

ARTICLE

AGENCY COSTS, CHARITABLE TRUSTS, AND CORPORATE CONTROL: EVIDENCE FROM HERSHEY'S KISS-OFF

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In July 2002 the trustees of the Milton Hershey School Trust announced a plan to diversify the Trust's investment portfolio by selling the Trust's controlling interest in the Hershey Company. The Company's stock jumped from \$62.50 to \$78.30 on news of the proposed sale. But the Pennsylvania Attorney General, who was then running for governor, opposed the sale on the ground that it would harm the local community. Shortly after the Attorney General obtained a preliminary injunction, the trustees abandoned the sale and the Company's stock dropped to \$65.00. Using standard event study methodology, we find that the sale announcement was associated with a positive abnormal return of over 25% and that canceling the sale was followed by a negative abnormal return of nearly 12%. Our findings imply that instead of improving the welfare of the needy children who are the Trust's main beneficiaries, the Attorney General's intervention preserved charitable trust agency costs of roughly \$850 million and foreclosed salutary portfolio diversification. Furthermore, blocking the sale destroyed roughly \$2.7 billion in shareholder wealth, reducing aggregate social welfare by preserving a suboptimal ownership structure of the Company. Our analysis contributes to the literature of trust law by supplying the first empirical analysis of agency costs in the charitable trust form and by highlighting shortcomings in supervision of charities by the state attorneys gen-

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eral. We also contribute to the literature of corporate governance by measuring the change in the Company's market value when the Trust exposed the Company to the market for corporate control.

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INTRODUCTION

Domestic tax-exempt charitable organizations hold roughly \$2.4 trillion in assets and have roughly \$1.2 trillion in annual revenues.¹ These impressive figures speak to the American impulse toward philanthropy.² But the ugly secret about charitable organizations is that their lack of

1. See Treasury Inspector Gen. for Tax Admin., Dep't of the Treasury, Performance Measures and Improved Tracking Would Help the Exempt Organizations Function Better Allocate Resources I (2008), available at <http://www.ustreas.gov/tigta/auditreports/2008reports/200810057fr.pdf> (on file with the *Columbia Law Review*).

2. Measured as a share of Gross Domestic Product, charitable giving in the United States is estimated to be "roughly three times larger than" in the second-place United Kingdom. Joel L. Fleishman, Public Trust in Not-for-Profit Organizations and the Need for Regulatory Reform, *in* *Philanthropy and the Nonprofit Sector in a Changing America* 172,

clearly defined owners invites deadweight losses arising from agency costs. True, the state attorneys general have formal authority to ensure that the managers of such organizations efficiently pursue a bona fide charitable purpose.³ In reality, however, the typical state attorney general is an elected political official for whom the supervision of charitable organizations offers little political payoff. Accordingly, scholars tend to assume the existence of significant agency costs in charitable trusts and other charitable organizations.⁴

A separate agency problem arises in the context of the public corporation. The concern here is that the interests of the company's managers will diverge from those of the shareholders. To align managers' incentives with the interests of shareholders, the law gives shareholders various rights, including the right to sell their shares, which invites a takeover bid if the company's current management yields inferior returns. An alternative mechanism for minimizing corporate agency costs arises when the firm has a controlling shareholder or a large blockholder.⁵ A controlling shareholder or a large blockholder is more likely than an ordinary shareholder to have a concrete financial incentive to monitor actively and, if necessary, to impose value-maximizing operations on the company's managers. Indeed, a host of scholars and policymakers have come to embrace the utility of monitoring by blockholders,⁶ and the incidence of such control blocks is increasing among public U.S. firms and is quite common among public companies in Europe.⁷

175 (Charles T. Clotfelter & Thomas Ehrlich eds., 1999) [hereinafter Fleishman, Public Trust].

3. See Restatement (Second) of Trusts § 391 cmt. a (1959) (“[A] suit to enforce a charitable trust can be maintained by the Attorney General of the State in which the charitable trust is to be administered.”); Marion R. Fremont-Smith, *Governing Nonprofit Organizations: Federal and State Law and Regulation* 305–24 (2004) (discussing power of state attorneys general to oversee charitable trusts).

4. See, e.g., Richard A. Posner, *Economic Analysis of Law* § 18.5, at 547 (7th ed. 2007) [hereinafter Posner, *Economic Analysis*] (“[A charitable trust’s] board of trustees is self-perpetuating and is accountable to no one for the performance of the enterprise . . . [T]he carrot is missing along with the stick.” (citation omitted)); *infra* notes 219–221 and accompanying text.

5. See, e.g., Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 *UCLA L. Rev.* 811, 813 (1992) [hereinafter Black, *Agents*] (describing model of corporate governance in which major shareholders, generally large institutional investors, have incentive to oversee management effectively).

6. See, e.g., Ronald J. Gilson & Jeffrey N. Gordon, *Controlling Controlling Shareholders*, 152 *U. Pa. L. Rev.* 785, 785 (2003) (“[T]he presence of a large shareholder may better police management than the standard panoply of market-oriented techniques.”).

7. See John C. Coates IV, *Ownership, Takeovers, and EU Law: How Contestable Should EU Corporations Be?*, in *Reforming Company and Takeover Law in Europe* 677, 686, 687 fig.2 (Guido Ferrarini et al. eds., 2004) (showing frequent control of European corporations by single shareholders); Clifford G. Holderness, *A Survey of Blockholders and Corporate Control*, *Econ. Pol’y Rev.*, Apr. 2003, at 51, 52–53 (discussing frequency of substantial holdings by management and external blockholders in U.S. corporations).

In 2002 the foregoing agency problems collided in a salient real world event: the attempted sale of the Hershey Company by its controlling shareholder, the Milton Hershey School Trust, a Pennsylvania charitable trust. This paper uses the 2002 Hershey incident as a natural quasi-experiment to investigate empirically: (1) the agency costs that are inherent in the charitable trust form; (2) the shortcomings in supervision of charitable entities by the state attorneys general; and (3) the comparative merits of takeovers (i.e., the market for corporate control) versus monitoring by controlling shareholders (i.e., the market for partial corporate control) in minimizing agency costs in corporate governance.⁸ In so doing, we make fresh contributions to the literatures of trust law and corporate law and to the technical literature on event study methodology.

Background

The largest confectionary outfit in North America, the publicly traded Hershey Company (the “Company”) is the maker of such familiar goodies as Almond Joy, Jolly Ranchers, Kit Kats, Milk Duds, Reese’s Pieces, Twizzlers, York Peppermint Patties, and, of course, Hershey’s Chocolate Bars, Chocolate Kisses, and Chocolate Syrup.⁹ The Company is based in Hershey, Pennsylvania, a town that fancies itself “The Sweetest Place On Earth.”¹⁰ In Hershey, Cocoa Avenue intersects with Chocolate

8. Although a handful of prior studies consider the 2002 Hershey incident, none of these studies empirically investigates agency costs in the charitable trust form or addresses corporate agency costs. See Kenneth M. Eades et al., *Hershey Foods Corporation: Bitter Times in a Sweet Place* (2004), available at <http://ssrn.com/abstract=909738> (on file with the *Columbia Law Review*) (business school case study featuring Hershey incident); Evelyn Brody, *Whose Public? Parochialism and Paternalism in State Charity Law Enforcement*, 79 *Ind. L.J.* 937, 985–99 (2004) [hereinafter Brody, *Parochialism*] (examining Hershey incident, as well as other events relating to charity governance, for evidence of increasing state parochialism); Mark Sidel, *The Struggle for Hershey: Community Accountability and the Law in Modern American Philanthropy*, 65 *U. Pitt. L. Rev.* 1 (2003) [hereinafter Sidel, *Struggle for Hershey*] (analyzing Hershey incident as illustrative of behavior of various institutional actors); Jennifer L. Komoroski, Note, *The Hershey Trust’s Quest to Diversify: Redefining the State Attorney General’s Role When Charitable Trusts Wish to Diversify*, 45 *Wm. & Mary L. Rev.* 1769 (2004) (focusing primarily upon behavior of Attorney General in Hershey incident). A recent biography of Milton Hershey describes the 2002 incident but offers no policy analysis. See Michael D’Antonio, *Hershey: Milton S. Hershey’s Extraordinary Life of Wealth, Empire, and Utopian Dreams* 1–8, 255–67 (2006). In an unpublished manuscript, Harvey Dale uses the 2002 Hershey incident as one of three case studies on distortions in prudent trust investment laws applicable to charitable entities. See Harvey P. Dale, *Prudence Perverted: Politics, Perceptions, and Pressures* 11–29 (2006) (unpublished manuscript, on file with the *Columbia Law Review*), available at <http://www.tiff.org/TEF/seminars/archive/files/2006/PrudencePerverted.pdf>. Finally, several casebooks on trusts and estates note the Hershey incident in their treatment of charitable trusts. See, e.g., Roger W. Andersen & Ira Mark Bloom, *Fundamentals of Trusts and Estates* 465–67 (3d ed. 2007); Lawrence W. Waggoner et al., *Family Property Law: Cases and Materials on Wills, Trusts, and Future Interests* 15-38 to 15-39 (4th ed. 2006).

9. See *The Hershey Co.*, Annual Report (Form 10-K), at 1–3 (Feb. 19, 2008) [hereinafter 2008 Annual Report].

10. See Official Website—Hershey, PA, at <http://www.hersheypa.com> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*).

Avenue, the streetlights are shaped like Hershey's Kisses, and tourists are invited to stay in the Hotel Hershey or the Hershey Lodge while visiting local attractions such as Hershey's Chocolate World and Hersheypark.¹¹

Also based in Hershey, Pennsylvania, is the Milton Hershey School (the "School"), a boarding school that enrolls, feeds, and clothes about 1,700 needy students whose families have an average income of just under \$14,000.¹² The School's operations are funded by the Milton Hershey School Trust (the "Trust"), a Pennsylvania charitable trust worth roughly \$8.8 billion,¹³ more than all but the five largest domestic university endowments.¹⁴ The Hershey Trust Company (of Hershey, Pennsylvania) is trustee of the Trust.¹⁵ The Company, the School, the Trust, and the Hershey Trust Company were all founded about a century ago by Milton S. Hershey.¹⁶

The fortunes of the Company, the Trust, and the School are deeply intertwined. The Trust owns roughly 30% of the Company's shares and, because of a dual class stock arrangement, controls over 75% of the votes in the Company's elections.¹⁷ The Trust's stock in the Company, which is worth over \$4.7 billion, represents more than half of the Trust's \$8.8 billion corpus. Hershey dividends account for more than 40% of the Trust's investment income. Under the terms of the Trust's governing instrument, the managers of the School are selected from the board of the Hershey Trust Company and have the power to direct the investment and disbursement policies of the Trust (hence we refer to the School's man-

11. See Mary Davidoff Houts & Pamela Cassidy Whitenack, *Images of America: Hershey* 115 (2000) (providing photograph of streetlights); Map of Hershey, PA, at http://www.hersheypa.com/plan_your_trip/images/hershey_map.jpg (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*).

12. See Milton Hershey Sch., *Frequently Asked Questions*, at <http://www.mhs-pa.org/content/?/about/frequently-asked-questions> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*). The \$14,000 figure is for a student from a "family of three enrolling in August 2004–05." *Id.*; cf. Milton Hershey Sch., *Admissions Criteria*, at <http://www.mhs-pa.org/content/?/admissions/criteria> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*) (noting that School will consider financial need of applicants).

13. Hershey Trust summary statistics and the sources for those statistics are collected in *infra* Table 1. Unless stated otherwise, all figures are for the tax year ending on July 31, 2005.

14. The top five are Harvard (\$25.5 billion), Yale (\$15.2 billion), Stanford (\$12.2 billion), Texas (\$11.6 billion), and Princeton (\$11.2 billion). Number six is MIT (\$6.7 billion). See Nat'l Ass'n of Coll. & Univ. Bus. Officers, 2005 NACUBO Endowment Study, *Institutions Listed by Fiscal Year 2005 Market Value of Assets with Percent Change Between 2004 and 2005 Endowment Assets 1* (2006), available at <http://www.nacubo.org/documents/about/FY05NESInstitutionsbyTotalAssets.pdf> (on file with the *Columbia Law Review*).

15. See Milton Hershey Sch. Trust, *Second Restated Deed of Trust* pmbl. (Nov. 15, 1976) (on file with the *Columbia Law Review*) [hereinafter 1976 Deed of Trust].

