-specific disclosure rules, which require detailed discussion of the freezeout process and the basis for any fairness opinion delivered to the company or the special committee.¹⁴² This disclosure helps to ensure that the market price reflects observable value, but for the reasons noted above, the pre-freezeout price will still likely be below the firm's no-tunneling value. Even so, disclosure helps to provide the information on which a lawsuit can be based.¹⁴³

Tax rules. Freezeout transactions involve a sale of shares by minority shareholders. This sale accelerates the payment of capital gains tax but can normally be structured to be tax-free for controllers. Since freezeouts are typically revenue-positive for the U.S. Treasury, they receive no special scrutiny.

Creditor Protection Rules. Freezeouts often involve borrowing the funds used to pay the minority. There can be occasional instances in which the company's solvency after the freezeout is in doubt. In these cases, the fraudulent conveyance rules might dissuade lenders from lending, in which case the freezeout will not happen.

A more important concern for a financially troubled firm involves a controller lending funds to the firm, and then using its creditor position to freeze out minority

where minority stockholders brought action to enjoin controlling stockholder's exchange offer).

139. See Atanasov et al., *supra* note 2, at 155–73 (giving an example of discounts in a high tunneling environment); Atanasov et al., *supra* note 12, at 19–20 (discussing discounts due to other sources of tunneling); Ernst Maug, *Efficiency and Fairness in Minority Freezeouts: Takeovers, Overbidding, and the Freeze-in Problem*, 26 INT'L REV. L. & ECON. 335, 335–79 (2006) (explaining discounts due to controller timing of the freezeout).

140. This is the opposite of the known tendency of firms to report unusually high earnings before IPOs. See generally Siew Hong Teoh et al., *Are Accruals during Initial Public Offerings Opportunistic?*, 3 REV. ACCT. STUD. 175 (1998) (concerning selecting accruals at the time of IPO's to report high earnings); Siew Hong Teoh et al., *Earnings Management and the Long-Run Market Performance of the Initial Public Offerings*, 53 J. FIN. 1935 (1998) (explaining issuers reporting in excess of cash flows). There is no comparable study of pre-freezeout versus post-freezeout earnings because post-freezeout firms are private.

141. For a recent example of class counsel non-vigor despite strong facts in a case involving Ronald Perelman, who has been a prior abuser of minority shareholders and creditors, see *In re Revlon, Inc. S'holders Litig.*, 900 A.2d 940 (Del. Ch. 2010) (deciding case where owners of common stock challenged the merger proposed by a controlling shareholder).

142. The principal regulation of going-private transactions is in the Securities Exchange Act. Securities Exchange Act of 1934 § 13, 15 U.S.C. § 78m (2006).

143. *Id.*

shareholders for little or no consideration. For example, the controller can swap its debt for a high percentage of the firm's post-swap shares (potentially 100%), thus diluting minority shareholders. These "loan-to-own" schemes sometimes take place in bankruptcy, and sometimes in its shadow. Therefore, fairness of price can be very hard to determine.¹⁴⁴

Corporate governance rules provide little protection against equity tunneling by controller-creditors. The controller, wearing its debtholder hat, has no fiduciary obligation to anyone.¹⁴⁵ If the non-conflicted directors can be persuaded to approve a debt-for-equity swap outside bankruptcy, a fiduciary duty suit against them is unlikely to succeed.¹⁴⁶ Once in bankruptcy court, most bankruptcy judges have little sympathy for equity holders.¹⁴⁷

3. Sales of Control

Corporate Governance Rules. Many countries limit the power of a controller to sell control, leaving the minority behind. This reduces the cost to purchase control, which can be efficient in some situations but also places the minority at risk of self-dealing by the new controller.¹⁴⁸ Many jurisdictions also require buyers to make an equal offer to be made to all shareholders.¹⁴⁹ Some countries (such as Bulgaria) require majority of minority approval of the transfer of control.¹⁵⁰ U.S. law does not directly protect minority shareholders against the risk of a sale of control but does provide some indirect constraints.

In general, a controller can sell his shares to whomever he pleases for whatever price the market sets. If the controller sits on the company's board, he has fiduciary duties in that capacity. The controller faces no separate duty, however, as a shareholder, except for a narrow exception for sale of control to a known (or reason to know) looter.¹⁵¹

However, sale of control at a premium is not so simple in practice. First, Delaware Corporate Law Section 203, adopted to limit hostile takeovers but supplanted in that function by the poison pill, limits a second-step freezeout following acquisition of a 15%

144. See Atanasov & O'Brien, *supra* note 132 (providing a case study involving Nabors Industries); Vladimir Atanasov et al., *An Empirical Investigation of Litigation Involving Venture Capitalists* (2009) (unpublished manuscript) (on file with author) (offering examples involving venture capital-backed firms).

145. A similar situation arises if the controller holds convertible preferred; the preferred shareholder may have effective control but few or no fiduciary duties. Jesse Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967, 975–76 (2006).

146. Often the costs of such a swap are thought to be much less than those that would occur in bankruptcy.

147. While deviations can and do occur, the absolute priority rule does put shareholders behind creditors.

148. See Gilson & Gordon, *supra* note 8, at 787–804 (concerning limits on controlling shareholders). See generally Mike Burkart et al., *Why Higher Takeovers Premia Protect Minority Shareholders*, 106 J. POL. ECON. 172 (1998) (discussing agency problems that arise in takeovers with new controlling parties); KRAAKMAN ET AL., *supra* note 118 (discussing the opportunism of shareholders).

149. This is common in the European Union. See KRAAKMAN ET AL., *supra* note 118 (arguing that unequal offers can lead to dilution of ownership and control).

150. See Vladimir Atanasov et al., *Learning from the General Principles of Company Law for Transition Economies: The Case of Bulgaria*, 31 J. CORP. L. 1004, 1014–15 (2006) (discussing minority approvals of tender offers in going-private transactions).

151. See KRAAKMAN ET AL., *supra* note 118 (exploring the tension between the roles of controller and shareholder).

stake, unless the acquisition is approved by the target's board or the acquirer obtains over 85% ownership in a single step.¹⁵² This law gives the independent directors substantial power.¹⁵³ They have a duty to use their Section 203 power to negotiate on behalf of the minority, and can refuse to approve the acquisition unless the acquirer offers to buy the minority's shares at the same price.¹⁵⁴ Selling control at a premium is easier for a firm if the firm uses dual-class shares, though here too the independent directors can use their Section 203 power to limit the premium the buyer pays for high-voting shares.¹⁵⁵

Second, if the firm has a poison pill in place, it will usually need to be waived to permit the sale of control.¹⁵⁶ Here too, the independent directors can refuse to waive the pill unless the acquirer buys all shares for the same price. For both Section 203 and the poison pill, the controller's nominees can often outvote the independent directors, but they will still face a suit for breach of fiduciary duty that they will likely lose.¹⁵⁷ As with freezeouts, some controllers bull ahead despite the expected lawsuit.¹⁵⁸

Disclosure Rules. The sale of control will not be a secret. The acquirer and the controller will each report the sale, including the price that the buyer paid for the controlling shares. The acquirer will report the acquisition and its future plans on Exchange Act Schedule 13D;¹⁵⁹ the controller must report as part of the general Exchange Act Section 16 system for insider reporting of trades in a company's shares,¹⁶⁰ and the company will thereafter report the new controller's ownership in its annual proxy statements.¹⁶¹

Tax Rules. No special rules apply.

Creditor Protection Rules. Usually, no special rules apply, because the transaction is between two shareholders, and does not directly affect the firm's solvency. However, lenders sometimes negotiate for loan terms which give them the right to be paid on a change of control (poison put covenants). If they distrust the new controller, lenders can demand repayment. More commonly, they will demand some compensation for agreeing to waive the right to repayment.

4. Insider Trading and Market Manipulation

Insiders can extract value by using their informational advantages to trade with less-informed investors in public securities markets at advantageous prices, thus extracting value from their counterparties. For purchases, insider trading fits the equity tunneling paradigm, in which insiders increase their fractional ownership at the expense of minority

152. See DEL. CODE ANN. tit. 8, § 203 (2001).

153. *Id.*

154. *Id.*

155. *Id.*

156. By their very design, poison pill defenses make the unwanted sale of control an undesirable event for the acquirer.

157. See KRAAKMAN ET AL., *supra* note 118 (discussing the types of protections for minority shareholders).

158. See, e.g., *In re Digex Inc. S'holder Litig.*, 789 A.2d 1176 (Del. Ch. 2000) (bringing action on behalf of minority shareholders to enjoin a merger between the defendants).

159. Securities Exchange Act of 1934 § 13(d), 15 U.S.C. § 78m(d) (2006).

160. Securities Exchange Act of 1934 § 16, 15 U.S.C. § 78p.

161. *Id.*

shareholders. Insider trading does not fit the equity tunneling paradigm for sales, however, because the losers are not the firm's shareholders, but instead is the market in general. Sometimes insiders can make these trades more profitable by manipulating the firm's trading price, either directly or by manipulating firm's results or the information it discloses to investors. A freezeout at an opportune time, including a freezeout originally made opportune by manipulating trading prices, firm performance, or disclosure, demonstrates an extreme case of the more general problem of insiders purchasing shares from outsiders at below-market prices.

Corporate Governance Rules. Insiders and firms are barred from trading on inside information by a combination of a general prohibition under Exchange Act Section 10(b) from trading while in possession of "material" inside information, and Exchange Act Section 16, under which officers, directors, and ten percent shareholders are also subject to "short swing profit recapture" rules, which extract any profit the insider earns from offsetting sales and purchases (or purchases and sales) within a six-month period.¹⁶² Both sets of rules are actively enforced.¹⁶³ The SEC and the stock exchanges investigate unusual trading before important announcements.¹⁶⁴ Violators face triple damages in a civil suit from the SEC, in addition to potential criminal liability.¹⁶⁵ Lawyers police the short-swing rules because they can earn fees by bringing suits on the company's behalf to recapture the insider's profits. Insider trading by directors and officers would also violate their fiduciary duties, but in practice this adds little to the 10(b) and 16 rules.¹⁶⁶

At the same time, insider trading rules do not reach certain areas. Insiders can lawfully profit by *not* trading—not selling before good news, nor buying before bad. They can rely on the Rule 10(b)(5-1) safe harbor for pre-arranged sales on a regular schedule—and then cancel a sale if good news is expected.¹⁶⁷ An insider who is willing to wait out the six-month short swing period can benefit from soft information that outside investors lack, but which is not material, or not probably so. In general, what insiders can do directly, they can often influence their firms to do as well.¹⁶⁸

Disclosure Rules. The short-swing profit recapture rules are combined with reporting rules governing all transactions in shares, options, and other equity derivatives.¹⁶⁹ Thus, trades by insiders must be either reported or actively concealed. Concealment would provide evidence of intent, and thus raise the risk of criminal

162. Securities Exchange Act of 1934 §§ 10(b), 16, 15 U.S.C. §§ 78j(b), 78p.

163. *SEC Enforcement Actions: Insider Trading Cases*, SEC.GOV, www.sec.gov/spotlight/insidertrading/cases.shtml (last visited Oct. 20, 2011).

164. *Id.*

165. For an overview of the insider trading rules, see ALLEN ET AL., *supra* note 84. For a discussion of the potential for insider trading rules and enforcement to affect share prices, see Laura Nyantung Beny, *Do Investors in Controlled Firms Value Insider Trading Laws? International Evidence*, 4 J.L. ECON & POL'Y 267 (2008); Utpal Bhattacharya & Hazem Daouk, *When No Law is Better than a Good Law*, 13 REV. FIN. 577 (2009); Utpal Bhattacharya & Hazem Daouk, *The World Price of Insider Trading*, 57 J. FIN. 75 (2002).

166. *Id.*

167. See Allen D. Jagolinzer, *SEC Rule 10b5-1 and Insiders' Strategic Trade*, 55 MGMT. SCI. 224, 226–27 (2009) (explaining that insiders can legally make a profit by not trading as long as they do not possess material information).

168. The corporation must comply with rules, notably Exchange Act Rule 10b-18, designed to limit price manipulation. Exchange Act Rule 10b-18, 17 C.F.R. § 240.10b-18 (2006). There is no corporate analogy to a Rule 10b5-1 plan. Exchange Act Rule 10b5-1, 17 C.F.R. § 240.10b5-1.

169. *Id.*

prosecution. The company reports quarterly the number of shares outstanding, which is related to whether it has issued or repurchased any shares, but not details of particular transactions.

Tax Rules. No special rules apply.

Creditor Protection Rules. Creditor protection rules do not reach transactions between insiders and other shareholders. They can restrict a corporation from purchasing shares from insiders shortly before bankruptcy. Repurchases from insiders within a year of the bankruptcy filing will be reversed.

D. An Overview of Gaps in Anti-Tunneling Rules

Parts III.A–C offered a detailed assessment of how particular rules affect particular forms of tunneling. In this Part, we take a step back and offer an overall assessment of how effective U.S. rules are in preventing tunneling. Table 1 contains an overview of our personal judgment on the strength of legal protections against different types of tunneling as none, minimal, weak, moderate, or strong. Some cells involve close calls, but the big picture is clear. For many tunneling types, there are significant gaps in legal controls.

Consider first the columns in Table 1. Corporate governance rules have the largest overall effect, but vary in strength and are minimal or weak in a number of areas. Disclosure rules are strong for equity tunneling and executive compensation but weak elsewhere. Moreover, many insiders will be willing to line their own pockets if the only constraint is telling shareholders what they have done. This particular disclosure dog is all bark and no bite. The most important effect of tax rules is indirect: they discourage pyramids and thus limit opportunities for intra-group asset tunneling and transfer pricing. Tax rules otherwise have little impact. Creditor protection rules matter for financially distressed firms, but only in some areas.

Consider now the rows of Table 1. Where corporate governance rules are weak, there is no assurance that another set of rules will pick up the slack. Controls on equity tunneling are reasonably robust, with the notable exception of executive compensation. In some other areas, all constraints are weak. The weak areas include: asset tunneling, cash flow tunneling through transfer pricing, and loans to insiders other than directors and officers.

Overall, U.S. legal constraints on tunneling can be described as a glass at best half-full.¹⁷⁰ The case studies in Part III.E confirm that the gaps identified in Table 1 can be exploited in the real world. For an aggressive insider, who will take whatever tunneling opportunities the legal system offers, the menu is rich, even if not unlimited. If the United States remains a mostly low-tunneling place, the explanation may owe much to constraints other than formal rules.¹⁷¹

At the same time, informal constraints can weaken over time. Executive

170. Our assessment of U.S. rules is far more detailed than, but consistent in spirit with, the conclusion by Holger Spamann that the United States scores only 2/5 on a corrected “LLSV” anti-director rights index. Holger Spamann, *The Law and Finance*, 23 REV. FIN. STUD. 467, 474 (2010).

171. See Black, *supra* note 9 (discussing the role of a variety of legal and market institutions in constraining self-dealing). For optimistic assessments of the overall level of tunneling by controllers at U.S. firms, compared to other countries, see Nenova, *supra* note 3; Dyck & Zingales, *supra* note 3. For evidence suggesting significant private benefits of control, see Michael J. Barclay & Clifford Holderness, *Private Benefits From Control of Public Corporations*, 25 J. FIN. ECON. 371 (1989).

compensation offers an example. Thirty years ago, no one worried much about the compensation of large firm CEOs. To become seriously rich, one had to found a firm, not merely run it. Today, many non-founder CEOs do get seriously rich, and there is general, albeit not universal concern that executives are overpaid and pay is often loosely tied to performance or to a competitive market for executive talent. The difference lies not in law—flabby then and only slightly less flabby now—but in norms.¹⁷²

Table 1 provides a research agenda in two ways. First, we predict that the principal gaps in tunneling protection will be exploited—that real-world examples will be found to correspond to those gaps. We offer examples in Part III.E. Second, although the cell entries are U.S.-specific, Table 1 offers a template for assessing tunneling protections in other countries. No country, we predict, will provide strong tunneling protection across the board. Some will do better than the United States in particular areas. Their rules might offer guidance on what one might call “best practices” in anti-tunneling rules.

E. Case Studies of Tunneling in the United States

Our analysis of the U.S. anti-tunneling legal system summarized in Table 1 suggests that there are significant weaknesses, which could be exploited by opportunistic controllers. We proceed in this Part with a detailed description of seven case studies that highlight the use of one or more of the tunneling techniques classified in Part II. The cases are grouped in three broad categories: (i) examples of cash flow tunneling; (ii) examples of asset tunneling; and (iii) examples of equity tunneling.

1. Cash Flow Tunneling Examples

Cash flow tunneling is often hard to document. SEC rules require disclosure of related-party transactions above a fairly low threshold, but not of what arms-length terms for these transactions would have been.¹⁷³ Yet, sometimes a related-party transaction is blatantly one-sided. We discuss below three cases of reported transactions between a corporation and its executives or controlled subsidiaries, which clearly involve highly beneficial terms for the corporation’s controllers.

a. Williams Sonoma and CEO Howard Lester

Our first case is based on transactions disclosed in the Williams Sonoma 2010 proxy statement involving the company leasing distribution facilities in Memphis, Tennessee from its long-term (recently retired) CEO and Chairman Howard Lester.¹⁷⁴ The proxy states:

Our Memphis-based distribution facilities include an operating lease entered into in July 1983 for a distribution facility in Memphis, Tennessee. The lessor is a general partnership (“Partnership 1”) comprised of W. Howard Lester and

172. For example criticisms of executive compensation, see CRYSTAL, *supra* note 6; BEBCHUK & FRIED, *supra* note 6; Jensen et al., *supra* note 6.

173. Regulation S-K, 17 C.F.R. § 229.404 (1975).

174. Williams–Sonoma, Inc., Definitive Proxy Statement (Form DEF 14A) (Apr. 8, 2010) [hereinafter Williams–Sonoma Proxy Statement], *available at* <http://www.sec.gov/Archives/edgar/data/719955/000119312510079027/ddef14a.htm>.

[former director and major shareholder] James A. McMahan. . . . Partnership 1 financed the construction of this distribution facility through the sale of a total of \$9,200,000 of industrial development bonds in 1983 and 1985. Annual principal payments and monthly interest payments are required through maturity [of the bonds] in December 2010. . . . As of January 31, 2010, \$175,000 was outstanding under the Partnership 1 industrial development bonds. We made annual rental payments in fiscal 2009, fiscal 2008 and fiscal 2007 of approximately \$618,000, plus interest on the bonds . . . , applicable taxes, insurance and maintenance expenses. The term of the lease automatically renews on an annual basis until the bonds are fully repaid in December 2010, at which time we intend to enter into a new short-term lease agreement on this facility.¹⁷⁵

The net effect of the transaction is as if Williams–Sonoma built a warehouse, financed it with industrial development bonds, and repaid the bonds, except that after repayment the building belongs to Lester and McMahan instead of Williams–Sonoma.¹⁷⁶ In addition, the \$618,000 annual rental cumulates to more than \$15 million over the life of the bonds, well in excess of the bond principal of \$9.2 million.¹⁷⁷ One can see this as partly cash-flow tunneling over time, as the loan is repaid and Lester and McMahan accumulate ownership, and partly as slow asset tunneling. The proxy also discloses a second similar, but larger deal:

Our other Memphis-based distribution facility includes an operating lease entered into in August 1990 The lessor is a general partnership (“Partnership 2”) comprised of W. Howard Lester, James A. McMahan and two unrelated parties. . . . Partnership 2 financed the construction of this distribution facility and related addition through the sale of a total of \$24,000,000 of industrial development bonds in 1990 and 1994. Quarterly interest and annual principal payments are required through maturity in August 2015. . . . As of January 31, 2010, \$9,625,000 was outstanding under the Partnership 2 industrial development bonds. We made annual rental payments of approximately \$2,582,000, \$2,577,000 and \$2,591,000 plus applicable taxes, insurance and maintenance expenses in fiscal 2009, fiscal 2008 and fiscal 2007, respectively. The term of the lease automatically renews on an annual basis until these bonds are fully repaid in August 2015.¹⁷⁸

Here, we cannot tell how much of the annual rental went toward paying bond principal and interest, versus simple profit to Lester and McMahan. However, the amounts Williams–Sonoma paid suggest a similar design, in which the rental payments are more than sufficient to repay the bonds, including interest. This arrangement leaves Lester and McMahan owning the warehouse once Williams–Sonoma repays the bonds in 2015, and provides likely cash flow along the way.¹⁷⁹

175. *Id.* at 66.

176. This is both the practical and the accounting reality.

177. The sum of payments of \$618,000 made annually until 2010 equals either \$16.7 million, if we take 1983 as the start date, or \$15.5 million, if we take 1985 as the starting date.