16. See *infra* Part I.

17. See 2008 Annual Report, *supra* note 9, at 85–87 (describing Company's capital structure).

agers and the Hershey Trust Company's board collectively as the "trustees").¹⁸

The Trust's heavy investment in the Company is not healthy for the Trust or the Company. For the Trust, holding an undiversified portfolio makes the welfare of the School and the needy children it serves vulnerable to swings in the performance of a single company. The Trust, in other words, is exposed to what financial economists call uncompensated risk—risk for which there is no offsetting improvement in expected return and that could be avoided costlessly by diversifying the Trust's investment portfolio.¹⁹ Indeed, the modern law of trust investment has come to regard lack of diversification as close to a per se breach of fiduciary duty.²⁰

For the Company, the Trust's controlling interest has two distorting effects. First, no matter how poorly the Company's managers run the Company, so long as the Trust maintains its controlling interest and the trustees remain listless, the Company's managers need not worry about being displaced in a takeover. Second, fear that taking on normal business risks might impair the welfare of the needy children who depend on a steady flow of dividends from the Company to the Trust has caused the Company's managers to forgo potentially lucrative business opportunities. For example, Milton Hershey's immediate successor was so worried about the Trust's exposure to volatility in the cocoa bean market that, instead of expanding the business to meet exploding consumer demand in the economic boom that followed World War II, he rationed the Company's products, failed to increase manufacturing capacity, and ordered the construction of silos to store an enormous reserve of cocoa

18. See 1976 Deed of Trust, *supra* note 15, ¶¶ 4–7, 10, 25 (describing procedure for selecting School managers from Hershey Trust Company board).

19. See Jonathan R. Macey, *An Introduction to Modern Financial Theory* 22–27 (2d ed. 1998) [hereinafter Macey, *Introduction*] (describing potential to eliminate firm-specific risk through diversification and lack of compensation for failure to do so); John H. Langbein, *The Uniform Prudent Investor Act and the Future of Trust Investing*, 81 *Iowa L. Rev.* 641, 647–48 (1996) [hereinafter Langbein, *Trust Investing*] (same).

20. See *Unif. Prudent Investor Act* § 3 & cmt. (1994), 7B *U.L.A.* 29–30 (2006) (“A trustee shall diversify the investments of the trust unless the trustee reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying.”); *Restatement (Third) of Trusts* § 90(b), § 90 cmt. g (2007) (“[T]he trustee has a duty to diversify the investments of the trust unless, under the circumstances, it is prudent not to do so.”). Four “occasional exceptions,” none applicable to the Hershey Trust, are noted in Jesse Dukeminier, Stanley M. Johanson, James Lindgren & Robert H. Sitkoff, *Wills, Trusts, and Estates* 814 (7th ed. 2005). By contrast, the 1999 Pennsylvania enactment of the Prudent Investor Act excludes the trustees of trusts in existence prior to 1999 from the Act's explicit duty to diversify. See 20 Pa. Cons. Stat. Ann. § 7204(b) (West 2005); Act of June 25, 1999, No. 1999-28, sec. 6(b), 1999 Pa. Laws 212, 219. However, the Act's duty of prudence, see 20 Pa. Cons. Stat. Ann. § 7203(a) (West 2005), which is applicable to all trustees, will in most cases require diversification nonetheless. Cf. *In re Estate of Janes*, 681 N.E.2d 332, 336–39 (N.Y. 1997) (holding that failure to diversify violated duty of prudence).

beans.²¹ In part as a result of this missed opportunity, the Company still lacks an international presence comparable to that of competitors such as Mars, Nestlé, and Cadbury.²²

The Trust's concentration in the town of Hershey that the trustees will retain control over the Company indefinitely. Indeed, after the trustees abandoned the 2002 effort to diversify the Trust's holdings by selling the Trust's controlling interest in the Company, a local lawyer who organized protests against the sale told the *New York Times* that "Our cash cow is safe; we're feeling really great."²³ This sentiment, however, obscures the sad reality of the Trust's exposure to uncompensated risk and the growing disconnect between the Trust's value and its mission. Only 1,700 children benefit from the Trust's \$8.8 billion in assets.²⁴ The quid pro quo for charitable trust status, which the common law rewards with perpetual existence and the public subsidizes through generous state and federal tax exemptions,²⁵ is that the trust must benefit society by properly advancing a bona fide charitable purpose. It is hardly obvious that a trust with so large a corpus and so small a mission warrants the tax subsidy.

The Natural Quasi-Experiment

Having recognized the Trust's dangerous dependence on the Company, the trustees developed a plan in 2002 to diversify the Trust's holdings by selling the Trust's controlling interest in the Company. The *Wall Street Journal* broke the news of the trustees' plan on July 25, 2002.²⁶ The Company's stock, which is traded on the New York Stock Exchange, jumped to \$78.30 from the previous day's closing price of \$62.50,²⁷ implying that the capital markets saw vast potential in the Company that had not been realized while the Company was under the control of the Trust. However, the Pennsylvania Attorney General, who was then running for governor and whose office supervises Pennsylvania charitable trusts, brought suit to stop the sale on the grounds that it would lead to layoffs and plant closings that would harm the central Pennsylvania community. In September 2002, after the Attorney General obtained a preliminary

21. See Joël Glenn Brenner, *The Emperors of Chocolate: Inside the Secret World of Hershey and Mars 198–200* (1999).

22. See *id.* at 294.

23. Francis X. Clines, Whiff of Chocolate, and the Sweet Smell of Success, *N.Y. Times*, Sept. 19, 2002, at C6.

24. See *supra* notes 12–13 and accompanying text.

25. See Ilana H. Eisenstein, Comment, Keeping Charity in Charitable Trust Law: The Barnes Foundation and the Case for Consideration of Public Interest in Administration of Charitable Trusts, 151 *U. Pa. L. Rev.* 1747, 1759–68 (2003) (discussing tax exemptions and inapplicability of rule against perpetuities associated with charitable trusts).

26. See Shelly Branch, Sarah Ellison & Gordon Fairclough, Sweet Deal: Hershey Foods Is Considering a Plan to Put Itself Up for Sale, *Wall St. J.*, July 25, 2002, at A1 [hereinafter Branch et al., Sweet Deal].

27. We detail the source of our stock price data at *infra* notes 244–245 and accompanying text.

injunction, the trustees abandoned the sale.²⁸ The Company's stock dropped to \$65.00 on news of the trustees' surrender.

We use a standard event study econometric methodology to isolate price movements in Hershey's stock related to news of the sale from movements owing to ordinary market volatility.²⁹ We find that news of the proposed sale was associated with a statistically and economically significant increase in the Company's value (in event study jargon, a "positive abnormal return") of over 25%.³⁰ News of the sale's cancellation was associated with a statistically and economically significant decrease in the Company's value (a "negative abnormal return") of nearly 12%.³¹ The magnitude of these abnormal returns is astonishing; "positive abnormal returns of even 1 percent [are] considerable for competitive capital markets."³² In dollars, our findings imply that blocking the sale destroyed roughly \$2.7 billion in shareholder wealth,³³ suggesting a social welfare loss owing to a suboptimal ownership structure of the Company and its underlying assets.³⁴ Moreover, instead of improving the welfare of the needy children who are the principal objects of Milton Hershey's beneficence, the Attorney General's intervention preserved charitable trust agency costs on the order of roughly \$850 million (about 15% of the Trust's 2002 value) and continued the Trust's exposure to uncompensated risk.³⁵

Trust Law

Regarding trust law, this paper joins the small but growing empirical literature by providing the first quantitative empirical analysis of agency costs in the charitable trust form,³⁶ furthering the application of agency

28. See *infra* Part II.A.

29. "The event study methodology is well-accepted and extensively used in finance." Sanjai Bhagat & Roberta Romano, *Empirical Studies of Corporate Law*, in 2 *Handbook of Law and Economics* 945, 947 (A. Mitchell Polinsky & Stephen Shavell eds., 2007).

30. See *infra* Part III.C.2.

31. See *infra* Part III.C.2.

32. Bhagat & Romano, *supra* note 29, at 971.

33. See *infra* note 299.

34. The Company's announcement in early 2007 of layoffs and restructuring tends to confirm our finding of inefficiency in the Company's operations. See *infra* note 339 and accompanying text.

35. See *infra* note 300.

36. There is no significant quantitative empirical literature regarding charitable trusts. With respect to private trusts, empirical analysis has been limited to trust investment law, see, e.g., Max M. Schanzenbach & Robert H. Sitkoff, *Did Reform of Prudent Trust Investment Laws Change Trust Portfolio Allocation?*, 50 *J.L. & Econ.* (forthcoming 2007), available at <http://ssrn.com/abstract=868761> (on file with the *Columbia Law Review*) [hereinafter Schanzenbach & Sitkoff, *Portfolio Allocation*], and jurisdictional competition, see, e.g., Max M. Schanzenbach & Robert H. Sitkoff, *Perpetuities or Taxes? Explaining the Rise of the Perpetual Trust*, 27 *Cardozo L. Rev.* 2465 (2006); Robert H. Sitkoff & Max M. Schanzenbach, *Jurisdictional Competition for Trust Funds: An Empirical Analysis of Perpetuities and Taxes*, 115 *Yale L.J.* 356 (2005). There have also been a handful of survey-based studies. See, e.g., Martin D. Begleiter, *Does the Prudent Investor Need the Uniform*

cost analysis to charitable trusts.³⁷ If the trustees had been managing the Trust's assets efficiently, the sale announcement should not have had a very large positive effect on the value of Hershey shares not held by the Trust. Effective trustees would already have used their controlling vote block to impose a value-maximizing strategy on the Company's managers.³⁸ Such efficiency-inducing efforts would have accrued to the benefit of all shareholders in the form of a higher stock price.

Yet we find that publicly traded shares in the Company experienced a large and statistically significant positive abnormal return when news of the trustees' plan to sell broke, and a large and statistically significant negative abnormal return when the trustees abandoned the sale. Regardless of the mechanism for the increase in the Company's value on news of the sale—for example, expectation of better management from or synergies with a prospective buyer, overpayment by an empire-building buyer, or release from the worry that aggressive pursuit of profit through higher risk/return opportunities might imperil the needy children who depend on the Trust—the implication of our results is the same. The trustees not only exposed the Trust to uncompensated risk, but they also left money on the table that could have been realized for the benefit of the Trust's charitable purpose.

Our findings therefore provide the first quantitative empirical validation, albeit in a single case study, of prior theoretical claims of agency costs in charitable trusts and inefficient management of charitable trust assets.³⁹ Our findings also highlight an additional but less often dis-

Prudent Investor Act—An Empirical Study of Trust Investment Practices, 51 Me. L. Rev. 27 (1999).

37. See, e.g., Robert A. Katz, *Let Charitable Directors Direct: Why Trust Law Should Not Curb Board Discretion over a Charitable Corporation's Mission and Unrestricted Assets*, 80 Chi.-Kent L. Rev. 689, 703–12 (2005); Geoffrey A. Manne, *Agency Costs and the Oversight of Charitable Organizations*, 1999 Wis. L. Rev. 227, 230–52; Robert H. Sitkoff, *An Agency Costs Theory of Trust Law*, 89 Cornell L. Rev. 621 (2004) [hereinafter Sitkoff, *Agency Costs*]; see also Dukeminier et al., *supra* note 20, at 774–76 (describing increased role of fiduciary obligation in minimizing trust agency costs as well as difficulty in identifying principal with regard to any given trust); Jonathan R. Macey, *Private Trusts for the Provision of Private Goods*, 37 Emory L.J. 295, 315–20 (1988) (arguing that, although charitable trust form contains significant agency costs, such costs are greatly reduced in private trust form); A.I. Ogus, *The Trust as Governance Structure*, 36 U. Toronto L.J. 186 (1986) (analyzing agency costs and associated desirability of trust form in several potential economic contexts); Schanzenbach & Sitkoff, *Portfolio Allocation*, *supra* note 36 (manuscript at 4) (discussing agency costs in private trusts); Stewart E. Sterk, *Trust Protectors, Agency Costs, and Fiduciary Duty*, 27 Cardozo L. Rev. 2761 (2006) (discussing agency costs arising from addition to trust form of office of trust protector acting as agent for interests of settlor).

38. See, e.g., Unif. Trust Code § 802(g) (amended 2005), 7C U.L.A. 589 (2006) (providing that trustees with control over corporation “shall elect or appoint directors or other managers who will manage the corporation or enterprise in the best interests of the beneficiaries”).

39. See *infra* notes 219–222 and accompanying text. Although there has been no significant empirical investigation of charitable trusts, see *supra* note 36, there is an empirical literature on not-for-profit firms. For example, in John E. Core, Wayne R. Guay

cussed concern. Even if the Attorney General does intervene in the administration of a charitable trust, the intervention might be designed to promote the Attorney General's political interests rather than the trust's charitable purpose.⁴⁰ Indeed, the Attorney General's intervention in this instance preserved agency costs within the Trust on the order of roughly \$850 million.⁴¹

Accordingly, we provide an empirical grounding for policy analysis of new developments in the supervision of charitable entities.⁴² For example, some have argued that the IRS should be more active in policing charities,⁴³ almost half the states now give the donor standing concurrent with the attorney general to enforce a charitable trust,⁴⁴ and the 2000 Uniform Trust Code and the 2003 Restatement (Third) of Trusts liberalize the cy pres doctrine to allow modification of a charitable trust when its assets grow out of proportion to its purpose.⁴⁵ Further, inasmuch as opponents of the sale argued that the sale would hurt the town of Her-

& Rodrigo S. Verdi, Agency Problems of Excess Endowment Holdings in Not-for-Profit Firms 3-4 (Dec. 15, 2005) (unpublished manuscript, on file with the *Columbia Law Review*), available at <http://ssrn.com/abstract=565241>, the authors find evidence of agency costs in the operation of not-for-profit firms that have excess endowments. Although the context and legal form is different, these results are consistent with ours. In effect, the Hershey Trust has an excess endowment, a subject we take up in Part IV.A.2 in connection with the cy pres doctrine. For a survey of the literature, see generally Anup Malani, Tomas Philipson & Guy David, Theories of Firm Behavior in the Nonprofit Sector: A Synthesis and Empirical Evaluation, in *The Governance of Not-for-Profit Organizations* 181 (Edward L. Glaeser ed., 2003).