178. Williams–Sonoma Proxy Statement, *supra* note 174, at 66.

179. *See id.* (describing the financing for the Memphis distribution facility).

Williams–Sonoma has also been generous in its dealings with Howard Lester involving corporate aircraft.¹⁸⁰ The 2010 proxy informs shareholders that the company:

entered into an Aircraft Lease Agreement (the “Lease Agreement”) with a limited liability company (the “LLC”) owned by W. Howard Lester . . . for use of a Bombardier Global 5000 owned by the LLC Under the terms of the Lease Agreement, in exchange for use of the aircraft, we will pay the LLC \$375,000 for each of the thirty-six months of the lease term through May 15, 2011. We are also responsible for all use-related costs associated with the aircraft During fiscal 2009 and fiscal 2008, we paid a total of \$4,500,000 and \$3,185,000 to the LLC¹⁸¹

Williams–Sonoma apparently pays Lester enough so that Lester can own and use a jet for free, with profit left over.¹⁸² Likely, Williams–Sonoma designed the lease payments to leave Lester, over time, with full ownership of the jet for no cash outlay. The price of a used Bombardier Global 5000 is around \$35 million, so Williams–Sonoma pays monthly rent of more than 1% of the jet’s market value, more than ample to pay principal and interest on a loan that Lester might have taken out to buy the jet.¹⁸³

These cash flow and asset tunneling transactions were presumably approved by the Williams–Sonoma Board. Disclosure rules require that Williams–Sonoma describe the transactions in proxy statements, permitting some scrutiny (by academics at least), but shareholders were not asked to approve them.¹⁸⁴ Note, however, that the value transferred to Lester is not expressly stated, nor can we assess the total value transferred from the disclosures that Williams–Sonoma did make.¹⁸⁵

b. Excessive Perquisites at Buca, Inc.

Executive perquisites can also reflect cash flow tunneling that is not included in a company’s disclosure of executive compensation.¹⁸⁶ One example involves Buca, Inc. (Buca), the Minneapolis-based corporate parent of the Buca di Beppo restaurant chain. Our information comes from an SEC complaint, which the company settled.¹⁸⁷

The SEC alleged that Buca failed to disclose during 2000 to 2003 that its former CEO:

Improperly obtained reimbursement from Buca for personal expenses totaling nearly \$850,000, including ATM cash withdrawals, duplicate airline tickets,

180. *See id.* at 67 (describing transactions related to corporate aircraft).

181. *Id.*

182. *See id.* (describing transactions related to corporate aircraft).

183. As of September 21, 2011, Global Air (globalair.com) had an offer of four such aircrafts at an average price of \$31.9 million.

184. *See* SEC Related Party Transactions Which Affect the Financial Statements, 17 C.F.R. § 210.4-08(k)(1) (2009) (requiring companies to disclose related party transactions in financial statements); Williams–Sonoma Proxy Statement, *supra* note 174, at 65–66 (describing the policies related to relating party transactions).

185. *See* Williams–Sonoma Proxy Statement, *supra* note 174, at 67 (describing transactions related to corporate jets).

186. Excessive executive perquisites classify as cash flow tunneling, as they are potentially ongoing.

187. *See* *Litigation Release No. 20312*, SEC.GOV (Sept. 28, 2007), <http://www.sec.gov/litigation/litreleases/2007/lr20312.htm> (describing the settlement of an injunctive action against Buca, Inc.).

family wedding expenses, dog kenneling, and home remodeling costs and that its former CFO improperly obtained reimbursement of more than \$111,000 for vacations and visits to strip clubs and other personal expenses.¹⁸⁸

The SEC also alleged that Buca failed to disclose its former CEO's and CFO's participation in various related party transactions, including the CEO's purchase of an Italian villa with Buca's funds and the CFO's ownership interest in a vendor with which Buca transacted more than \$1 million of business.¹⁸⁹

These transactions involve cash flow tunneling. Corporate governance rules again failed to stop these activities. Disclosure rules should have caught these payments, which would at least have made the tunneling visible. Why the auditors missed these payments, and how the SEC caught them, we are not sure. We also can't assess whether, if these payments had been disclosed, the disclosure would have been complete enough to take them out of a "tunneling" category, and put them instead into ordinary executive compensation.

c. Enron and Enron Global Power and Pipelines

Our third example of cash flow tunneling involves debt payments at non-arms-length terms. In 1994, Enron sold to the public a 42% stake in its subsidiary Enron Global Power and Pipelines (Pipelines), but retained both majority ownership and majority control of the Pipelines board.¹⁹⁰ Enron proceeded to enter into several loan transactions with Pipelines over 1994–97 on terms favorable to Enron and unfavorable to Pipelines.¹⁹¹ In its 1997 proxy statement, Pipelines reported owing \$59 million to Enron from a variety of transactions.¹⁹² Interest rates on the whole amount were not disclosed, but Pipelines did say that it paid interest on \$6 million of this amount at rates from 9% to 12%.¹⁹³ At the same time, Enron was indebted to Pipelines for \$7 million, which was an interest free advance.¹⁹⁴ If one nets these obligations, any interest paid by Pipelines with respect to \$7 million of debt to Enron is a pure cash transfer from Enron Pipelines to Enron. Once again, corporate governance rules did not block these transfers. Disclosure rules tell us that the transactions occurred, but not whether they were on market terms or, to the extent they were not, the dollars transferred from Pipelines to Enron.¹⁹⁵

2. Asset Tunneling Examples

We present two examples of asset tunneling. The first case involves a series of transactions of tangible and non-tangible assets between Coca-Cola and its partially controlled bottling subsidiary Coca-Cola Enterprises. These transactions have clearly

188. *Id.*

189. Complaint at ¶¶ 13–14, 18, *SEC v. Buca, Inc.*, 2007 WL 2914451 (D. Minn. Oct. 3, 2007) (No. 07-411).

190. Enron Global Power and Pipelines LLC, Proxy Statement (Schedule 14A) (Mar. 28 1997) (on file with author) (describing outstanding indebtedness and various loan agreements).

191. *Id.*

192. *Id.*

193. *Id.*

194. *Id.*

195. Failure to report the interest rates of the transaction leaves a key piece of the puzzle missing.

benefited Coca-Cola at the expense of its subsidiary. The second example involves a transaction between M&F Worldwide and its controller by Ron Perelman, which is designed transfer a significant amount of wealth to Ron Perelman at the expense of the remaining shareholders in M&F Worldwide.

a. Asset Tunneling In: Coca Cola and Coca Cola Enterprises

Various transactions between Coca-Cola (Coke) and its 49% owned subsidiary Coca-Cola Enterprises (Bottling) illustrate asset tunneling by a parent company from a subsidiary.¹⁹⁶ Bottling's principal business is to bottle and distribute Coke products. Coke sold 51% of Bottling to the public in 1986.¹⁹⁷ Coke chose to hold just under 50% of Bottling so that it could retain control yet need not include Bottling in its consolidated financial statements.¹⁹⁸ Coke claimed not to control Bottling, in order to deconsolidate its results from Coke's consolidated financial statements.¹⁹⁹ But this was a thin pretense, even apart from Coke's near-majority stake. A majority of Bottling's directors were Coke or Bottling executives, large investors in Coke, or consultants to Coke.²⁰⁰

After the spin-off, Coke methodically sold additional bottling assets to Bottling at high prices, thus shifting value from Bottling to Coke, and boosting Coke's near-term income at Bottling's longer-term expense.²⁰¹ Typically, Bottling would buy a bottling plant for a price far above tangible asset value, and record the difference between the purchase price and the value of tangible assets as non-tangible franchise rights, amortized under the then-applicable rules over 40 years.²⁰² By 1992, \$5.6 billion in Bottling's assets (70% of total assets) consisted of these intangible franchise rights.²⁰³ Over 1987–2006, Bottling bought assets from Coke for a total of \$15 billion.²⁰⁴ Its average return on

196. This case study draws in part on a detailed analyst report on Coke's transactions with Bottling by Meyer et al., *infra* note 199. For allegations of continued tunneling, see *In re Coca-Cola Enters., Inc. S'holders Litig.*, No. 1929-cc, 2007 Del. Ch. LEXIS 147, at *7 (Del. Ch. Oct. 17, 2007). For more general discussion of tunneling between U.S. parents and their publicly traded subsidiaries, see Vladimir Atanasov et al., *Is There Shareholder Expropriation in the United States? An Analysis of Publicly Traded Subsidiaries*, 45 J. FIN. & QUANTITATIVE ANALYSIS 1 (2010).

197. See Meyer et al., *infra* note 199 (describing the sale).

198. See Coca-Cola Co., Annual Report (Form 10-K) (1987) (on file with author) [hereinafter Coca-Cola Annual Report]. For a discussion of the accounting rules, see also FIN. ACCT. STANDARDS BD., STATEMENT OF FINANCIAL ACCOUNTING NO. 94: CONSOLIDATION OF ALL MAJORITY-OWNED SUBSIDIARIES (Oct. 1987), available at <http://www.fasb.org/jsp/FASB/Page/PreCodSectionPage&cid=1218220137031#fas94>; FIN. ACCT. STANDARDS BD., ACCOUNTING PRINCIPLES BOARD OPINION NO. 18 (Mar. 1971), available at <http://clio.lib.olemiss.edu/u/?aicpa,337> (describing that when a parent owns between 20% and 50% of a second company (sub), parent can account for sub using the equity method, unless parent controls sub). Consolidation is required if parent owns 50% or more of sub. *Id.* Even if parent owns less than 50% of sub, consolidation is required if parent controls sub. *Id.*; see also Atanasov et al., *supra* note 196, at 1–4 (outlining research findings about expropriation in publicly-traded subsidiaries).

199. Albert Meyer et al., What is KO Worth: An Unconventional and Critical Analysis of the Quality of Coca-Cola Earnings (1998) (unpublished manuscript) (on file with authors).

200. *Id.*

201. *Id.*; see also Atanasov et al., *supra* note 196 at 23 (illustrating Coke's activities).

202. The transactions thus represent asset tunneling—the transfer of valuable long-term assets from Bottling to Coke.

203. See Coca-Cola Enters. Inc., Annual Report (Form 10K) (1992) (on file with the author) (listing franchise assets of \$5.651 billion and total assets of \$8.085 billion).