40. See *infra* note 217 and accompanying text.

41. See *infra* note 300 and accompanying text.

42. Although far more charities take the corporate form than the trust form, see Principles of the Law of Nonprofit Orgs. § 200 reporter's note 1 (Preliminary Draft No. 4, 2007) (providing statistics), the law respecting supervision of charitable corporations derives from the law of charitable trusts. See *id.* § 200 cmt. b; Restatement (Second) of Trusts § 348 cmt. f (1959) ("Ordinarily the principles and rules applicable to charitable trusts are applicable to charitable corporations."); 4A Austin Wakeman Scott & William Franklin Fratcher, *The Law of Trusts* § 348.1 (4th ed. 1989) ("[M]any of the principles applicable to charitable trusts are applicable to charitable corporations."); see also Evelyn Brody, *Charity Governance: What's Trust Law Got to Do with It?*, 80 *Chi.-Kent L. Rev.* 641 (2005) (discussing interaction between governance requirements of charitable trusts and not-for-profit organizations).

43. See *infra* note 309 and accompanying text.

44. The list includes California and New York, see *L.B. Research & Educ. Found. v. UCLA Found.*, 29 *Cal. Rptr. 3d* 710, 716-17 (Ct. App. 2005); *Smithers v. St. Luke's-Roosevelt Hosp. Ctr.*, 723 *N.Y.S.2d* 426, 434-36 (App. Div. 2001), as well as the nineteen U.S. jurisdictions (eighteen states and the District of Columbia) that have adopted Unif. Trust Code § 405(c) (amended 2005), 7C *U.L.A.* 486 (2006), or some variant thereof. See Nat'l Conference of Comm'rs on Unif. State Laws, *Significant Differences in States' Enacted Uniform Trust Codes*, at <http://www.utcproject.org/utc/DesktopDefault.aspx?tabindex=0&tabid=1> (last updated Aug. 9, 2006) (on file with the *Columbia Law Review*) [hereinafter *UTC Enactment Charts*] (providing UTC enactment charts).

45. See Unif. Trust Code § 413(a) (amended 2005), 7C *U.L.A.* 509 (2006) (authorizing cy pres "if a particular charitable purpose becomes . . . wasteful"); Restatement (Third) of Trusts § 67 & cmt. c(1) (2003) ("[A]pplication of cy pres . . . is [appropriate in] a situation in which the amount of property held in trust exceeds what is

shey and the Company's workers, our findings also bear on the propriety of social investing by trustees and other fiduciaries.⁴⁶ The \$850 million cost to the Trust of protecting the local "cash cow" by abandoning the sale equates roughly to \$67,000 per resident of Hershey, or \$62,000 per worker at the Company.⁴⁷

Corporate Law

Regarding corporate law, our findings add to the intertwined literatures relating to takeovers and controlling shareholders. Specifically, the aborted 2002 sale provides a natural quasi-experiment that allows us to measure the difference in the Company's value when the Company's managers were exposed to the market for corporate control in comparison to when the Company's managers were under the thumb of the trustees. We find a large, statistically and economically significant positive abnormal return on news of the Trust's probable divestment and a large, statistically and economically significant negative abnormal return when the sale was abandoned.

Accordingly, the evidence indicates that the concentration of vote power in the hands of the trustees did not improve the value of the Company relative to the value of the Company in the shadow of the takeover market. As such, our findings highlight the potential inefficacy of disciplining by a controlling shareholder when that shareholder itself has distorted incentives stemming from its own internal agency problems. On this view, a hedge fund is likely to be a more effective monitor than a pension or mutual fund.⁴⁸ Our findings also lend modest empirical support for the view that the takeover market reduces corporate agency costs.

Financial Econometrics

Because our study is by necessity limited to a single firm, a concern might arise about the statistical power of our results. To ameliorate this concern, we undertake a host of robustness checks, several designed specifically to address the single-firm problem. In so doing, we contribute to the literature of financial econometrics by offering the first demonstra-

needed for the particular charitable purpose to such an extent that the continued expenditure of all of the funds for that purpose . . . would be wasteful.").

46. See generally John H. Langbein & Richard A. Posner, *Social Investing and the Law of Trusts*, 79 Mich. L. Rev. 72 (1980) (arguing that social investing decreases expected returns from investment and therefore is prohibited by fiduciary duties of trustees).

47. See *infra* note 302 and accompanying text. These figures jump to \$214,000 and \$199,000 if we consider the full \$2.7 billion in shareholder wealth destroyed. See *infra* note 346 and accompanying text.

48. See Marcel Kahan & Edward B. Rock, *Hedge Funds in Corporate Governance and Corporate Control*, 155 U. Pa. L. Rev. 1021, 1062–70 (2007) (arguing that hedge funds pursue profit-maximizing strategies superior to those of other institutional investors because of less stringent regulatory constraints, superior incentive structures, and lesser conflicts of interest).

tion of the use of randomization inference as a robustness check for statistical inference in a single-firm event study.⁴⁹

* * *

The remainder of this Article is organized as follows. Building on the foregoing statement of background, Part I frames the inquiry with more details on Milton Hershey, the Company, the School, and the Trust. Part II motivates the empirical analysis by examining the aborted sale in light of current understandings of the supervision of charitable trusts and corporate governance. In so doing, Part II situates our analysis in the existing literatures of trust law and corporate law, particularly agency cost analyses of those subjects. Part III presents our empirical analysis, which includes a graphical analysis of the data, a more formal event study analysis, and a nontechnical summary of our main findings. Mindful of the need for caution in generalizing from what is in effect a case study, Part IV assesses the positive and normative implications of our findings for the policy debates in corporate law and trust law identified above. After a short conclusion, three substantive appendices follow.

I. MILTON HERSHEY'S CHOCOLATE EMPIRE⁵⁰

Milton Snavely Hershey was born in 1857 in central Pennsylvania.⁵¹ After apprenticing in a candy store, Hershey opened stores of his own in

49. Single-firm event studies appear in the academic literature and are routine in securities litigation. See *infra* notes 291–292 and accompanying text.

50. More extensive treatments of Milton Hershey, the Company, the School, and the Trust are readily available elsewhere. For example, D'Antonio, *supra* note 8, is a recent and comprehensive biography of Milton Hershey. Brenner, *supra* note 21, is also a recent and comprehensive biography, but Brenner examines Hershey and the Company in juxtaposition to the Mars family and Mars Company. See also Charles Schuyler Castner, *One of a Kind: Milton Snavely Hershey, 1857–1945* (1983) (fawning biography published by local literary guild); Nancy F. Koehn & Erica Helms, *Candy Land: The Utopian Vision of Milton Hershey* (2005) (Harvard Business School case study). Houts & Whitenack, *supra* note 11, is a photographic history of Milton Hershey and the Hershey entities that was sponsored by the Hershey Foundation. James D. McMahon, Jr., *Built on Chocolate: The Story of the Hershey Chocolate Company* (1998), is a Hershey Company-sponsored study of the Hershey Company as well as of Milton Hershey and his philanthropic legacy. McMahon was the curator of the Hershey museum. Among the older sources, Joseph Richard Snavely, a relative of Milton Hershey on Milton's mother's side, published a number of biographical works. See Joseph Richard Snavely, *An Intimate Story of Milton S. Hershey* (1957); Joseph Richard Snavely, *Milton S. Hershey: Builder* (1935); Joseph Richard Snavely, *The Hershey Story* (1950) [hereinafter Snavely, *Story*]. The Hershey Company published Joseph Richard Snavely, *The Story of Hershey: The Chocolate Town* (1953). The Hershey Community Archives contains a wealth of information, including unpublished books by Paul A.W. Wallace (a history professor at Lebanon Valley College who was hired by the School to write a Hershey biography) and Samuel Hinkle (a former executive of the Company). See D'Antonio, *supra* note 8, at 175, 269 (describing Hershey Community Archives collection and providing biographical information regarding Wallace and Hinkle); see also Katherine B. Shippen & Paul A.W. Wallace, *Milton S. Hershey* (1959) (recounting Hershey's life in children's book based in part on Wallace's commissioned research).

51. See D'Antonio, *supra* note 8, at 12.

Philadelphia, Chicago, and New York, but each failed.⁵² Hershey then returned home to Pennsylvania and opened a caramel business. Here Hershey's luck improved. Thanks to a large, serendipitous order from an Englishman who happened upon Hershey's caramel while passing through town, a bridge loan approved against bank policy by a junior loan officer, and a better taste owing to Hershey's use in his caramel formula of milk instead of the more common paraffin, Hershey's caramel business prospered.⁵³ The business proved so successful that in 1900 Hershey was able to sell it for \$1 million. Crucially, however, Hershey retained the Company's fledgling chocolate division.⁵⁴

Although disinterested in day-to-day business management, Hershey had "a natural flair for experimentation" and a feel for "the intimate relationship between timing, temperature and taste."⁵⁵ For Hershey, therefore, the lure of chocolate was irresistible. Chocolate—the rich, sensual, and satisfying food derived from the cocoa bean—had long been a pleasure of the upper class.⁵⁶ But because chocolate was so difficult to mass produce and ship in an edible and economically viable form, few others had ready access to it.⁵⁷ Milk chocolate, a solid form of chocolate with a pleasing taste that could be mass produced and widely distributed at bearable cost, was thus the holy grail for confectioners. The trick was to induce the water-based milk to combine with the fatty, oil-based cocoa.⁵⁸

Having earlier succeeded with milk in his caramel formula, Hershey began construction of the Hershey Chocolate Company's main factory and the surrounding town of Hershey in the heart of Pennsylvania's dairy country even before perfecting a viable milk chocolate recipe.⁵⁹ The timing was tight, but after much experimentation Hershey eventually solved the problem of combining milk and cocoa. Hershey's solution was to boil the milk to the brink of souring, which explains the hallmark bitter, harsh taste of Hershey's milk chocolate.⁶⁰ Although panned by chocolate connoisseurs, who preferred the more subtle flavors of Cadbury, Lindt, and Nestlé, Hershey's grittier chocolate was the first encounter with the

52. See *id.* at 26–53.

53. See Brenner, *supra* note 21, at 74–80, 88; D'Antonio, *supra* note 8, at 54–58.

54. See Brenner, *supra* note 21, at 88; D'Antonio, *supra* note 8, at 89–91.

55. Brenner, *supra* note 21, at 77; see also *id.* at 73, 83 (describing Hershey's aptitude for invention and planning, as well as his disinterest in ordinary business operations); D'Antonio, *supra* note 8, at 29, 58 (noting Hershey's "passion for experimentation").

56. See Brenner, *supra* note 21, at 91–102. Dark chocolate might also have salutary health benefits. See, e.g., Charalambos Vlachopoulos et al., Effect of Dark Chocolate on Arterial Function in Healthy Individuals, 18 *Am. J. Hypertension* 785, 788–89 (2005) ("[C]onsumption of dark chocolate may exert a beneficial effect of endothelial function.").

57. See Brenner, *supra* note 21, at 90, 92–93, 100.

58. See *id.* at 91–92, 100–01.

59. See *id.* at 89–90, 105–08; D'Antonio, *supra* note 8, at 101–06.

60. See Brenner, *supra* note 21, at 103–05, 109; D'Antonio, *supra* note 8, at 95–98, 106–08.

substance for many Americans.⁶¹ Hershey's chocolate thus came "to define the taste of chocolate for" the American palate⁶²—a process helped along by Hershey's production of "Field Ration D" during World War II, a high-calorie, high-melting point chocolate bar developed for the Army that garnered the Company an exemption from wartime rationing,⁶³ and by fawning press coverage of the corporate "utopia" that was the town of Hershey.⁶⁴ By the end of World War II, the Company dominated the U.S. chocolate market.⁶⁵

As with the caramel business, Hershey left the day-to-day operations of the chocolate company to others and turned his attention elsewhere, particularly to sponsorship of the Milton Hershey School,⁶⁶ which he and his wife Catherine founded for the benefit of orphan boys in 1909.⁶⁷ Indeed, because Milton and Catherine never had children of their own, the boys enrolled in the School became their surrogate children. "This was especially true for Milton, who reviewed every application and helped to choose the youngsters who got rooms at the homestead."⁶⁸ As Milton later explained, "Well, I have no heirs; so I decided to make the orphan boys of the United States my heirs."⁶⁹

The original 1909 Deed of Trust that created the School was quite detailed. The School—then known as the Hershey Industrial School—was to "be permanently located in Derry Township," the political subdivision of Pennsylvania in which the town of Hershey is situated, on farm land conveyed to the Trust by Milton Hershey.⁷⁰ The trust instrument prohibited the use of Trust funds for any other purpose.⁷¹ The School was to admit "poor, healthy, white, male orphans" between the ages of four and eight.⁷² The Deed of Trust defined the term "orphan" to mean "a child whose father is deceased."⁷³ Preference was given first to orphans from the three counties closest to the town of Hershey, then to

61. See Brenner, *supra* note 21, at 109–11.

62. D'Antonio, *supra* note 8, at 108.

63. See Brenner, *supra* note 21, at 8–10, 153.

64. See *id.* at 131–32; D'Antonio, *supra* note 8, at 177–79.

65. See Brenner, *supra* note 21, at 155 (noting that, in 1947, Hershey "provided 90% of the nation's milk chocolate").

66. See *id.* at 131–33; D'Antonio, *supra* note 8, at 169; see also Brenner, *supra* note 21, at 137–38 (describing founding and oversight of similar school in Cuba).

67. See Brenner, *supra* note 21, at 117.

68. D'Antonio, *supra* note 8, at 128.

69. Brenner, *supra* note 21, at 117.

70. Milton Hershey Sch. Trust, Deed of Trust ¶ 11 (Nov. 15, 1909) (on file with the Trust *Columbia Law Review*) [hereinafter 1909 Deed of Trust].

71. *Id.* ¶ 8.

72. *Id.* ¶ 13. According to a family biography, the Hersheys limited enrollment in the School to boys because Milton Hershey was of the view that girls were "useful in the home" and hence more likely to be adopted. Snively, Story, *supra* note 50, at 126. Contemporary social scientists had warned that needy boys, by contrast, were vulnerable to becoming "shiftless and criminal men who would spawn another generation of undesirables." D'Antonio, *supra* note 8, at 129.

73. 1909 Deed of Trust, *supra* note 70, ¶ 13.

those from the rest of Pennsylvania, and finally to those from the remainder of the United States.⁷⁴

The purpose of the School was to produce productive members of society. The Hersheys instructed that:

[T]he main object in view is to train young men to useful trades and occupations, so that they can earn their own livelihood. Each and every scholar shall be required to learn, and to be thoroughly instructed in some occupation or mechanical trade, so that when he leaves the School . . . he may be able to support himself.⁷⁵

Once admitted, an orphan could stay at the school until the age of eighteen.⁷⁶ Students who went on to college were eligible for tuition assistance.⁷⁷ Graduates who did not plan on further education were given “\$100, a new wardrobe, and help in finding a job.”⁷⁸

The School was also to feed, clothe, and board the orphans. “All orphans admitted to the School shall be fed with plain, wholesome food; plainly, neatly, and comfortably clothed, without distinctive dress, and fitly lodged.”⁷⁹ From its founding and to the present day, the School has provided room and board by placing each student in a home with several other students supervised by a married couple who serve as houseparents.⁸⁰

In 1918, three years after Catherine died, Milton Hershey transferred substantially all of his assets—including his stock in the Company, then worth \$60 million—to the Trust.⁸¹ The transfer was not publicly disclosed until the *New York Times* ran a story about it five years later.⁸² But once the School’s dependence on the Company was known, the Company’s managers took notice, becoming cautious and resisting new methods in production and marketing out of worry that change could imperil the steady flow of dividends to the Trust.⁸³

Eventually, after falling behind its leading domestic competitor the Mars Company in the 1970s, the Company was forced to embrace modernity.⁸⁴ The Company’s managers now speak of being “more conscious of

74. Id. ¶ 14.

75. Id. ¶ 17.

76. See id. ¶ 21.

77. See id.

78. Brenner, *supra* note 21, at 132–33.

79. 1909 Deed of Trust, *supra* note 70, ¶ 17.

80. See Milton Hershey Sch., Life in a Student Home, at <http://www.mhs-pa.org/content/?/student-life/life-in-the-student-home> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*).

81. See Brenner, *supra* note 21, at 134–35; D’Antonio, *supra* note 8, at 169.

82. See M.S. Hershey Gives \$60,000,000 Trust for an Orphanage, *N.Y. Times*, Nov. 9, 1923, at 1.

83. See Brenner, *supra* note 21, at 136–37, 230, 260–61; D’Antonio, *supra* note 8, at 245–46.

84. See Brenner, *supra* note 21, at 259–78, 300–01; D’Antonio, *supra* note 8, at 244–46.

our stock price and what we have to do to improve the stock price, to give value to our shareholders.”⁸⁵ Thanks to better management, improved marketing, and several successful acquisitions, the Company is again number one in the North American confectionary market.⁸⁶ In 2007, the Company reported net sales of \$5 billion and at year end had a market capitalization of \$8.9 billion.⁸⁷ The Mars Company remains a close second, however, and in 2007 the Hershey Company announced a plan to streamline operations that will include domestic plant closings and layoffs and the construction of a new factory in Mexico.⁸⁸

Just as the Company has modernized, so have the Trust and the School. Since 1909, the original Deed of Trust has been modified to expand the age range for admission to four through fourteen (1933) and then to four through sixteen (1970); to redefine “orphan” to include children whose mothers are deceased (1933) and then to replace “orphan” with “children” who do not receive “adequate care from one of his or her natural parents” (1976); to drop the word “Industrial” from the School’s name (1951); and, as is now typical for discriminatory trusts, to remove the racial (1970) and gender limitations (1976).⁸⁹

The School, which in the 1980s was called “terrible” by accrediting officials, has evolved from an agrarian vocational institution to more of a college preparatory school.⁹⁰ Today the School sits on 3,200 “pristine

85. Brenner, *supra* note 21, at 317–18.

86. See 2008 Annual Report, *supra* note 9, at 1.

87. See *id.* at 15, 18, 85. These calculations implicitly assume an equal valuation between Class A shares, which are priced in the market, and Class B shares, which do not trade in a liquid market.

88. See *infra* note 339 and accompanying text. Soon thereafter, the CEO resigned and the Trust replaced several members of the Company’s Board of Directors. See *infra* notes 339–345 and accompanying text.

89. See *In re* Petition of the Hershey Indus. Sch. for Modification of Trust, Equity Docket No. 1096 (Ct. C.P. Dauphin County, Pa. Oct. 30, 1933) (decree granting modification of trust) (on file with the *Columbia Law Review*); *In re* Petition of the Hershey Indus. Sch. for Modification of Trust, No. 824-1951 (Ct. C.P., Orphans’ Ct. Div., Dauphin County, Pa. Dec. 17, 1951) (decree granting modification of trust) (on file with the *Columbia Law Review*); Milton Hershey Sch. Trust, Restated Deed of Trust ¶ 13 (Dec. 24, 1970) (on file with the *Columbia Law Review*); 1976 Deed of Trust, *supra* note 15, ¶ 13. On modification of discriminatory trusts, see Dukeminier et al., *supra* note 20, at 742–43.

90. See D’Antonio, *supra* note 8, at 250–54 (describing movement toward modernization following scathing accreditation review in 1989, as well as strong complaints about such changes from alumni association). This is not to say, however, that the evolution was smooth. On the contrary, the School’s alumni association accused the School’s managers of conflicts of interest and other misdeeds. See Kirkpatrick & Lockhart, LLP, Findings and Conclusions of the Special Counsel (2000) (on file with the *Columbia Law Review*) (examining alumni association’s allegation of breach of fiduciary duty by trustees, but finding such allegations to be unfounded); Milton Hershey Sch. Alumni Ass’n, Bias, Flaw, & Avoidance: A Response to the K&L Report (2000) (on file with the *Columbia Law Review*) (arguing that Kirkpatrick & Lockhart report demonstrates bias in favor of trustees and failed properly to consider alleged breaches of fiduciary duty). Some of the association’s complaints led to an investigation by the state Attorney General. See D’Antonio, *supra* note 8, at 253–54 (noting Attorney General investigation and eventual

acres of rolling countryside” and boasts state-of-the-art facilities (including the world’s second largest marble rotunda).⁹¹ The School clothes, feeds, and provides health care for 1,700 students whose average family income is under \$14,000.⁹² The School also gives scholarships for college tuition.⁹³ All of the School’s operations are funded by the \$8.8 billion Trust. Table 1 summarizes the Trust’s financial position and dependence on the Company.

TABLE 1: HERSHEY TRUST SUMMARY STATISTICS

	2000	2001	2002	2003	2004	2005
Trust Corpus						
Total	\$4,593,255,021	\$5,151,587,064	\$5,816,887,358	\$5,851,334,397	\$7,095,503,724	\$8,752,608,388
From HSY	\$1,969,448,811	\$2,570,290,384	\$3,341,036,837	\$3,100,444,712	\$3,578,929,577	\$4,718,956,071
Percent From HSY	43%	50%	57%	53%	50%	54%
Trust Investment Income (i.e., Interest and Dividends from Securities)						
Total	\$118,099,233	\$122,229,432	\$118,569,196	\$123,411,502	\$130,661,524	\$139,632,178
From HSY	\$41,255,383	\$44,358,938	\$47,888,318	\$51,843,526	\$62,734,729	\$60,168,752
Percent From HSY	35%	36%	40%	42%	48%	43%
Trust Ownership of and Voting Rights in Hershey Company⁹⁴						
Percent Owned	32%	32%	32%	33%	30%	31%
Percent Of Votes	77%	77%	77%	78%	78%	79%

Sources: Milton Hershey Sch. & Sch. Trust, Return of Organization Exempt From Income Tax (Form 990) for the fiscal years ending in 2000 through 2005 (data as of July 31 of each year); The Hershey Co., Annual Report (Form 10-K) for the fiscal years ending in 2000 through 2005 (data as of December 31 of each year); Telephone Interview with Gayla M. Bush, Vice President, The Hershey Trust Co. (Nov. 17, 2006).

settlement thereof through structural changes of board composition); *infra* note 124. The trustees’ dealings with the Attorney General with regard to this matter played a role in prompting the trustees to attempt to diversify. See *infra* note 104 and accompanying text.

91. Brenner, *supra* note 21, at 135; see also D’Antonio, *supra* note 8, at 244 (describing modern additions to facilities).

92. See Milton Hershey Sch. & Sch. Trust, Return of Organization Exempt from Income Tax (Form 990), at Statement 8 (June 13, 2006) [hereinafter 2006 Return] (describing services provided to student body); *supra* note 12 and accompanying text. Although the School’s Form 990 for the tax year ending on July 31, 2005 reports an enrollment of only 1,300, we report the increased figure of 1,700 found on the web page cited in *supra* note 12 because it is more recent.

93. For the tax year ending on July 31, 2005, the Trust reported \$5.3 million in expenditures in connection with post-secondary education grants. See 2006 Return, *supra* note 92, at pt. II, l. 22 & Statement 5; see also *id.* at Statement 23 (describing qualifications for student grants).

94. The figures for the Trust’s ownership of and voting rights in the Company are slightly overstated in that they include other shares held by the Hershey Trust Company for some estates and trusts other than the Hershey Trust. See The Hershey Co., Annual Report (Form 10-K), at 66 (Mar. 7, 2005). The Trust has a disproportionate voting share relative to its ownership share on account of the Company’s dual class stock structure. See *supra* note 17 and accompanying text.

The Trust's size is striking, particularly given the School's small enrollment. In spite of the Trust's mushrooming corpus, the School "served no more children at the start of 2005 than it did in 1963."⁹⁵

The Trust's endowment is also remarkable for its breathtaking lack of diversification. Of the Trust's \$8.8 billion corpus, \$4.7 billion (54%) is in Company stock (representing 31% of all outstanding shares of the Company).⁹⁶ Close to half of the Trust's income from interest and dividends comes from its Hershey shares. What is more, these figures understate the Trust's diversification problem because the Trust's other assets include, among other local holdings, the Hershey Entertainment & Resorts Company.⁹⁷

The problem with an undiversified portfolio is that it entails uncompensated risk—risk for which there is no offsetting improvement in expected return and that could be avoided costlessly by diversifying.⁹⁸ To understand why, imagine ten companies, each in a different industry and each with different managers. If all ten have the same expected risk and return profile, then a portfolio of all ten stocks would have the same expected return as a portfolio of just one. But there will be less variance in the actual return of the ten-stock portfolio than in the portfolio of one, because in the larger portfolio losers will be offset by winners.⁹⁹ Thus the

95. D'Antonio, *supra* note 8, at 266. The School's current plan for enrollment growth, moreover, remains modest. See *infra* note 324 and accompanying text.