204. The figure can be obtained by summing values from Bottling's annual reports over that timeframe.

assets over this period was effectively zero (under 0.1%), while its peers averaged 4%.²⁰⁵ Clearly, Bottling did not get much value from these intangible rights.

Coca-Cola also sells syrup to Bottling. In 1993 (the year of Bottling's first electronically available proxy statement), these purchases accounted for \$1.2 billion or 40% of Bottling's cost of goods sold (COGS).²⁰⁶ Coke effectively controlled Bottling's profitability, through the prices it charged for syrup. We lack the information to determine whether Coke overcharged for syrup as well as for bottling assets, but the combination of syrup prices and asset prices effectively moved all profits from Bottling to Coke over a 20-year period.

Coke's tunneling from Bottling provoked a number of lawsuits by Bottling shareholders. One lawsuit in 1991 involved Bottling's purchase of the Johnston plant.²⁰⁷ Shareholder Three Bridges alleged that Coke "breached its fiduciary duties by exerting improper influence over [Bottling] in connection with the Johnston Acquisition in order to maximize its financial interests at the expense of [Bottling]." ²⁰⁸ Coke settled the lawsuit in 1996 with a minimal payment.²⁰⁹ A more recent attempt to challenge these asset sales failed entirely.²¹⁰ The Coke-Bottling saga eventually ended in 2010 when Coke bought Bottling's North American assets in exchange for assuming \$8.8 billion in Bottling debt, Coke's then remaining 34% equity stake in Bottling, and Coke bottling assets in Sweden and Norway.

The transactions between Coke and Bottling at a minimum involve asset tunneling "in" through overpriced asset sales from Coke to Bottling. They might involve cash flow tunneling (overpayment for syrup) as well. Corporate governance rules did not stop these wealth transfers; corporate law did not help, as shareholder lawsuits were brought but to no avail, and disclosure was minimal. Bottling never told its shareholders of the pre-acquisition profitability of the bottling assets it acquired and often didn't disclose purchase prices or sales volume for individual plants. One might quip that the principal beneficiaries from the 1997 death of long-time Coke CEO Roberto Goizueta were Emory University (to whom his estate made a \$20 million gift) and Bottling shareholders.²¹¹

Calculations on file with authors.

205. The four peers used in the analysis are: Pepsi Bottling Group, PepsiAmericas, Pepsi Gemex SA, and Cott Corp. of Quebec. These are the four bottling enterprises closest in asset value to Coca Cola Enterprises. Calculations on file with the authors.

206. Coca-Cola Enters. Inc., Annual Proxy Statement (Form DEF 14A) (Mar. 8, 1994), *available at* http://ir.cokecce.com/phoenix.zhtml?c=117435&p=irol-sec&control_symbol=.

207. *See Coca-Cola is Sued by Group of Holders of Its Largest Bottler*, WALL ST. J., Mar. 20, 1992, at A4 (describing subsidiary's shareholders lawsuit against parent corporation); Coca-Cola Bottling, Annual Proxy Statement (1992) (on file with author).

208. *Id.*

209. *See* Coca-Cola Bottling, Annual Report (Form 10-K) (1995) (on file with author) ("Under the terms of the settlement, (i) an amount of attorneys' fees was awarded to plaintiffs' counsel; (ii) [Bottling] agreed that, for five years after the date the settlement became final, any proposed merger or consolidation with, purchase of an equity interest in, for a consideration of \$10 million or more, or other acquisition of an entity or other ownership interest from, [Coke or a Coke affiliate] must be approved by a committee of three independent directors of [Bottling]; and (iii) the Company agreed to continue its share repurchase program through at least April 1996.").

210. *In re Coca-Cola Enters., Inc. S'holders Litig.*, No. 1927-CC, 2007 Del. Ch. LEXIS 147, at *18 (Del. Ch. Oct. 17, 2007).

211. *The Life and Legacy of Our Namesake Roberto C. Goizueta*, EMORY GOIZUETA BUS. SCH.,

Bottling's shares rose after his death, apparently on investor anticipation that the next Coke CEO would be a less aggressive tunneler.²¹²

b. Investments in Affiliates: Ronald Perelman and M&F–Panavision

Our second asset tunneling example also involves overpriced purchase of assets from a controlling shareholder. It involves a complex deal initiated in 2000 by Ronald Perelman involving two companies that he controlled—M&F Worldwide and Panavision, Inc. In the deal, M&F (of which Perelman owned 35%) bought Perelman's 83% stake in Panavision.²¹³ The deal had features of both asset and equity tunneling. Even before the deal was announced, the market had built a significant "Perelman" discount into M&F's stock price, reflecting his known penchant for mistreating minority shareholders.²¹⁴ M&F was the world's dominant producer of licorice, a steady business with high and stable margins, yet sold for a price-earnings ratio of five and price/cash-flow multiple of three, among the lowest multiples for companies listed on the NYSE.²¹⁵

In November 2000, when Perelman proposed that M&F purchase his stake in Panavision, Panavision was in financial trouble.²¹⁶ Its shares traded at \$6 per share, its market capitalization was only \$55 million, and its subordinated bonds traded at around 25% of face value.²¹⁷ Perelman proposed that M&F buy the shares for his original cost of \$26 per share (approximately \$190 million) plus an "appropriate premium."²¹⁸ Money manager Mario Cibelli summarized the proposed deal as follows: "Basically Perelman wants M&F to commit financial suicide to bail him out of a failing investment This deal would be nothing more than a bald transfer of wealth from M&F's public shareholders to Perelman."²¹⁹

Perelman controlled M&F's board. M&F created a committee of three independent directors, who hired their own counsel, engaged an investment banker, and negotiated with Perelman. In April 2001, with Panavision trading at \$4, agreed that M&F should purchase Perelman's stake in Panavision for \$17.50 per share—more than four times

http://www.goizueta.emory.edu/aboutgoizueta/life_legacy/index.html (last visited Sept. 12, 2011).

212. Following Goizueta's death, Bottling's one-month buy-and-hold market adjusted return (BHAR) relative to its peers (other publicly traded bottling companies) for October 1997 is 11%; its three-month BHAR relative to peers is 43%. Calculations on file with the authors.

213. Perelman held M&F shares through his holding company, Mafco, which also holds his interests in Panavision, Revlon, and other companies. For a general description of M&F, see M&F WORLDWIDE CORPORATION, <http://mandfworldwide.com> (last visited Oct. 20, 2011). Perelman acquired his Panavision stake for \$26 per share in a complex 1997 leveraged restructuring. See Andrew Bary, *Perelman's Price: Panavision Deal Draws Shareholder Suit*, BARRON'S, Nov. 20, 2000, at 45.

214. Extremely low price-earnings multiples can be an indicator of investor expectations for high future levels of asset and or equity tunneling by controllers. See Atanasov et al., *supra* note 12, at 39. The calculations for the ratios on are file with the authors.

215. Andrew Bary, *Ron Strikes Again: Another Perelman Plan Leaves Shareholders Steaming*, BARRON'S, Apr. 2, 2001, at 22.

216. Andrew Bary, *Deep Focus: Panavision's Debt is Putting Perelman in an Unflattering Light*, BARRON'S, May 6, 2002, at 13.

217. Calculations on file with the authors.

218. Calculations on file with the authors.

219. Jonathan R. Laing, *Party on, Ron: With his biggest holdings in the tank, Perelman is squeezing fellow investors*, BARRON'S, Jan. 29, 2001, at 17, 22 (quoting Mario Cibelli).

Panavision's trading price.²²⁰

Perelman received \$128 million in cash and M&F common and preferred shares for his Panavision stake, which had a market value of \$30 million.²²¹ The consideration included \$80 million in cash, 1.5 million M&F common shares, and 6.2 million M&F voting preferred shares.²²² The terms of the preferred shares made them, for all intents and purposes, common shares under another name.²²³ The transaction increased Perelman's ownership of M&F from 35% to 53%.²²⁴ The equity tunneling component arises because one can see this portion of the transaction as either an overpriced purchase of assets by M&F from Perelman, or an underpriced sale of M&F shares to Perelman, which diluted other M&F shareholders.

NYSE rules would require shareholder approval for a share issuance of this size in the form of common shares.²²⁵ M&F used preferred shares to take advantage of a loophole in the NYSE rules, which apply only to issuance of common shares.²²⁶ From the beginning, M&F shareholders objected vociferously to the transaction.²²⁷ Several major shareholders wrote and telephoned board members, and complained to the press after the transaction was proposed, but before it was completed.²²⁸ The special committee members chose not to meet with unhappy shareholders or to otherwise respond to shareholder complaints, and agreed to structure the transaction to avoid shareholder approval.²²⁹

When the special committee announced the approval of the transaction, M&F shares fell by 35% in a single day from \$5.09 to \$3.30/share.²³⁰ Several shareholders sued. Jonathan Vannini, a California investor who held about 5% of M&F's outstanding shares, settled by selling his shares to Perelman for \$10/share, twice the pre-announcement price, plus another \$1/share in litigation expenses.²³¹ A class action lawsuit was also filed.²³² Under a proposed settlement, M&F agreed to pay up to \$12 million (\$2.15/share) to M&F shareholders who had owned their shares continuously since April 19, 2001; the actual payment was likely to be around half this amount, plus \$2.75 million in fees for the class action lawyers.²³³ The settlement was expected to be paid by M&F's D&O insurer.²³⁴

The Delaware Chancery Court (Vice Chancellor Leo Strine) rejected the proposed

220. See Bary, *supra* note 216.

221. *Id.*

222. *Id.*

223. They have the same voting and dividend rights as the common shares.

224. Calculations on file with the authors. Perelman received a total of 7.7 million shares (1.5 million common and 6.2 million preferred), increasing his ownership by 18%.

225. See NYSE LISTED COMPANY MANUAL, *supra* note 83, § 312.03(a).

226. *Id.*

227. See Laing, *supra* note 219.

228. *Id.*

229. *Id.*

230. Andrew Barry, *The Trader: Half-point rate cut is worth 10% to the Nasdaq*, BARRON'S, Apr. 23, 2001, at MW3.

231. Dargar W. Bjorksten, *Expropriating Non-Controlling Shareholders, A Beginner's Guide* (May 2002) (unpublished manuscript) (on file with the authors).

232. See Bary, *supra* note 215.

233. See Bjorksten, *supra* note 231.

234. *Id.*

settlement as too low given the strong evidence suggesting that M&F had overpaid for Panavision.²³⁵ The case proceeded to trial. In mid-trial, Perelman agreed to rescind the entire transaction.²³⁶ When the rescission was announced, M&F shares rose 28%.²³⁷

The M&F–Perelman transaction shows the limits of corporate governance rules that rely heavily on approval of related party transactions by noninterested directors, without approval by noninterested shareholders. A shareholder vote would have prevented this transaction, but Perelman structured the transaction to avoid one.²³⁸ The noninterested directors approved a transaction that was laughable, and hired an investment bank—Houlihan Lokey Howard and Zukin—that somehow concluded the transaction was fair.²³⁹ Most judges would have accepted the class action settlement. Had an activist judge not rejected the settlement, Perelman’s cost to settle the resulting lawsuits would scarcely have put a dent into his gain from selling Panavision shares to M&F.

3. Equity Tunneling Examples

We conclude our case studies with two examples of equity tunneling. The first case involves a transfer of a significant portion of Fairchild Corporation’s equity to the CEO via equity-based compensation. In the second case, Enron’s CFO and outside investors effectively receive a large amount of free Enron common stock in exchange for participation in transactions designed to inflate Enron’s reported net income.

a. Executive Compensation at Fairchild Corporation

Fairchild Corporation took advantage of a variety of equity tunneling techniques during the first five years of control by CEO Jeff Steiner. The forms of equity tunneling included very large stock option grants, stock option re-pricing, and a dual-class recapitalization.²⁴⁰ The result was transfer of more than half of Fairchild’s value from the shareholders to Steiner and his family.²⁴¹

In 1985 Jeffrey Steiner bought a 25% stake—roughly 2 million shares—in Fairchild—then named Banner Industries—and was soon appointed CEO.²⁴² In 1987, he consolidated his control by causing Fairchild to engage in a dual-class recapitalization.²⁴³ The recapitalization gave shareholders ten days to exchange their regular “A” common

235. The settlement was rejected by several institutional shareholders. Dan Breen of Furtherfield Partners, a Houston investment manager, was quoted as saying, “I’m going to object to it. This was a fleecing of shareholders. Perelman took out almost \$130 million and it appears that the settlement may not total much more than \$10 million.” Andrew Bary, *Enron and Ron? Sounds familiar: Perelman may get his payoff, leaving little for M&F shareholders*, BARRON’S, Feb. 11, 2002, at 22.

236. *M&F Settles Investors’ Suit*, L.A. TIMES, July 30, 2002, <http://articles.latimes.com/2002/jul/30/business/fi-panavision30>.

237. *Id.*

238. See NYSE LISTED COMPANY MANUAL, *supra* note 83, § 312.03(a).

239. See Bjorkson, *supra* note 231.

240. See the prior discussion of equity tunneling in Part II.

241. For a discussion on Fairchild up to 1991, see CRYSTAL, *supra* note 6 at 85–95.

242. In June 1989, Fairchild did a two-for-one stock split. See Fairchild Corp., Annual Report (Form 10-K) (1989) (on file with author). In the discussion that follows, all share numbers are expressed in post-split equivalents.

243. See Fairchild Corp., Definitive Proxy Statements (1985–89) (on file with author).

shares for new Class B common shares.²⁴⁴ These shares were structured to be unattractive to outside investors. The B shares had 10 votes, but were not listed on an exchange and got only 50% of the dividends paid on the A shares.²⁴⁵ The recapitalization succeeded; Steiner ended up with a high percentage of the B shares and an absolute majority of votes.²⁴⁶ The company soon thereafter amended its charter to allow owners of B shares to freely convert them to A shares, thus giving Steiner both control and liquidity.²⁴⁷

By 1989, Steiner owned 47% of the Fairchild shares—2.08 million A shares (22% of the outstanding A shares) and 3.57 million B shares (95% of the outstanding B shares).²⁴⁸ He also held options to purchase another 375,000 shares (either A or B).²⁴⁹ Steiner achieved this increase in ownership from 25% to 47% through a series of stock option grants.²⁵⁰ Over 1987–90, he received options to purchase 3.6 million shares, against a base of only 9 million outstanding shares in 1987.²⁵¹ In addition to these huge grants, Steiner's cash compensation was highly generous for a small company with 1990 revenue of \$690 million and average net income over 1987–90 of \$15 million.²⁵² For example, his 1990 cash compensation was over \$6 million.²⁵³ Steiner's cash compensation roughly equaled the exercise prices of his options, so Steiner was using company cash to exercise his options, thus effectively receiving free shares.

Fairchild's board also repeatedly re-priced Steiner's options after declines in Fairchild's share price. For example, in 1987, options with an average exercise price of around \$7 had the exercise price reduced to \$5.16.²⁵⁴ In 1990, Steiner options with an exercise price around \$15 were re-priced to \$10.875.²⁵⁵

Steiner's transactions were principally equity tunneling. His high cash compensation can be seen either as cash flow tunneling or as reducing Steiner's cost to acquire shares, and thus forming part of an overall equity tunneling plan. The transactions were disclosed, but shareholders had no effective remedy, since Steiner controlled the Board.²⁵⁶ The transactions were disclosed, but shareholders had no way to block them. In light of the futility of contesting executive compensation packages in court, no shareholder lawsuits were filed.

244. *Id.*

245. *Id.*

246. *See* Fairchild Corp., Definitive Proxy Statements (1988–89) (on file with author).

247. *See* Fairchild Corp., Definitive Proxy Statement (1989) (on file with author).

248. *Id.*

249. *Id.*

250. *See* Fairchild Corp., Definitive Proxy Statements (1987–91) (on file with author).

251. *See* Fairchild Corp., Definitive Proxy Statements (1988–91) (on file with author). Steiner also received several hundred thousand share performance units. *See id.* Including these share performance units as effectively an equity claim, his ownership of Fairchild was closer to 49%. *Id.*

252. *See* Fairchild Corp., Definitive Proxy Statements (1987–90) (on file with author).

253. *See* Fairchild Corp., Definitive Proxy Statement (1991) (on file with author).

254. *Id.*

255. *Id.*

256. For example, in 1988 Fairchild appointed as a director the CEO's 26-year-old son, a medical student at the time. *See* Fairchild Corp., Definitive Proxy Statement (1989) (on file with author).

b. Dilutive Equity Offerings: Enron's Rhythms Transaction

Our second equity tunneling example involves a complex deal between Enron and an off-balance sheet special purpose entity that Enron created, called LJM1. In March 1998, Enron invested \$10 million in Rhythms, a private internet service provider, by purchasing 5.4 million shares of stock at \$1.85/share.²⁵⁷ In 1999, Rhythms went public.²⁵⁸ By May 1999, Enron held Rhythms shares worth \$300 million, but it was prohibited (by a lock-up agreement) from selling these shares before the end of 1999.²⁵⁹

Changes in the value of Rhythms stock were reflected on Enron's income statement. Enron was concerned about the volatility of Rhythms stock and wanted to hedge the position to capture the value already achieved and protect against income volatility.²⁶⁰ To achieve that goal, Enron CFO Andrew Fastow obtained board approval and created a limited partnership, LJM1, which purchased 6.8 million Enron shares (worth \$276 million at market value) for \$168 million (61% of their market value).²⁶¹ The partnership paid for the shares partly by giving Enron a \$64 million note and partly by having a subsidiary of LJM1 (Swap Sub) give Enron a 5-year "put" option to sell the Rhythms shares to the subsidiary at their current market price, which Enron valued at \$104 million.²⁶² Enron justified the discounted purchase price on the thin basis that they were restricted, but it was easy for LJM1 to realize most of the market value of the shares by hedging and then waiting for the restriction period to end.²⁶³ The put option was an obligation only of Swap Sub, with no recourse to LJM1.²⁶⁴

Swap Sub held only 3.2 million of the 6.8 million Enron shares sold to LJM1, plus \$4 million in cash.²⁶⁵ LJM1 was left with 3.6 million Enron shares with a market value of \$146 million, for which it had effectively paid at most \$68 million (the \$64 million note plus \$4 million contributed to Swap Sub).²⁶⁶ In effect, Enron sold 3.6 million shares to LJM1 at a 53% discount to market value.

On December 17, 1999, LJM1 paid back the \$64 million note to Enron.²⁶⁷ The source of this payment is unclear; perhaps LJM1 borrowed against its Enron shares or sold them "forward" with the transaction to close after the restriction period lapsed. If we assume that LJM1 sold shares to pay the note (which would have required selling 1.6

257. See Expert Report and Affidavit, *In re Enron Corp. Sec. Litig.*, 2006 WL 2432018 (S.D. Tex. Jan. 17, 2006) (No. H-01-3624) (discussing Enron's publicly traded equity and debt securities between October 19, 1998 and November 27, 2001); WILLIAM POWERS ET AL., REPORT OF INVESTIGATION BY THE SPECIAL INVESTIGATION COMMITTEE OF THE BOARD OF DIRECTORS OF ENRON CORP. 77 (Feb. 1, 2002), available at <http://news.findlaw.com/wsj/docs/enron/sicreport/index.html>.

258. *Id.*

259. *Id.*

260. *Id.*

261. Fastow became the sole and managing member of LJM Partners, LLC, which was the general partner of LJM Partners, L.P. This position, in turn, was the general partner of LJM1. Fastow raised \$15 million from two limited partners, ERNB Ltd. (affiliated with CSFB), and Campsie Ltd. (affiliated with NatWest). POWERS ET AL., *supra* note 257, at 69.

262. See Expert Report and Affidavit, *supra* note 257.

263. *Id.*

264. *Id.*

265. *Id.*

266. *Id.*

267. See Expert Report and Affidavit, *supra* note 257.

million shares), LJM1 would have retained 2 million Enron shares, effectively transferred for zero price. In addition, in 2000 Enron paid \$17 million to Swap Sub in exchange for cancelling the put option and return of the 3.2 million Enron shares held by Swap Sub.²⁶⁸ The beneficiaries of the equity tunneling were Fastow and the remaining investors in LJM1.²⁶⁹

The Rhythms transaction was approved by the Enron board, based on a fairness opinion from PriceWaterhouseCoopers. As in the M&F–Panavision example above, the company obtained a fairness opinion despite the extraordinarily unfairness of the transaction. Enron shareholders had no remedy and received minimal, opaque disclosure. In its 2000 financial statements, Enron told its shareholders the following in its financial statement note on related party transactions:

In 1999, Enron entered into a series of transactions involving a third party and the Related Party. The effect of the transactions was (i) Enron and the third party amended certain forward contracts to purchase shares of Enron common stock, resulting in Enron having forward contracts to purchase Enron common shares at the market price on that day, (ii) the Related Party received 6.8 million shares of Enron common stock subject to certain restrictions and (iii) Enron received a note receivable, which was repaid in December 1999, and certain financial instruments hedging an investment held by Enron.²⁷⁰

Enron’s accountants and lawyers considered this to be sufficient disclosure of a major related party transaction. We defy anyone to understand from this disclosure the actual transaction, or that Enron had in fact transferred \$100 million of value to Fastow and collaborators.