96. Because the Hershey Trust qualifies under the tax code as a supporting organization, see I.R.C. § 509(a)(3) (2000) (describing qualifications for such treatment), it is exempt from the 5% minimum distribution requirement, the excess business holdings prohibition, and the other such rules of governance applicable to private foundations adopted by Congress in the Tax Reform Act of 1969. See James J. Fishman, *The Faithless Fiduciary and the Quest for Charitable Accountability 1200–2005*, at 293–99 (2007) [hereinafter *Fishman, Faithless*] (describing changes made by Tax Reform Act of 1969 applicable to private foundations); Fremont-Smith, *supra* note 3, at 264–80 (same); Brody, *Parochialism*, *supra* note 8, at 987–88 (noting Hershey's exemption). Indeed, the exemption evidently was created in part for the Hershey Trust. See *id.* at 987–88 & n.230.

97. See 2006 Return, *supra* note 92, at Statements 9–11 (showing \$231 million stake in Hershey Entertainment & Resorts Company and over \$500 million spent on land, buildings, and equipment).

98. For a more in-depth treatment of the perils of not diversifying with a focus on trust portfolio management, see Langbein, *Trust Investing*, *supra* note 19, at 647–48. Although there is some literature that suggests that occasionally investors can increase their return with a concentrated portfolio, see, e.g., Azriel Levy & Miles Livingston, *The Gains from Diversification Reconsidered: Transaction Costs and Superior Information*, *Fin. Markets, Institutions & Instruments*, Aug. 1995, at 1, 46 (purporting to show that, in certain circumstances, optimal portfolio for small investors may be very concentrated), that notion does not bear on analysis of the Hershey Trust. The trustees did not claim any benefits from the Trust's concentrated holding. On the contrary, as we detail in Part II.A, the trustees wanted to diversify.

99. Assuming returns in the ten firms are independent, the ten-firm portfolio would have 1/10 the variance of a one-firm portfolio. This is a simple application of the calculation of variance, which holds that if you have a nonrandom factor, b , multiplying a random outcome that has variance σ^2 , the variance of the product will be $b^2\sigma^2$. Furthermore, the variance of the sum of c independent random outcomes, each with

single-stock portfolio presents more risk, as measured by variance, without an offsetting increase in expected return.

To be sure, an investor cannot diversify away general market risk (in the jargon of financial economics, "systematic risk"). But it is possible to avoid most firm risk ("unsystematic risk").¹⁰⁰ The key to the risk-avoiding magic of diversification, which can be achieved with investment in as few as twenty stocks,¹⁰¹ is that unsystematic risk is often inversely correlated across firms. A breakthrough in solar power, for example, would negatively affect an oil company, but would positively affect an energy-dependent manufacturing concern. In the case of the Hershey Company, and so the Hershey Trust, firm-specific risk factors include volatility in the cocoa and sugar markets.¹⁰²

According to published accounts, the bursting of the technology bubble and the Enron and Worldcom scandals sensitized the trustees to the perils of an undiversified portfolio.¹⁰³ In addition, the Pennsylvania Attorney General's office reportedly urged the trustees to diversify in meetings held in December 2001.¹⁰⁴

Nothing in the Deed of Trust requires the trustees to retain the Trust's stock in the Company. On the contrary, the trust instrument gives the trustees "full power and authority" over the Trust's portfolio management.¹⁰⁵ As a matter of hornbook law, therefore, the trustees have the authority to diversify the Trust's investment portfolio if they determine that diversifying is in the best interests of the Trust.¹⁰⁶

variance σ^2 , will equal $c\sigma^2$. Thus, in the present example, the contribution of each individual firm with return variance σ^2 to the portfolio will be $(1/10)^2 \sigma^2 = (1/100) \sigma^2$ leading to a portfolio variance of $10 * (1/100) \sigma^2 = (1/10) \sigma^2$. For the first application of this principle in the finance literature, see Harry Markowitz, *Portfolio Selection*, 7 J. Fin. 77 (1952).

100. See Langbein, *Trust Investing*, *supra* note 19, at 648.

101. In the words of the leading finance text, "once you have a portfolio of 20 or more stocks, diversification has done the bulk of its work. For a reasonably well-diversified portfolio, only market risk matters." Richard A. Brealey & Stewart C. Myers, *Principles of Corporate Finance* 169 (6th ed. 2000); see also Macey, *Introduction*, *supra* note 19, at 22–27 (reviewing risk and diversification in modern finance theory).

102. For examples of wild swings in these commodities and the effects of those swings on the Hershey Company, see Brenner, *supra* note 21, at 137, 199–201, 231–42.

103. See Branch et al., *Sweet Deal*, *supra* note 26.

104. See *id.*; Sarah Ellison, *Sale of Hershey Foods Runs into Opposition*, *Wall St. J.*, Aug. 26, 2002, at A3 [hereinafter Ellison, *Sale of Hershey*]; Robert Frank & Sarah Ellison, *Meltdown in Chocolatetown*, *Wall St. J.*, Sept. 19, 2002, at B1 [hereinafter Frank & Ellison, *Meltdown in Chocolatetown*].

105. 1976 Deed of Trust, *supra* note 15, ¶ 5.

106. See *Principles of the Law of Nonprofit Orgs.* § 310 *illus.* 1 (Tentative Draft No. 1, 2007). This illustration, in fact, is based on the Hershey Trust:

The investment assets of the H School consist primarily of a controlling interest in H Foods Corporation worth over \$5 billion. H Foods is a major employer in the town of H. The shares had been contributed by the donor upon his founding of the H School, but the donor did not limit the ability of the H School governing board to dispose of this investment in the company he had also founded. The

II. AGENCY COSTS AND THE ABORTED 2002 SALE

A. *The Aborted Sale*¹⁰⁷

News of the trustees' plan to sell the Trust's controlling interest in the Company first became public on Thursday, July 25, 2002, in a front-page story with a two-column headline in the *Wall Street Journal*.¹⁰⁸ Both the Trust and the Company confirmed the *Journal's* story that day. The subsequent media coverage, which credited the *Journal* with breaking the story, reported that securities analysts were surprised by the announcement.¹⁰⁹ In the ensuing litigation, the trustees and the Attorney General also credited the *Wall Street Journal* with making the sale plan public.¹¹⁰

According to the July 25 *Journal* story, the trustees were "keen to diversify" the Trust's portfolio and had rejected alternatives to a sale "such as a buyback or major recapitalization" in which the Company would buy some of the Trust's shares at a premium.¹¹¹ The *Journal* also reported that "People familiar with the matter say that Pennsylvania Attorney General Mike Fisher's office, while not advocating a sale of the company,

members of the H School governing board determine that it would be prudent for the charity to diversify its investments, and therefore to dispose of the stock in H Foods, and that not to do so would entail substantial financial risk that would far outweigh the benefit of community good will. Because the H school does not have as a charitable purpose maintaining a controlling interest in H Foods for the benefit of the town of H, the governing board may prudently diversify.

Id.

107. Our narrative of the aborted sale is presented in day-by-day detail to allow the reader to evaluate our choices of event dates in the subsequent empirical analysis. To ensure that we did not miss important events, we examined every story in the *Wall Street Journal*, *New York Times*, and *Pittsburgh Post-Gazette* that mentioned "Hershey" between June 25, 2002, and October 18, 2002. We also examined the Company's principal 2002 SEC filings.

108. See Branch et al., *Sweet Deal*, supra note 26.

109. See, e.g., Theresa Howard, *Hershey Soars on Possibility of Sale of Controlling Stake*, USA Today, July 26, 2002, at 3B (describing surprise at announcement); Martha Raffaele, *Hershey, Trust Discuss Possible Sale*, Pittsburgh Post-Gazette, July 26, 2002, at W-1 (crediting *Wall Street Journal* with initially breaking story); Greg Winter, *Hershey Is Put on the Auction Block*, N.Y. Times, July 26, 2002, at C5 (noting that analysts were "startl[ed]"); see also D'Antonio, supra note 8, at 257 (noting that "the public remained in the dark" until July 25 *Wall Street Journal* story).

110. See Brief for Appellee, *Opposing Appellants' Application for Suspension of Injunction Pending Appeal* at 7, *In re Milton Hershey Sch. Trust*, 807 A.2d 324 (Pa. Commw. Ct. 2002) (No. 2111 C.D. 2002) [hereinafter *Brief of Appellee*] (citing stipulation by both parties). The only possible exception to the otherwise uniform view that news of the sale broke on July 25 is a cryptic reference in the original July 25 *Wall Street Journal* story to "rumblings in the food industry six to eight months ago that the trust was looking to diversify its holdings and had hired an investment bank to advise it on a possible sale." Branch et al., *Sweet Deal*, supra note 26. These rumblings, however, do not appear to have lessened the surprise of the July 25 story. Further, if these rumblings did affect the price of the Company's stock prior to July 25, such an effect would be positive and so would work against our finding of a large, positive abnormal return on July 25. We take up the possibility of leakage in Appendix B.

111. Branch et al., *Sweet Deal*, supra note 26.

has urged the Hershey trust to diversify.”¹¹² The *Journal* story predicted a “grim” reception for the trustees’ plan among Hershey residents and the Company’s workers.¹¹³

Hershey residents and workers received the news grimly indeed. With “tears in his eyes” the Company CEO Richard Lenny broke the news to the Company’s employees at a 9 A.M. meeting.¹¹⁴ Lenny also recorded a statement, which was broadcast on the internet every half hour, to the effect that he “disagreed with the trust’s actions” and that he had offered the Trust alternative means to diversify.¹¹⁵ The next day, Friday, July 26, a local newspaper reported that “Hershey residents questioned why the trust would need to sell Hershey Foods, wondered how the sale would affect the village, and asked if a sale would be consistent with Milton Hershey’s vision of social responsibility.”¹¹⁶ The chairman of the local Township’s Board of Supervisors warned that “[t]he economics of the region could be impacted severely” from loss of jobs.¹¹⁷ On Sunday, July 28, a local paper quoted the president of the School’s alumni association, which had previously accused the trustees of conflicts of interest and other forms of malfeasance,¹¹⁸ as saying that the trustees’ plan was “despicable.”¹¹⁹

Investors took a more favorable view. On Thursday, July 25, the day of the *Wall Street Journal*’s first story, the Company’s common stock (ticker symbol HSY) closed at \$78.30, up \$15.80 (more than 25%) from the prior day’s closing price of \$62.50. A little over 19 million HSY shares traded on July 25, about ten times as many as the day before.¹²⁰ On Friday, July 26, the press ran stories speculating about potential buyers and possible prices.¹²¹ HSY closed at \$78.72 on Friday, July 26. On Monday, July 29, HSY closed at \$79.49.

112. *Id.*; see also *supra* note 104 and accompanying text (describing statements made by members of Attorney General’s office prior to proposed sale).

113. Branch et al., *Sweet Deal*, *supra* note 26.

114. Winter, *supra* note 109.

115. Shelly Branch & Sarah Ellison, *Few Hershey Kisses Behind Move to Sell*, *Wall St. J.*, July 26, 2002, at B1.

116. Dan Shope & Keith Herbert, *Hershey Wants to Swap Candy for Dough*, *Morning Call* (Allentown, Pa.), July 26, 2002, at A1.

117. Winter, *supra* note 109.

118. See *supra* note 90; *infra* note 124. Ironically, the resulting investigation by the Attorney General helped prompt the trustees’ interest in diversifying. See *supra* note 104 and accompanying text.

119. Judy A. Strausbaugh, *Hershey Sale May Force Town to Kiss Life Good-Bye*, *Sunday News* (Lancaster, Pa.), July 28, 2002, at D1.

120. We detail the source of our stock price data at *infra* notes 244–245 and accompanying text. We obtained our trading volume data from the Hershey Company’s web page. See *The Hershey Co., Investor Relations: Historical Price Lookup*, at <http://www.thehersheycompany.com/ir/pricelookup.asp#> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*).

121. See, e.g., Neil Buckley, Juliana Ratner & William Hall, *Nestlé and Kraft Head Race to Buy Hershey*, *Fin. Times* (London), July 26, 2002, at 23 (discussing potential for Nestlé or Kraft to buy Hershey and mentioning proposed valuation); Gordon Fairclough &

By Monday, July 29, local opposition to the sale began to organize. The School's alumni association asked D. Michael Fisher, the Pennsylvania Attorney General and the Republican candidate for governor in the following November gubernatorial election, "to remove the trust's leadership for 'fiscal waste and child-care incompetence.'"¹²² On Wednesday, July 31, six former trustees (including the former Company CEO Richard Zimmerman) made public statements in opposition to the sale.¹²³ Both Fisher and Ed Rendell, the ultimately victorious Democratic gubernatorial candidate, openly opposed the sale.¹²⁴

As part of a grassroots "Derail the Sale" campaign, a public rally against the sale was held on Friday, August 2.¹²⁵ Residents began displaying yard signs with slogans such as "The Hershey Trust—An Oxymoron" and "Don't Shut Down Chocolate Town."¹²⁶ John Dunn, a former Hershey marketing executive, crafted the opposition's message to ensure favorable media coverage.¹²⁷ By Monday, August 5, the editorial page of the *Lancaster New Era* opined that "[i]t almost seems that the current members of the trust are about the only people to think the sale is a good idea."¹²⁸ HSY closed at \$72.37 on Monday, August 5, down \$7.12 (about

Erin White, *Shake-Up in Candyland*, Wall St. J., July 26, 2002, at B1 (noting Nestlé bidding advantage arising from preexisting arrangement and speculating about effect of simultaneous sale of other candy company upon bids for Hershey); Ameet Sachdev, *Hershey May Lure Kraft and Nestlé*, Chi. Trib., July 26, 2002, Business, at 1. The stories continued thereafter. See, e.g., Neil Buckley, *Jeremy Grant & Juliana Ratner, Candy's Dandy but Strategy Remains the Key*, Fin. Times (London), Aug. 2, 2002, at 24 (continuing discussion of Nestlé and Kraft, but also mentioning other potential bidders such as Cadbury Schweppes, Wrigley, and Mars); Elizabeth Olson, *Nestlé Strikes \$2.6 Billion Deal to Buy Chef America*, N.Y. Times, Aug. 7, 2002, at W1 (describing Nestlé's commitment to other acquisitions and noting that such transactions may impede ability to purchase Hershey).

122. Shelly Branch, *Sale of Hershey to Be Contested by School Alumni*, Wall. St. J., July 29, 2002, at B10.

123. See Shelly Branch, *Trust Pushing Sale of Hershey Faces Rising Level of Criticism*, Wall St. J., Aug. 1, 2002, at B6 [hereinafter Branch, Criticism].

124. See *id.* (noting Fisher's opposition); Editorial, *Trust Should Not Sell Hershey Foods*, Lancaster New Era, Aug. 5, 2002, at A6 [hereinafter Lancaster, Not Sell] (describing concerns expressed about sale by both candidates). At the same time that Fisher announced his opposition to the sale, he also announced an agreement with the trustees over the alumni association's prior accusations of conflict of interest and other such charges. See Branch, Criticism, *supra* note 123; Peter Jackson, *Hershey School Agrees to Rule Changes*, Pittsburgh Post-Gazette, Aug. 1, 2002, at B-8; *supra* note 90.

125. See *Hershey Foods' Board of Trustees Thinking of Selling the Company Has Many Upset*, CNBC News (Aug. 2, 2002), available in LEXIS (transcript of broadcast) (describing rally and views of participants); Martha Raffaele, *Joy in Candyland*, Pittsburgh Post-Gazette, Sept. 19, 2002, at E-1 [hereinafter Raffaele, Joy in Candyland] (describing participation of community activists in "Derail the Sale" efforts).

126. D'Antonio, *supra* note 8, at 260.

127. See *id.* at 259–60.

128. Lancaster, Not Sell, *supra* note 124; see also Stacey Hirsh, *Hershey Residents Fear Worst if Company Sold*, Pittsburgh Post-Gazette, Aug. 8, 2002, at E-8 (describing fears of Hershey residents about adverse impact of sale upon community and local economy);

9%) from the post-sale announcement high of \$79.49 on Monday, July 29.

On Tuesday, August 6, Fisher met with several of the trustees to urge them to reconsider their sale plan in favor of alternative modes of diversification.¹²⁹ On Wednesday, August 7, the trustees held a special day-long meeting to consider Fisher's proposals and the merits of continuing the sale. That evening, after the stock market closed, the trustees issued a release stating that they would continue to pursue the sale because they believed it to be "in keeping with [their] fiduciary responsibility to protect and preserve the trust."¹³⁰ In the next day's trading (Thursday, August 8) HSY closed at \$74.09, up \$2.20 (3%) from the prior day's closing price of \$71.89.

Fisher then announced that he would turn to the courts.¹³¹ On Monday, August 12, Fisher asked the local court with jurisdiction over the Trust—ironically known in Pennsylvania as the Orphans' Court—to issue an order to the trustees to show cause why any sale of the Company should not be subject to judicial approval.¹³² The court issued the order to show cause the following Monday, August 19.¹³³ Said a spokesman for Fisher, "Ultimately, we hope that the court will require that any offer for Hershey Foods be revealed to our office and the court and that any proposed sale be subject to court approval."¹³⁴ HSY closed at \$74.56 on August 12 and \$74.71 on August 19.

Later that week, on Friday, August 23, Fisher asked the court to enjoin the trustees from any sale pending the court's resolution of the pro-

Thomas Hylton, Honor Hershey, *Pittsburgh Post-Gazette*, Aug. 11, 2002, at B-1 (arguing that Trust owes duty to preserve special community in line with vision of Milton Hershey).

129. See Company News: Hershey Trust Affirms Intention to Sell Candy Maker, *N.Y. Times*, Aug. 8, 2002, at C3 [hereinafter *Affirms Intention to Sell*]; Sarah Ellison, Hershey Trust Board Decides to Continue with Sale Option, *Wall St. J.*, Aug. 8, 2002, at B6 [hereinafter *Ellison, Decides to Continue*]; see also Courtney Schlisserman, Fisher Urges Hershey Trust Not to Sell, *Pittsburgh Post-Gazette*, Aug. 8, 2002, at E-8 (noting possibility that "political pressure" would be brought to bear to defeat sale).

130. *Affirms Intention to Sell*, supra note 129; see also Ellison, *Decides to Continue*, supra note 129 (providing similar description of statement).

131. See Company News: Attorney General Says Court Must Decide Hershey Sale, *N.Y. Times*, Aug. 10, 2002, at C4.

132. See Brief for Appellants the Hershey Trust Company and the Milton Hershey School in Support of Their Application for Suspension of Injunction Pending Appeal at 12, *In re Milton Hershey Sch. Trust*, 807 A.2d 324 (Pa. Commw. Ct. 2002) (No. 2111 C.D. 2002) [hereinafter *Brief of Appellant*]; *Brief of Appellee*, supra note 110, at 5.

133. See *In re Milton Hershey Sch. Trust*, No. 712-1963 (Ct. C.P., Orphans' Ct. Div., Dauphin County, Pa. Sept. 10, 2002), reprinted in *In re Milton Hershey Sch. Trust*, 807 A.2d at 328; *Brief of Appellee*, supra note 110, at 5 (noting grant of show cause petition by Orphans' Court).

134. Marc Levy, Court Orders Hershey Trust to Defend Sale, *Pittsburgh Post-Gazette*, Aug. 20, 2002, at E-2.

priety of the trustees' sale plan.¹³⁵ HSY closed at \$75.03. Fisher's office also announced that it was drafting legislation that, if passed, would require the trustees of a charitable trust to weigh the effect on the community in making investment decisions.¹³⁶ The trustees filed their papers in opposition to the injunction request on the following Monday, August 26.¹³⁷ HSY closed at \$76.80. The Orphans' Court scheduled a hearing for Tuesday, September 3.¹³⁸

At the September 3 hearing, with protestors outside the courthouse "carrying signs and singing a Hershey's chocolate jingle,"¹³⁹ the main witness for the Attorney General was former Hershey CEO Richard Zimmerman. Zimmerman predicted that an acquiring company would seek to cut costs first by eliminating jobs made redundant by the merger and second by shutting down less efficient manufacturing plants.¹⁴⁰ "And I suspect," testified Zimmerman, "that one would start with the [main Hershey] plant that's nearly a hundred years old."¹⁴¹ In Zimmerman's view, although these actions might improve the profitability of the combined company, "there are very many more things in life more important than money."¹⁴²

The trustees argued that the trust instrument authorized them to divest the Trust's holdings in the Company and that prudent investment practice required diversification.¹⁴³ Indeed, the trustees' investment advisor testified that the Trust's heavy investment in the Company made its portfolio "twice as risky as the typical college or university or independent school portfolio."¹⁴⁴ The investment advisor also admitted, however, that

135. See Brief of Appellee, *supra* note 110, at 5–6; Brief of Appellant, *supra* note 132, at 12; see also Ellison, *Sale of Hershey*, *supra* note 104 (noting that Fisher had "asked the court to delay a sale until October").

136. See Company News: Delay Is Sought in Effort to Sell Hershey Food, *N.Y. Times*, Aug. 24, 2002, at C4; Marc Levy, *Hershey Sale Tough, Not Impossible*, *Sunday News* (Lancaster, Pa.), Aug. 25, 2002, at D1. The proposed legislation was later enacted. See *infra* notes 193–198 and accompanying text.

137. See Sarah Ellison & Robert Frank, *Hershey Trust Contests Move to Halt Sale of Chocolate Firm*, *Wall St. J.*, Aug. 27, 2002, at A4.

138. See *In re Milton Hershey Sch. Trust*, No. 712-1963, 807 A.2d at 328.

139. D'Antonio, *supra* note 8, at 263. On Monday, September 2 (Labor Day), the day before the hearing, a local paper ran a story about Milton Hershey's "dream of building a 'model town'" and the reliance of the community on the Company, which "is considered a good corporate citizen and has an estimated annual budget of several million dollars for charities." *Hershey: Candy Is Just the Beginning*, *Intelligencer J.* (Lancaster, Pa.), Sept. 2, 2002, at B2; see also Andrew Ross Sorkin, *Market Place: Price Tag and Local Politics Damp Interest in Hershey*, *N.Y. Times*, Aug. 27, 2002, at C1 (suggesting that political controversies surrounding any Hershey sale might drive away potential bidders).

140. See Brief of Appellee, *supra* note 110, at 9–10.

141. *Id.* at 10.

142. *Id.* at 11.

143. See Brief of Appellant, *supra* note 132, at 20–21, 34–36.

144. *Id.* at 15 (emphasis omitted) (internal quotation marks omitted).

the Trust's portfolio had always produced enough income for the School in spite of its concentration in Hershey stock.¹⁴⁵

The next day, Wednesday, September 4, the trial judge issued the preliminary injunction with an opinion to follow.¹⁴⁶ Both the timing and the result of the judge's decision appear to have been a surprise. The *Wall Street Journal's* Wednesday story about the Tuesday hearing quoted the judge as having said that he would rule by "week's end" and reported that "[m]any legal observers said the judge appeared unlikely to issue an injunction."¹⁴⁷ In heavy trading (10 million shares, more than four times the prior day's trading volume), HSY closed on Wednesday at \$72.51, down \$3.09 (4%) from Tuesday's closing price of \$75.60.

On Thursday, September 5, the trustees appealed and the appellate court scheduled a hearing for Wednesday, September 11.¹⁴⁸ In their Thursday coverage of the trial court's ruling, both the *Wall Street Journal* and the *New York Times* reported that "legal experts" predicted that the trial court would be reversed on appeal.¹⁴⁹ HSY closed at \$74.30 on Thursday, up \$1.79 (about 2.5%) from Wednesday's closing price. Meanwhile, Fisher praised the trial court's ruling, saying that the injunction would allow him "to represent the public's interest" and would allow "the court to determine how a sale could hurt this community."¹⁵⁰ On Friday, September 6, HSY closed at \$73.85.

On Monday, September 9, the parties filed their appellate briefs;¹⁵¹ HSY closed at \$73.53. The Attorney General conceded that the Trust was "imprudently" undiversified "and that it would be 'desirable' for the Trust to diversify its holdings," but he also argued that "there was no testi-

145. In re Milton Hershey Sch. Trust, No. 712-1963 (Ct. C.P., Orphans' Ct. Div., Dauphin County, Pa. Sept. 10, 2002), reprinted in In re Milton Hershey Sch. Trust, 807 A.2d 324, 332-33 (Pa. Commw. Ct. 2002).

146. See *id.* at 328.

147. Sarah Ellison & Christina Cheddar, Decision on Hershey Injunction Is Expected by End of the Week, *Wall St. J.*, Sept. 4, 2002, at B4. After the hearing, Fisher told reporters that he expected a ruling later in the week. Pennsylvania Tries to Block Sale of Hershey, *N.Y. Times*, Sept. 4, 2002, at C4.

148. See Appeals Court to Hear Arguments on Hershey, *Wall St. J.*, Sept. 6, 2002, at B6; Hershey's Owners Seek Lifting of Injunction, *N.Y. Times*, Sept. 6, 2002, at C2.

149. See Sarah Ellison, Hershey Sale Is Temporarily Blocked, *Wall St. J.*, Sept. 5, 2002, at A3 ("[L]egal experts believe that the attorney general's arguments might not hold up under appeal . . ."); Andrew Ross Sorkin, Court Ties Up Hershey Deal, for Time Being, *N.Y. Times*, Sept. 5, 2002, at C1 [hereinafter Sorkin, Ties Up] ("[M]ost legal experts suggested that the injunction would be overturned."). *USA Today* quoted a Philadelphia lawyer "who filed a lengthy brief against the sale" as saying "[l]egally, it's hard to say the trust doesn't have the discretion to sell." Gary Strauss & Thor Valdmanis, Judge Halts Hershey Sale; Shares Dive 4%, *USA Today*, Sept. 5, 2002, at 1B.