IV. INFORMAL MECHANISMS THAT LIMIT TUNNELING

In Part III, we have illustrated that gaps exist in the U.S. laws that permit tunneling to occur not only in theory, but also in practice. While the examples of tunneling described in the previous Part are striking, the common belief is that tunneling in the U.S. is neither severe nor widespread.²⁷¹ If there are gaps in the U.S. laws, and some tunnelers do indeed take advantage of them, then why aren’t tunneling opportunities more widely exploited? One reason might be that there are also informal mechanisms that complement the law and limit tunneling.²⁷² This Part offers a discussion of how these informal mechanisms work and what gaps remain after they are considered.

A. Equity Ownership of the Tunneler

In the absence of laws and legal enforcement of tunneling, tunneling managers could choose any or all of the techniques described earlier in the Article. Assume, however, that the manager’s own equity stakes are relatively high, and the market is placing a

268. *Id.*

269. *Id.*

270. *See* Enron Corp., Annual Report (Form 10-K) (2000) (on file with author).

271. At first glance, tunneling might be thought to be a problem confined to “emerging markets,” and not developed ones.

272. Black, *supra* note 9, at 798–99; Dyck & Zingales, *supra* note 3, at 577–79.

reasonable valuation on the company's shares. A rational tunneling manager might choose to limit certain types of tunneling that negatively impact operational performance, such as cash flow and asset tunneling, because the tunneling manager harms her own wealth more by engaging in those activities than by forgoing them. The controller could consume excess perquisites (like Buca) but the bottom line impact on earnings or the damage to shareholder perceptions about the firm could reduce the value of the controller's shares by more than the value gained by excess perquisite consumption. In the parlance of economics, one might say that the tunneler's choices were rational. Thus, high stock valuations (measured by price to earnings ratio) and/or significant insider equity stakes limit incentives for cash flow and asset tunneling, which will reduce equity value by a multiple of earnings cost.²⁷³

A controller might continue to tunnel equity even if she owns a large number of shares already (similar to Fairchild) as equity tunneling alone does not impact operational assets, just who owns them. In this event, a negative market reaction to the threat of equity tunneling could provide some deterrence, as the value of the controller's existing shares would fall. This was not a significant deterrent to Perelman in the M&F–Panavision transaction, however.²⁷⁴ The market's reaction to equity tunneling is influenced, in part, by the quality of disclosure that the law requires; the market mechanism does not operate independently of the law.

B. The Controller's Reputational Concerns

Engaging in egregious tunneling could impact the controller's ability to employ her human capital in future business endeavors. If the public were to learn of examples of excessive perquisite consumption or outrageous executive compensation, it could negatively impact the ability to obtain another C-suite position. Thus, controllers who want to maintain the real option to move inside the business world (perhaps to a more lucrative CEO position) or into other areas, such as politics, might be constrained in their choice and level of tunneling activities.

Alternatively, if a controller is not concerned about career options, she may feel no such constraints. This may be the case similar to Perelman or Steiner, where an individual has accumulated power and dominates the "independent" Board. This type of controller is not concerned with being selected to lead any other organization. The controller's focus then is not on building an outside reputation but instead on optimizing her tunneling strategy within the firm.

Even in the case where a controller has no intention of leaving the enterprise, shaming may impact tunneling behavior.²⁷⁵ For example, the media may call attention to outrageous examples of tunneling.²⁷⁶ For mass media impact, simple cash flow examples may be the most powerful since they can be easily understood in the context of ordinary life. Examples would include Buca-like perquisites, such as a controller spending large

273. See Atanasov et al., *supra* note 2, at 155–63 (demonstrating how tunneling impacts valuation).

274. See Bary, *supra* note 216 (describing the transaction).

275. Alexander Dyck et al., *The Corporate Governance Role of the Media: Evidence From Russia*, 63 J. FIN. 1093, 1097 (2008).

276. *Id.*

amounts of cash on vacation homes, parties, and personal services.²⁷⁷ To the extent that anyone can “publish” to a broad audience using the web, private websites or blogs may also be a powerful shaming tool.

Shaming has its limits. For example, the complex financial transactions underlying Enron’s Rhythms deal would be hard for the public to digest.²⁷⁸ Complexity also allows the tunneler to claim a “fair deal” and cloud the issue, similar to Perelman in the M&F–Panavision transaction.²⁷⁹ Complexity thus provides a shield against shaming. Thus, similar to the examples discussed in the prior section, most types of asset and equity tunneling would tend to have some immunity to shaming.

Shaming by more sophisticated members of the financial press is also possible, but in the financial media context some outlandish cases of executive perquisites or compensation are viewed as a “badge of honor.” If an executive is of high quality, then she has more perquisites and higher compensation, ipso facto. Several notorious examples, including Grasso at the NYSE, suggest that the threat of shaming is a weak deterrent for excessive “incentive” compensation.²⁸⁰

Financial analysts have the tools to recognize and assess the impacts of tunneling transactions. To the extent that analysts are rewarded for recognizing value-destroying tunneling propensities and communicating them to the market, they have incentives to monitor tunneling by controllers. Since large firms tend to have the largest analyst following, this effect would be most prominent in larger firms. Controllers in smaller firms that have little or no analyst coverage have less to worry about from analysts. Regardless of the level of analyst coverage, some analysts may be reluctant to shame large firms as such practice might limit an analyst’s further access to top executives. Moreover, the complexity of some asset and equity tunneling schemes in the United States like Enron–Rhythms—along with weak disclosure—may outstrip even analysts’ ability to discern the impacts.

C. Actions by Other Shareholders

Controllers who tunnel can face risks imposed by other shareholders. Even with only rudimentary legal protections, other large shareholders can have an influence on what a tunneling manager chooses to do. Large shareholders, such as institutional or individual block holders in most cases, have a range of options open to them. At one end of the spectrum, they can simply sell their shares as long as there is a liquid market for the firm’s equity. Large block sales can harm the stock price and deter tunneling managers. At the other end of the spectrum, tunneling managers can face the risk of a battle for corporate control. In this case, the law’s provisions regarding shareholder rights and proxy procedures are clearly important.

277. The perquisite consumption in Buca, as discussed earlier, was striking in both its scale and scope.

278. Rhythms involves off-balance sheet financings with an array of embedded options. This is much more difficult for the public to digest than an executive boarding the family pet at expensive kennels on the “company dime.”

279. For example, Bary, *supra* note 216, writes: “In an interview with the *New York Times* in December, Perelman showed characteristic chutzpah, saying it was astounding to him that his Panavision proposal had aroused shareholder opposition. He called the plan the perfect transaction and contended that Panavision is undervalued partly because of the small public float in the stock.”

280. Jensen et al., *supra* note 6, at 1.

D. Organizational Transparency

Organizational transparency might also impact tunnelers' choices. Simple organizational structures make tunneling transactions easier to spot and understand. Transparency thus improves the functioning of each of the informal factors discussed in this Part. Complex organizational structures—such as pyramids—are relatively uncommon in the United States.²⁸¹ Therefore, organizational structure might be a factor in the relatively low overall level of tunneling in the United States. There is disagreement on the degree to which tax law, for example multiple taxation of dividends, explains the scarcity of pyramids.²⁸² Regardless of the reasons, the existence of simple, transparent organizational structures provides a deterrent to tunneling.²⁸³

In contrast, opaque or complex organizational structures provide tunnelers with more opportunities to engage in transactions that are difficult to both detect and analyze. Tunneling from subsidiary organizations is one example, as demonstrated by the Coke–CCE case.²⁸⁴ These cases demonstrate that the tunneler might have strong incentives to “prop” her organization by tunneling from a controlled subsidiary. In a complex organizational structure, tunneling incentives may be even stronger than those to manage earnings.²⁸⁵

E. Liquid Stock Markets

Liquid markets are the foundation that underlies much of the discussion of complementary mechanisms. If the market reflects a reasonable amount of information about the controller's tunneling activities, then the movement of the stock price provides a signal of the valuation impact. Negative reactions to disclosures about tunneling provide a discipline that is similar to, but less extreme than, actions aimed at a change in corporate control.

F. Remaining Gaps

In summary, when we consider the complementary mechanisms together with the legal restrictions on tunneling, several gaps in the coverage remain. In particular, complex transactions involving asset tunneling and/or equity tunneling are difficult for the informal mechanisms to detect. Often these transactions are done within complex organizational structures.²⁸⁶ Evaluating these types of tunneling activities depends upon due diligence by various monitors both inside and outside of the firm, including media, analysts, block holders, and independent directors. Equity-based compensation remains

281. Morck, *supra* note 58, at 143; Randall Morck & Bernard Yeung, *Dividend Taxation & Corporate Governance*, 19 J. ECON. PERSP. 163, 164 (2005).

282. *Id.*

283. Morck, *supra* note 58, at 163; Steven Bank & Brian R. Cheffins, *The Corporate Pyramid Fable*, 84 BUS. HIST. REV. 435, 439 (2010).

284. See Atanasov et al., *supra* note 196, at 7 (arguing that a lack of public announcements make tunneling more difficult to detect).

285. John C. Coffee, Jr., *A Theory of Corporate Scandals: Why the U.S. and Europe Differ* (Columbia Law and Econ., Working Paper No. 274, 2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=694581.

286. The Enron–Rhythms case is a good example.

another mechanism that largely escapes informal mechanisms, due in part to its positioning as being “aligned” with investor interests and partly due to its relative complexity compared to simpler forms of remuneration.

V. IMPLICATIONS DESIGN AND ENFORCEMENT OF LAW

Our principal goals in this Article are to highlight areas of comparative strength and weakness in the regulatory control of tunneling and offer evidence that the apparent weaknesses we identify are real and are sometimes exploited. Proposing detailed reforms to address specific weaknesses is well beyond our scope. Still, we can offer some general observations and recommendations.