150. Hershey Sale Blocked Temporarily by Judge, *Chi. Trib.*, Sept. 5, 2002, Business, at N3; Sorkin, Ties Up, *supra* note 149.

151. Brief of Appellee, *supra* note 110; See Brief of Appellant, *supra* note 132. Also on September 9, published reports indicated that Nestlé and Cadbury were in talks over a possible joint bid for the Hershey Company. See Robert Frank & Sarah Ellison, Nestlé, Cadbury Discuss Terms of Possible Joint Bid for Hershey, *Wall St. J.*, Sept. 9, 2002, at A3.

mony that it needs to do so immediately, within the next few days or weeks.”¹⁵² By contrast, “the current employees of Hershey Foods would be worse off under an acquisition than they are now,” and the sale of the Company “would seriously impair, if not destroy, the symbiotic relationship which has existed for many decades among the company, the School and its Trust, and the other institutions which together carry on Milton Hershey’s unique vision.”¹⁵³ The Attorney General argued that the balance of equities therefore favored upholding the preliminary injunction.¹⁵⁴ “At its core,” the Attorney General explained, “this case raises the question of whether the administrators of a charitable trust can operate the trust to inflict injury and harm upon the public at large, which is the ultimate beneficiary and real party in interest of all charitable trusts.”¹⁵⁵

In response, the trustees argued that “‘the public’ benefit is not the personal economic or social benefit that ‘the public’ derives from the assets that the charitable trust holds—rather, ‘the public’ benefits from the achievement of the specific charitable purpose for which the trust is established.”¹⁵⁶ Moreover, according to the trustees, nothing in the Deed of Trust indicated that Milton and Catherine Hershey wanted the Trust to maintain its ownership of the Company, or to undertake responsibility for the economic health of the local community, or to provide continuing employment for the Company’s workers.¹⁵⁷ On the contrary, the only interest named in the Deed of Trust was that of the School.¹⁵⁸ The Deed of Trust also gave the trustees “full power and authority to invest” the trust assets.¹⁵⁹ Accordingly, because “portfolio diversification is the hallmark of any prudent investor,”¹⁶⁰ because the Trust’s concentration of investment in the Company made the Trust “twice as risky as the typical college or university portfolio,”¹⁶¹ and because nothing in the trust instrument made the Trust’s investment in the Company “sacrosanct,”¹⁶²

152. Brief of Appellee, *supra* note 110, at 11–12.

153. *Id.* at 10.

154. *See id.* at 15.

155. *Id.* at 19. Throughout his brief the Attorney General took the position that the Trust’s ultimate beneficiary was the public at large. *See, e.g., id.* at 5, 14, 19, 21, 22, 23, 26.

156. Brief of Appellant, *supra* note 132, at 23 (emphasis omitted).

157. *See id.* at 25.

158. *Id.* at 13, 25; *see* 1909 Deed of Trust, *supra* note 70, ¶ 8 (requiring Trust’s income to be “exclusively devoted” to School).

159. Brief of Appellant, *supra* note 132, at 21 (quoting 1976 Deed of Trust, *supra* note 15, ¶ 5).

160. *Id.* at 34. Elsewhere in their brief the trustees argued that “if recent events involving the collapse of companies that were pillars of the communities in which they were headquartered . . . reveal anything, they reveal that no company, no matter how special and unique . . . , is immune from market forces and potential adverse economic, business, or financial developments.” *Id.* at 39 (emphasis omitted).

161. *Id.* at 36 (emphasis omitted) (internal quotation marks omitted).

162. *Id.* at 21.

the trustees argued that it “was improper for the trial court to enjoin” the sale process, which was both “lawful and prudent.”¹⁶³

On Tuesday, September 10, the trial judge rendered a written opinion explaining the issuance of the September 4 injunction; HSY closed at \$74.10. Calling Zimmerman’s testimony “persuasive” and noting the “symbiotic relationship among the School, the community, and the Company,” the judge found that a sale of the Trust’s “controlling interest in the Hershey Foods Corporation creates a likelihood that there will be reduction in the work force and that relocations of plant operations and closing of duplicate facilities will be matters of probable immediate consideration by the acquiring company.”¹⁶⁴ The injunction was therefore necessary to prevent “the adverse economic and social impact” that would result from a sale, “particularly in its effect on employees of the [Company] and the community of Derry Township.”¹⁶⁵ Put more bluntly (and again quoting the trial judge), after paying a premium for the Company an acquirer would probably “introduce management efficiencies in order to cut costs to achieve an acceptable return The likelihood is great that these efficiencies will result in reduced work forces with a potential for plant location changes.”¹⁶⁶

The judge noted two other factors favoring the injunction’s issuance. First, the Trust’s income had always exceeded the School’s operating expenses.¹⁶⁷ The judge therefore found that the proposed sale “appears to be excessive and unnecessary for any foreseeable needs of the Trust.”¹⁶⁸ Second, in the teeth of the volatility experienced by HSY on September 4 and 5, the judge rejected as “not . . . compelling” the argument that an injunction would “cause significant fluctuations” in the Company’s stock “that [would] result in possible loss to the School fund.”¹⁶⁹ The Attorney General made a similar argument in his appellate brief, adding also that “nothing suggests that the stock will be priced differently even if a sale does not occur.”¹⁷⁰

The appellate court heard argument the next day, Wednesday, September 11. “Who in the courtroom,” the trustees’ lawyer asked, “has not read in the paper what happens in today’s economy when you invest too heavily in a single stock?”¹⁷¹ The Deputy Attorney General arguing the case replied that “[t]here is absolutely no support, and in fact the

163. *Id.* at 36.

164. *In re Milton Hershey Sch. Trust, No. 712-1963* (Ct. C.P., Orphans’ Ct. Div., Dauphin County, Pa. Sept. 10, 2002), reprinted in *In re Milton Hershey Sch. Trust*, 807 A.2d 324, 331–32 (Pa. Commw. Ct. 2002).

165. *Id.* at 331.

166. *Id.* at 329.

167. *Id.* at 332–33.

168. *Id.* at 334.

169. *Id.* at 333.

170. Brief of Appellee, *supra* note 110, at 29–30.

171. Bill Sulon, *Attorneys Debate Trust Company Role*, *Patriot-News* (Harrisburg, Pa.), Sept. 12, 2002, at D1.

evidence contradicts, that there is a need to sell this company.”¹⁷² No timeframe was set for the ruling; HSY closed at \$73.55.

On Tuesday, September 17, 2002, while waiting for the appellate court to render a decision, the trustees gathered in a hotel in Valley Forge, Pennsylvania, for a previously scheduled two-day meeting.¹⁷³ “Despite opposition from a handful of the 17 trustees,” the *Wall Street Journal* reported that morning, “most . . . remain committed to at least exploring the sale until a firm offer is on the table”¹⁷⁴ HSY closed at \$73.81 in Tuesday’s trading.

The trustees had set a deadline of Saturday, September 14, for bids for the Company.¹⁷⁵ The top bid was from the Wm. Wrigley Jr. Company: \$12.5 billion in cash and stock, or about \$89 per share. The second best bid was a joint proposal from Nestlé and Cadbury, which was valued at \$10.5 billion, which works out to approximately \$75 per share. Wrigley also promised to keep the local Hershey factories open (a sad irony given the Company’s 2007 announcement of layoffs).¹⁷⁶ Because the \$12.5 billion price would be paid with both cash and stock, accepting the Wrigley bid would not have entirely resolved the Trust’s diversification problem. But it would have reduced the Trust’s single-firm concentration to the extent of the cash component of the deal.

According to subsequent media reports, the trustees’ Tuesday session was “emotional,” “rancorous,” and “sometimes teary,” with the trustees feeling “embittered” by what they perceived to be “pressure” from the Attorney General’s office to diversify followed by the Attorney General’s heated opposition.¹⁷⁷ Having become the objects of calumny, the trustees felt “overwhelmed by the outcry of protest from the community.”¹⁷⁸ The chairman of the board of trustees, who had received death threats, had been living with an armed guard assigned to his home.¹⁷⁹ The trustees deliberated for ten hours. William Wrigley delivered a “moving” speech in which he discussed the significance of adding Hershey to his eponymous company’s name and promised a commitment to the Hershey community.¹⁸⁰ Just before midnight, however, the trustees an-

172. George Strawley, *Hershey: Attorney General Has No Right to Oppose Sale*, *Star-Ledger* (Newark, N.J.), Sept. 12, 2002, at 25.

173. See Sarah Ellison & Robert Frank, *Hershey Trust to Meet Today, Consider Alternatives to Sale*, *Wall St. J.*, Sept. 17, 2002, at B6 [hereinafter Ellison & Frank, *Alternatives*]; Frank & Ellison, *Meltdown in Chocolatetown*, *supra* note 104.

174. Ellison & Frank, *Alternatives*, *supra* note 173.

175. Frank & Ellison, *Meltdown in Chocolatetown*, *supra* note 104.

176. See Sarah Ellison & Nikhil Deogun, *Hershey Trust Calls Off Sale of Firm*, *Wall St. J.*, Sept. 18, 2002, at A3; Andrew Ross Sorkin, *Hershey Trust Halts Auction Despite Offer of \$12 Billion*, *N.Y. Times*, Sept. 18, 2002, at C1 [hereinafter Sorkin, *Trust Halts*]. On the 2007 announcement of layoffs, see *infra* note 339 and accompanying text.

177. Sherri Day & Andrew Ross Sorkin, *Candy Giants Both Show New Faces in Failed Deal*, *N.Y. Times*, Sept. 19, 2002, at C1; Ellison & Deogun, *supra* note 176.

178. Sorkin, *Trust Halts*, *supra* note 176.

179. D’Antonio, *supra* note 8, at 263.

180. Frank & Ellison, *Meltdown in Chocolatetown*, *supra* note 104.

nounced that they had voted ten to seven to reject Wrigley's bid and all the other bids too.¹⁸¹

The trustees' decision was met by Hershey residents and workers with a mix of relief and joy. "All I can say is hooray," one resident told the Associated Press.¹⁸² "I still want this company to be around for my grandchildren, so they can work here when they're old enough," said another.¹⁸³ Kathy Taylor, a former town supervisor who helped spearhead the "Derail the Sale" movement, offered a more blunt assessment to the *New York Times*: "Our cash cow is safe; we're feeling really great."¹⁸⁴ In something of an anticlimax, also on Wednesday the appellate court upheld the trial judge's injunction by a four to one vote.¹⁸⁵

Investors took a dim view of the sale's cancellation. On Wednesday, September 18, HSY closed at \$65.00, down \$8.81 (almost 12%) from Tuesday's closing price of \$73.81. Some 20 million HSY shares traded on Wednesday, ten times the number that traded on Tuesday.

The trustees did not fare well in the aftermath. On October 16, the Orphans' Court dissolved the injunction but ordered the trustees to give the Attorney General's office "prompt written notice" of any future intention to sell the Trust's controlling interest in the Company,¹⁸⁶ formalizing what the trustees had already promised in writing to do.¹⁸⁷ The judge also criticized the trust board as being too "large" and too "distant and disconnected from the charitable interests they serve."¹⁸⁸ On November 14, Fisher announced that the seven trustees who had voted in favor of continuing the sale, as well as three others who had opposed the sale, would be stepping down in favor of four new board members, all hailing from central Pennsylvania.¹⁸⁹

Fisher, too, faced disappointment—at least initially. His announcement of the change in the trust board came a week after he lost the gubernatorial election by almost 10%.¹⁹⁰ Prior to the election, Fisher had

181. See Ellison & Deogun, *supra* note 176; Frank & Ellison, *Meltdown in Chocolatetown*, *supra* note 104; Sorkin, *Trust Halts*, *supra* note 176.

182. Raffaele, *Joy in Candyland*, *supra* note 125.

183. *Id.*

184. Clines, *supra* note 23.

185. The majority held that it could reverse the judge only if there were "no reasonable grounds" for the injunction, and a "review of the record and [the judge's] opinion does not immediately convince us no apparently reasonable grounds exists." In re Milton Hershey Sch. Trust, 807 A.2d 324, 327 (Pa. Commw. Ct. 2002).

186. Sidel, *Struggle for Hershey*, *supra* note 8, at 29–30 (quoting In re Milton Hershey Sch. Trust, No. 712-1963, slip op. at Decree ¶ 2 (Ct. C.P., Orphans' Ct. Div., Dauphin County, Pa. Oct. 16, 2002) (on file with the *Columbia Law Review*)).

187. See The Hershey Co., Annual Report (Form 10-K), at 25 (Feb. 23, 2007); Sarah Ellison, *Hershey Foods' Controlling Trust Says It Has "No Intentions to Sell,"* Wall St. J., Sept. 27, 2002, at B5.