A. Reduce Legal and Accounting Arbitrage Opportunities

Tunneling, by its nature, is a transfer of wealth across boundaries. One motive for tunneling is arbitrage created by wedges in the law. One prior motive for using executive stock options was to allow off-income-statement compensation, because the options were treated as not involving compensation expense if granted with an exercise price equal to current share price.²⁸⁷ Executive stock options remain favored by the rules governing cash flow disclosure—the company’s tax deduction when an option is exercised boosts cash flow from operations—while the share repurchases needed to offset share dilution from option issuance are considered cash flows from financing.

Asset tunneling is encouraged by the different treatment of the transaction by seller and buyer. For Coca-Cola and Enterprises, Coca-Cola could report large profits by selling bottling plants and franchise rights to Enterprises for well above their value on Coca-Cola’s books. Yet there was no offsetting expense for Enterprises, which recorded goodwill—which was written off at the time over 15 years; today it is not written off at all unless materially impaired.²⁸⁸

An executive who defers his compensation or pension income often earns above-market interest rates. The company records the expense over time and *not* as a compensation expense. The true compensation is hidden, so use of this disguise is encouraged.

Harmonizing tax rules will reduce incentives for arbitrage. For example, one motive for cash movement is tax arbitrage—transferring profits to an entity or individual paying a lower tax rate. Once transferred, the profits may be vulnerable to tunneling. In general, a flatter tax with broader applicability reduces this motive.

B. Shareholder Power to Approve or Challenge Self-Dealing

U.S. corporate law is director-centric. What the outside directors approve, the shareholders can rarely contest. Thus, if a passive board approves a tunneler’s dealings, shareholders have few remedies. Perhaps we should rethink the degree to which corporate law protects self dealing transactions—especially large ones—even when approved by outside directors. The M&F–Panavision case study involved gross self-

287. See FASB 123, *supra* note 128.

288. The wedge between the treatment by the seller and buyer becomes larger as goodwill write-offs decline.

dealing, approved by independent directors.²⁸⁹ The only surprise was the outcome, in which a Delaware judge rejected a settlement and Ron Perelman later agreed to rescind the transaction.²⁹⁰ In the Enron case studies, insiders fooled Enron's outside directors with complex transaction structures.²⁹¹ At Fairchild, CEO Steiner increased his ownership from 25% to 47% through equity-based executive compensation.²⁹²

Ex-post judicial remedies are only one response to self-dealing. Ex ante approval of significant transactions—by a majority of non-conflicted shareholders—has promise as well. In M&F, Perelman was able to avoid an M&F shareholder vote. He relied on a loophole in NYSE rules which allowed M&F to issue voting preferred shares without this vote.²⁹³ The recent Dodd–Frank “say on pay” reform moves in this direction for executive compensation—albeit not very far.²⁹⁴

C. Disclosure of Self-Dealing Transactions

Several of our examples—notably Coca-Cola—illustrate that corporations do not effectively disclose self-dealing. There is a clear need for more complete disclosure, and for a broader range of related-party asset sales and purchases. Ideally, this disclosure should be close to real time, to allow shareholders to challenge before the corporation completes the transaction. Above a threshold size, disclosure might include the pro forma impact of the transaction on the company's financial statements, similar to pro forma financial statements for acquisitions. At present, corporations often cite disclosures in opaque footnotes, in the next annual report or proxy statement. Enron was not alone in ensuring that these disclosures conveyed little or no information to shareholders about its related party transactions.

D. Gatekeeper Review for Fairness

Increased disclosure may ensure fairness. Moreover, even with better disclosure, fairness may be hard for shareholders to assess. One approach to improving the fairness of self-dealing transactions would be for the government to require a company's auditors—or another “gatekeeper”—to assess the fairness of the terms for any transaction over a threshold size.²⁹⁵ The assessment would become public in the next annual report. But the insiders—knowing it was coming—would want to obtain the auditors' approval in advance, when the terms are still malleable and insiders could be adjusted to make the auditors comfortable.

Today, fairness opinions are sometimes laughably far from the truth, as our M&F and Enron examples illustrate. A touch of direct liability to minority shareholders would

289. *Supra* Part III.E.2.b.

290. *See generally In re CNX Gas Co. S'holder Litig.*, 4 A.3d 397 (Del. Ch. 2010).

291. *Supra* Parts III.E.1.c–3.b. In developed economies, complexity is often a tool of the tunneling controller.

292. *Supra* Part III.E.3.a.

293. *See* NYSE LISTED COMPANY MANUAL, *supra* note 83, § 312.03(a).

294. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

295. *See* Bernard Black & Reiner Kraakman, *A Self-Enforcing Model of Corporate Law*, 109 HARV. L. REV. 1911 (1996) (proposing such a scheme for Russia).

reduce this problem; however, we do not conclude how much liability is optimal for a corporation to incur. Another solution may be for shareholders to choose the gatekeeper—a strategy that might also address the pro-management bias of compensation consultants.²⁹⁶

VI. SUMMARY

This Article first unbundles tunneling by focusing on what is being taken: cash flow, assets, or equity. The result is a more granular understanding of how insiders extract wealth from firms, and how different laws and regulations affect insiders' choices of whether and how to tunnel. Our analysis on how laws and norms affect different forms of tunneling in the United States identifies a number of gaps in the overall system of anti-tunneling legal protections. We then confirm that these loopholes are real, not merely theoretical, by offering case studies where they were exploited.

These are the core messages from our survey of law and tunneling: opportunities exist and are sometimes exploited. This raises the question of how the loopholes can be closed—or at least limited. We offer some general suggestions, but as our analysis suggests, there are no simple solutions. Close one loophole, and a determined tunneler will seek another.

296. For discussions of this problem, see generally BEBCHUCK & FRIED, *supra* note 6; CRYSTAL, *supra* note 6.

References

- George A. Akerlof & Paul M. Romer, *Looting: The Economic Underworld of Bankruptcy for Profit*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 1993.
- WILLIAM T. ALLEN ET AL., COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION (3d ed. 2009).
- William T. Allen et al., *Function Over Form: A Reassessment of Standards of Review in Delaware Corporation Law*, 56 BUS. LAW. 1287 (2001).
- John Armour et al., *Private Enforcement of Corporate Law: An Empirical Comparison of the UK and US*, 6 J. EMPIRICAL LEGAL STUD. 687 (2009).
- Vladimir Atanasov, *How Much Value Can Blockholders Tunnel? Evidence from the Bulgarian Mass Privatization Auctions*, 76 J. FIN. ECON. 191 (2005).
- Vladimir Atanasov et al., *An Empirical Investigation of Litigation Involving Venture Capitalists* (2009) (unpublished manuscript) (on file with author).
- Vladimir Atanasov et al., *Is There Shareholder Expropriation in the United States? An Analysis of Publicly-Traded Subsidiaries*, 45 J. FIN. & QUANTITATIVE ANALYSIS 1 (2010).
- Vladimir Atanasov et al., *How Does Law Affect Finance? An Examination of Equity Tunneling in Bulgaria*, 96 J. FIN. ECON. 155 (2010).
- Vladimir Atanasov et al., *Unbundling and Measuring Tunneling* (Univ. Tex. Sch. of Law, Law & Econ. Res. Working Paper No. 117, 2008), available at <http://ssrn.com/abstract=1030529>.
- Vladimir Atanasov & Eric O'Brien, *Is a CEO Worth Ten Percent of Net Cash Flow? Analysis of CEO Compensation at Nabors Industries* (2010) (unpublished manuscript) (on file with author).
- Jae-Seung Baek et al., *Business Groups and Tunneling: Evidence from Private Securities Offerings by Korean Chaebols*, 61 J. FIN. 2415 (2006).
- Steven Bank & Brian R. Cheffins, *The Corporate Pyramid Fable*, 84 BUS. HIST. REV. 435 (2010).
- Ronen Barak & Beni Lauterbach, *Estimating the Private Benefits of Control from Block Trades: Methodology and Evidence* (Jan. 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=965668>.

- Michael J. Barclay & Clifford G. Holderness, *Private Benefits from Control of Public Corporations*, 25 J. FIN. ECON. 371 (1989).
- Thomas W. Bates et al., *Shareholder Wealth Effects and Bid Negotiation in Freeze-Out Deals: Are Minority Shareholders Left Out in the Cold?*, 81 J. FIN. ECON. 681 (2006).
- Lucian Ayre Bebchuk et al., *Stock Pyramids, Cross Ownership, and Dual Class Equity: The Mechanisms and Agency Costs of Separating Control from Cash Flow Rights*, in CONCENTRATED CORPORATE OWNERSHIP (Randall K. Morck ed., 2000).
- LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* (2004).
- Thorsten Beck et al., *Law, Endowments, and Finance*, 70 J. FIN. ECON. 137 (2003).
- Thorsten Beck et al., *Law and Finance: Why Does Legal Origin Matter?*, 31 J. COMP. ECON. 653 (2003).
- Laura Nyantung Beny, *Do Investors in Controlled Firms Value Insider Trading Laws? International Evidence*, 4 J.L. ECON. & POL'Y 267 (2008).
- Henk Berkman et al., *Expropriation Through Loan Guarantees to Related Parties: Evidence from China* (Apr. 18, 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=981285>.
- Dan Berkowitz et al., *Economic Development, Legality, and the Transplant Effect*, 47 EUR. ECON. REV. 165 (2003).
- Marianne Bertrand et al., *Ferretting Out Tunneling: An Application to Indian Business Groups*, 117 Q. J. ECON. 121 (2002).
- Utpal Bhattacharya & Hazem Daouk, *When No Law is Better than a Good Law*, 13 REV. FIN. 577 (2009).
- Utpal Bhattacharya & Hazem Daouk, *The World Price of Insider Trading*, 57 J. FIN. 75 (2002).
- Bernard Black, *The Corporate Governance Behavior and Market Value of Russian Firms*, 2 EMERGING MKTS. REV. 89 (2001).
- BERNARD BLACK, *IN RE ENRON SECURITIES LITIGATION* (2006), available at <http://ssrn.com/abstract=1528457>.
- Bernard S. Black, *The Legal and Institutional Preconditions for Strong Securities Markets*, 48 UCLA L. REV. 781 (2001).

- Bernard Black & Reinier Kraakman, *A Self-Enforcing Model of Corporate Law*, 109 HARV. L. REV. 1911 (1996).
- Mike Burkart et al., *Why Higher Takeover Premia Protect Minority Shareholders*, 106 J. POL. ECON. 172 (1998).
- Jie Cai & Ralph A. Walkling, *Shareholders' Say on Pay: Does It Create Value?*, J. FIN. & QUANTITATIVE ANALYSIS (forthcoming 2011), available at <http://ssrn.com/abstract=1030925>.
- Yan-Leung Cheung et al., *Tunneling, Propping and Expropriation: Evidence from Connected Party Transactions in Hong Kong*, 82 J. FIN. ECON. 343 (2006).
- Conrad Ciccotello et al., *Impact of Employee Stock Options on Cash Flow*, 60 FIN. ANALYSTS J. 39 (2004).
- John C. Coffee, Jr., *A Theory of Corporate Scandals: Why the U.S. and Europe Differ* (Columbia Law and Econ., Working Paper No. 274, 2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=694581.
- GRAEF CRYSTAL, *IN SEARCH OF EXCESS: THE OVERCOMPENSATION OF AMERICAN EXECUTIVES* (1991).
- Harry DeAngelo et al., *Going Private: Minority Freezeouts and Stockholder Wealth*, 27 J.L. & ECON. 367 (1984).
- Asli Demircuc-Kunt & Vojislav Maksimovic, *Law, Finance, and Firm Growth*, 53 J. FIN. 2107 (1998).
- Jianping Deng et al., *Privatization, Large Shareholders' Incentive to Expropriate, and Firm Performance* (Aug. 2007) (unpublished manuscript), available at [http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS5.2/\\$FILE/Deng,+Gan,+He+-+Privatization.pdf](http://www.ifc.org/ifcext/cgf.nsf/AttachmentsByTitle/PS5.2/$FILE/Deng,+Gan,+He+-+Privatization.pdf).
- Mihir A. Desai et al., *Theft and Taxes*, 84 J. FIN. ECON. 591 (2007).
- Simeon Djankov et al., *The Law and Economics of Self-Dealing* (Dec. 2005) (unpublished manuscript), available at <http://ssrn.com/abstract=864645>.
- Alexander Dyck et al., *The Corporate Governance Role of the Media: Evidence from Russia*, 63 J. FIN. 1093 (2008).
- Alexander Dyck & Luigi Zingales, *Private Benefits of Control: An International Comparison*, 59 J. FIN. 537 (2004).

- Yonca Ertimur et al., *Shareholder Activism and CEO Pay*, REV. FIN. STUD. (forthcoming 2011), available at <http://ssrn.com/abstract=1443455>.
- Yi Feng & Yisong Tian, *Options Expensing and Managerial Equity Incentives*, 18 FIN. MARKETS, INST. & INSTRUMENTS 195 (2009).
- Fabrizio Ferri & David Maber, *Say on Pay Votes and CEO Compensation: Evidence from the UK* (Mar. 11, 2011) (unpublished manuscript), available at <http://ssrn.com/abstract=1420394>.
- Jesse Fried & Mira Ganor, *Agency Costs of Venture Capitalist Control in Startups*, 81 N.Y.U. L. REV. 967 (2006).
- Eric Friedman et al., *Propping and Tunneling*, 31 J. COMP. ECON. 732 (2003).
- Ronald J. Gilson & Jeffrey N. Gordon, *Controlling Controlling Shareholders*, 152 U. PA. L. REV. 785 (2003).
- Elizabeth A. Gordon et al., *Related Party Transactions and Corporate Governance*, in 9 ADVANCES IN FINANCIAL ECONOMICS 1 (2004).
- Jeffrey N. Gordon, *'Say on Pay': Cautionary Notes on the UK Experience and the Case for Shareholder Opt-In* (Columbia Law & Econ. Working Paper No. 336, 2009) (unpublished manuscript), available at http://ssrn.com/sol3/papers.cfm?abstract_id=1262867
- Campbell R. Harvey et al., *The Effect of Capital Structure When Agency Costs are Extreme*, 74 J. FIN. ECON. 3 (2004).
- Randall A. Heron & Erik Lie, *Does Backdating Explain the Stock Price Pattern Around Executive Stock Option Grants?*, 83 J. FIN. ECON. 271 (2007).
- Alan D. Jagolinzer, *SEC Rule 10b5-1 and Insiders' Strategic Trade*, 55 MGMT. SCI. 224 (2009).
- Michael C. Jensen et al., *Remuneration: Where We've Been, How We Got to Here, What are the Problems, and How to Fix Them* (Harvard NOM, Working Paper No. 04-28, 2004), available at <http://ssrn.com/abstract=561305>.
- Guohua Jiang et al., *Tunneling through Intercorporate Loans: The China Experience*, 98 J. FIN. ECON. 1 (2010).
- Simon Johnson et al., *Tunneling*, 90 AM. ECON. REV. 22 (2000).
- REINIER KRAAKMAN ET AL., *THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH* (2d ed. 2004).

Ariane Lambert-Mogilansky et al., *Capture of Bankruptcy: Theory and Russian Evidence* (Ctr. for Econ. & Fin. Research, Working Paper No. 38, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=253334.

Wayne R. Landsman et al., *Which Approach to Accounting for Employee Stock Options Best Reflects Market Pricing?*, 11 REV. ACCT. STUD. 203 (2006).

Rafael La Porta et al., *Investor Protection and Corporate Valuation*, 57 J. FIN. 1147 (2002).

Rafael La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113 (1998).

Rafael La Porta et al., *Legal Determinants of External Finance*, 52 J. FIN. 1131 (1997).

Rafael La Porta et al., *What Works in Securities Laws?*, 60 J. FIN. 1 (2006).

Ross Levine, *Law, Finance, and Economic Growth*, 8 J. FIN. INTERMEDIATION 8 (1999).

Ross Levine, *The Legal Environment, Banks, and Long-Run Economic Growth*, 30 J. MONEY, CREDIT & BANKING 596 (1998).

Harold Marsh, Jr., *Are Directors Trustees? Conflict of Interest and Corporate Morality*, 22 BUS. LAW. 35 (1966).

Ernst Maug, *Efficiency and Fairness in Minority Freezeouts: Takeovers, Overbidding, and the Freeze-in Problem*, 26 INT'L REV. L. & ECON. 355 (2006).

Albert Meyer et al., *What is KO worth? An Unconventional and Critical Analysis of the Quality of Coca-Cola's Earnings* (1998) (unpublished manuscript) (on file with author).

Jian Jane Ming & T.J. Wong, *Earnings Management and Tunneling through Related Party Transactions: Evidence from Chinese Corporate Groups* (EFA 2003 Annual Conference Paper No. 549, 2003), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=424888.

Randall Morck, *How to Eliminate Pyramidal Business Groups—The Double Taxation of Inter-Corporate Dividends & Other Incisive Uses of Tax Policy*, in TAX POLICY AND THE ECONOMY (James Poterba ed., 2004).

Randall Morck & Masao Nakamura, *Business Groups and the Big Push: Meiji Japan's Mass Privatization and Subsequent Growth* (Nat'l Bureau of Econ. Res., Working Paper No. 13171, 2007), available at <http://ssrn.com/abstract=989883>.

Randall Morck & Bernard Yeung, *Dividend Taxation & Corporate Governance*, 19 J. ECON. PERSP. 163 (2005).

Tatiana Nenova, *The Value of Corporate Votes and Control Benefits: A Cross-Country Analysis*, 68 J. FIN. ECON. 325 (2003).

F. HODGE O'NEIL & ROBERT P. THOMPSON, *OPPRESSION OF MINORITY SHAREHOLDERS AND LLC MEMBERS* (2d ed. 2004).

Edward L. Rock, *Saints and Sinners: How Does Delaware Corporate Law Work?*, 44 UCLA L. REV. 1009 (1996).

Mark Roe, *Legal Origins and Modern Stock Markets*, 120 HARV. L. REV. 460 (2006).

Holger Spamann, 'Law and Finance' Revisited, 23 REV. FIN. STUD. 467 (2010).

Guhan Subramanian, *Post-Siliconix Freeze-Outs: Theory and Evidence*, 36 J. LEGAL STUD. 1 (2007).

Siew Hong Teoh et al., *Are Accruals During Initial Public Offerings Opportunistic?*, 3 REV. ACCT. STUD. 175 (1998).

Siew Hong Teoh et al., *Earnings Management and the Long-Run Underperformance of Initial Public Offerings*, 53 J. FIN. 1935 (1998).

Table 1. Law and Tunneling

This table summarizes the strength of tunneling protections for small-to-moderate transactions. In some cases, additional protections may apply for very large transactions (for example, shareholder approval of large issuances of common shares to insiders, or for sale of “all or substantially all” assets). We consider creditor protection rules that apply to firms that are in financial distress (or would be after the tunneling); these rules provide essentially no tunneling protection for other firms.

	Corporate governance rules	Disclosure rules	Tax rules	Creditor protection rules
Cash flow tunneling				
Transfer Pricing	Weak	Weak	Indirect: discourage pyramids Weak (US to foreign); none (US to US)	Weak
Excessive executive compensation	Weak	Strong	Weak	Minimal
Asset tunneling				
Asset sales to related parties	Weak	Weak	Indirect: discourage pyramids Direct: none or minimal	Moderate
Asset purchases from related parties	Minimal			Rare
Investments in affiliates	Weak			Rare
Divert business opportunities	Minimal	None		None
Equity tunneling				
Dilution through sale of shares	Moderate	Strong	None	None
Dilution through executive compensation		Moderate		
Freezeouts		Strong		
Sales of control		Moderate		
Insider trading				
Mixed forms of tunneling				
Loans to directors and exec. officers	Strong	n.a.	n.a.	n.a.
Loans to other insiders or related firms	Weak	Weak	None	Moderate

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities*.

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

ECGI Working Paper Series in Law

Editorial Board

Editor	Luca Enriques, Allen & Overy Professor of Corporate Law, Faculty of Law, University of Oxford
Consulting Editors	John Coates, John F. Cogan, Jr. Professor of Law and Economics, Harvard Law School Paul Davies, Senior Research Fellow, Centre for Commercial Law, Harris Manchester College, University of Oxford Horst Eidenmüller, Freshfields Professor of Commercial Law, University of Oxford Amir Licht, Professor of Law, Radzyner Law School, Interdisciplinary Center Herzliya Roberta Romano, Sterling Professor of Law and Director, Yale Law School Center for the Study of Corporate Law, Yale Law School
Editorial Assistants	Tamas Barko , University of Mannheim Johannes Gaul, University of Mannheim Vanessa Wang, University of Mannheim

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.global/content/working-papers) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
-----------------------------	---

Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html
-------------------------	---