188. Tamar Lewin, *10 Board Members to Leave Hershey's Charitable Trust*, N.Y. Times, Nov. 15, 2002, at A22.

189. See Sidel, *Struggle for Hershey*, *supra* note 8, at 31; Lewin, *supra* note 188.

190. *The 2002 Elections: Northeast: Pennsylvania*, N.Y. Times, Nov. 7, 2002, at B12.

run television ads in which he claimed to have saved over 6,000 Hershey jobs.¹⁹¹ In 2003, however, President George W. Bush nominated Fisher to be a circuit judge for the United States Court of Appeals for the Third Circuit. The Senate confirmed Fisher's appointment on December 9, 2003.¹⁹²

The aborted sale also affected Pennsylvania law, which already deviated from the national norm by exempting trustees of existing trusts from an explicit statutory duty to diversify.¹⁹³ On November 6, 2002, the Governor signed an amendment to the Pennsylvania prudent investor statute. The amendment requires the trustees of a charitable trust "in making investment and management decisions" to consider "the special relationship of [a trust asset] and its economic impact as a principal business enterprise on the community."¹⁹⁴ It also bars the trustee of a charitable trust "holding a controlling interest in a publicly traded business corporation received as an asset from the settlor" from selling that controlling interest without first notifying the Attorney General and the Pennsylvania employees of the business.¹⁹⁵ If the Attorney General challenges the sale, the amendment puts the burden on the trustee to "prove by clear and convincing evidence" that the sale "is necessary to maintain the economic viability of the corporation and [to] prevent a significant diminution of trust assets or to avoid an impairment of the charitable purpose of the trust."¹⁹⁶

The amendment constitutes a radical departure from orthodox principles of prudent trust investment law.¹⁹⁷ Nonetheless, it was well received in Pennsylvania. The State Senate majority leader captured the local view: "We have to be active and protect our economic assets."¹⁹⁸

191. Bill Sulon & Charles Thompson, *Industry Representatives Assail Pennsylvania Trust-Regulation Bill*, *Patriot-News* (Harrisburg, Pa.), Oct. 29, 2002, at D1.

192. See The White House, *Presidential Nomination: Dennis Michael Fisher*, at <http://www.whitehouse.gov/news/nominations/490.html> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*). Judge Fisher serves with Judge Marjorie O. Rendell, the spouse of Ed Rendell, the Democratic Party candidate who beat Fisher in the gubernatorial election.

193. See *supra* note 20.

194. Act of Nov. 6, 2002, No. 2002-133, sec. 1, § 7203(c)(6), 2002 Pa. Laws 1101, 1101 (codified at 20 Pa. Cons. Stat. Ann. § 7203 (West 2005)).

195. *Id.* sec. 1, § 7203(d)(1), 2002 Pa. Laws at 1101.

196. *Id.* sec. 1, § 7203(d)(3), 2002 Pa. Laws at 1102.

197. Others have remarked upon the unusual nature of the Pennsylvania statute. See, e.g., Fremont-Smith, *supra* note 3, at 193 ("[The amendment] represents an unusual degree of interference with trustee discretion, not to say a perversion of the intent of many donors."); Sidel, *Struggle for Hershey*, *supra* note 8, at 44-48 (describing amendment as "position seemingly taken by no other state"); Dale, *supra* note 8, at 18-19 (describing skeptical commentary regarding amendment as "an understatement"); see also *infra* note 332 and accompanying text (discussing orthodox hostility, as embodied in Uniform Prudent Investor Act, to consideration by trustees of considerations other than beneficiary's interests).

198. Charles Thompson, *Future Hershey Sale Obstacles OK'd*, *Patriot-News* (Harrisburg, Pa.), Oct. 10, 2002, at B1.

As detailed in Table 1 above, in spite of occasional share repurchases by the Company,¹⁹⁹ the Trust remains overwhelmingly invested in the Company and, hence, manifestly undiversified.

B. *Charitable Trusts*

A private trust is a fiduciary relationship in which the trustee holds legal title to specified property, entrusted to him by the settlor, and manages that property for the benefit of one or more beneficiaries.²⁰⁰ Hence, the trust presents the standard agency problem that arises when risk-bearing (the beneficiaries) and management (the trustee) are separated.²⁰¹ To safeguard the beneficiary from mismanagement or misappropriation by the trustee, trust law supplies a set of default terms known as fiduciary duties that prescribe the trustee's level of care (the duty of prudence) and proscribe misappropriation (the duty of loyalty).²⁰² A beneficiary who believes that the trustee acted disloyally or imprudently may sue the trustee for breach of trust. Moreover, because trust default law makes it difficult for the beneficiary to remove the trustee, and because the beneficiary's interest is typically inalienable (i.e., there is no market for trust control), the threat of fiduciary litigation is the primary force for aligning the interests of the trustee and the beneficiary—that is, for minimizing agency costs in the modern private trust.²⁰³

199. See, e.g., 2008 Annual Report, *supra* note 9, at 33 (describing volume of shares repurchased by Company from Trust over preceding several years).

200. See Restatement (Third) of Trusts § 2 (2003); Dukeminier et al., *supra* note 20, at 485.

201. See Sitkoff, Agency Costs, *supra* note 37, at 623–25, 648–49.

202. See Robert Cooter & Bradley J. Freedman, The Fiduciary Relationship: Its Economic Character and Legal Consequences, 66 N.Y.U. L. Rev. 1045, 1047 (1991) (noting relationship between potential harm arising from misappropriation and neglect and corresponding trust law duties of loyalty and care); Frank H. Easterbrook & Daniel R. Fischel, Contract and Fiduciary Duty, 36 J.L. & Econ. 425, 426 (1993) (arguing that, because of impossibility of specifying contractual terms that address all future contingencies in agency relationship, law imposes upon agent “duty of loyalty in pursuit of the objective and a duty of care in performance”); John H. Langbein, The Contractarian Basis of the Law of Trusts, 105 Yale L.J. 625, 640–42, 655–60 (1995) [hereinafter Langbein, Contractarian Basis] (describing shift toward fiduciary law, and away from limited trustee powers, to safeguard beneficiary's interests).

203. See Dukeminier et al., *supra* note 20, at 775 (“[T]he fiduciary obligation in trust law is not backstopped by the beneficiary's ability to replace the trustee easily . . . or by unfettered freedom to sell her beneficial interest Hence the fiduciary obligation in trust law is the primary tool for minimizing agency costs”); Langbein, Contractarian Basis, *supra* note 202, at 640–43 (noting that fiduciary duties provide primary means of “safeguard[ing] beneficiaries against abuse of [trustee] discretion”); Sitkoff, Agency Costs, *supra* note 37, at 677–78 (arguing that “much of the governance burden” of modern trusts is placed “on the fiduciary obligation”); Robert H. Sitkoff, Trust Law, Corporate Law, and Capital Market Efficiency, 28 J. Corp. L. 565, 570–71, 577–78 (2003) (“[J]udicial oversight and the fiduciary obligation remain the beneficiaries' principal recourse.”); see also Schanzenbach & Sitkoff, Portfolio Allocation, *supra* note 36 (manuscript at 4), on which this paragraph draws.

The paramount role of fiduciary law in minimizing agency costs in trust governance explains the traditional rule that a private trust must be for the benefit of an ascertainable beneficiary.²⁰⁴ Requiring an ascertainable beneficiary ensures that there is someone with an economic incentive to enforce the trustee's fiduciary duties.²⁰⁵

Unlike a private trust, however, a charitable trust must be for the benefit of a charitable purpose such as advancing education or the relief of poverty (hence the validity of the Trust)—not for a specific beneficiary.²⁰⁶ “Even if individuals receive direct benefits from a charitable trust, such as scholarship grants, money, food, clothing, or any other direct assistance, they are considered the ‘conduits of the social benefits to the public and are not in reality the beneficiaries of the trust.’”²⁰⁷ Hence, for a charitable trust there is no identifiable beneficiary with an economic incentive and legal standing to ensure “that the trustee acts in accord with the settlor's charitable purpose and refrains from abuse or breach of fiduciary obligation.”²⁰⁸ Evelyn Brody aptly frames the resulting agency problem: “In the case of an entity having no owners and established for the benefit of indefinite beneficiaries, who is the principal on whom the law can rely to monitor the agents and enforce the charitable purposes?”²⁰⁹

The traditional answer to the problem of agency costs in charitable trusts is to vest the state attorney general, as *parens patriae*, with standing

204. See Unif. Trust Code § 402(a)(3) (amended 2005), 7C U.L.A. 481 (2006) (“A trust is created only if . . . the trust has a definite beneficiary . . .”); Restatement (Third) of Trusts § 44 (2003) (“A trust is not created . . . unless the terms of the trust provide a beneficiary who is ascertainable . . .”).

205. Empirical study suggests that trustee behavior is indeed sensitive to changes in default trust fiduciary law. See Schanzenbach & Sitkoff, *Portfolio Allocation*, *supra* note 36 (manuscript at 9–12, 24–35).

206. The list of valid charitable purposes, which traces back to the Statute of Charitable Uses, 43 Eliz., c. 4 (1601) (Eng.), is “(a) the relief of poverty; (b) the advancement of knowledge or education; (c) the advancement of religion; (d) the promotion of health; (e) governmental or municipal purposes; and (f) other purposes that are beneficial to the community.” Restatement (Third) of Trusts § 28 (2003). Unif. Trust Code § 405(a) (amended 2005), 7C U.L.A. 485 (2006) and Principles of the Law of Nonprofit Orgs. § 210 (Preliminary Draft No. 4, 2007) state virtually identical lists. The rules for qualifying as charitable under the tax code are similar, with differences that are immaterial to this study. See I.R.C. § 501(c)(3) (2000); Treas. Reg. § 1.501(c)(3)-1 (as amended in 1990); see also Principles of the Law of Nonprofit Orgs. § 210 reporter's notes 10–14 (describing requirements of federal tax law); Fremont-Smith, *supra* note 3, at 238–300 (canvassing tax rules applicable to charitable entities).

207. Fremont-Smith, *supra* note 3, at 128. Thus, in a December 2006 decision that is representative of traditional law, the Pennsylvania Supreme Court confirmed that the School's alumni association did not have standing to sue the trustees for breach of trust. See *In re Milton Hershey Sch.*, 911 A.2d 1258, 1263 (Pa. 2006).

208. Dukeminier et al., *supra* note 20, at 750.

209. Evelyn Brody, *The Limits of Charity Fiduciary Law*, 57 Md. L. Rev. 1400, 1429 (1998).

to enforce such trusts.²¹⁰ Indeed, many states have broadened the attorney general's common law enforcement power to include the power to investigate the operation of charitable entities.²¹¹ Most states also require charitable trusts and other charitable entities to make regular reports to the attorney general's office (a disclosure requirement backstopped by federal law applicable to tax-exempt entities).²¹² Furthermore, in many instances, the state attorney general is a necessary party in litigation involving a charitable trust or other charitable entity.²¹³

The state attorney general, however, is a political official, typically elected, with neither a personal financial stake nor, in the usual case, a political stake in the operation of a charitable trust. Most state attorneys general assign few (if any) lawyers to supervision of charities.²¹⁴ Unless an alleged breach of trust obtains enough media attention to achieve political salience, actual scrutiny of a charitable trust by the attorney general is unlikely. As a result, it is the politically salient, egregious cases that "trigger investigations," not "reviews of annual reports."²¹⁵ In the usual case there simply is not enough of a political payoff to the attorney general to warrant the diversion of resources from other initiatives.²¹⁶ The mirror-image worry, recently developed nicely by Evelyn Brody, is that when the attorney general does intervene in response to political pressure, he or she will be tempted to promote his or her political interests at

210. See Restatement (Second) of Trusts § 391 (1959) ("A suit can be maintained for the enforcement of a charitable trust by the Attorney General . . .").

211. See Fremont-Smith, *supra* note 3, at 317–18, app. at 476 tbl.1 (discussing trend toward expansion of powers of state attorneys general and providing comprehensive list of such powers in each state); see also James J. Fishman, Improving Charitable Accountability, 62 Md. L. Rev. 218, 259–62 (2003) [hereinafter Fishman, Improving] (collecting illustrative statutes); Craig Kaufman, Sympathy for the Devil's Advocate: Assisting the Attorney General When Charitable Matters Reach the Courtroom, 40 Real Prop. Prob. & Tr. J. 705, 725–26 (2006) (same).

212. See Fremont-Smith, *supra* note 3, at 315–17, app. at 476 tbl.1 (describing development of disclosure requirements and providing list of those of each state); see also Susan N. Gary, Regulating the Management of Charities: Trust Law, Corporate Law, and Tax Law, 21 U. Haw. L. Rev. 593, 619–22 (1999) (collecting state and federal disclosure rules).

213. See Fremont-Smith, *supra* note 3, at 318–19, app. at 476 tbl.1 (describing various forms of required notice to state attorney general of judicial proceedings and providing comprehensive list of each state's requirements); see also Kaufman, *supra* note 211, at 724 (collecting states that require state attorney general participation in judicial proceedings).

214. See Garry W. Jenkins, Incorporation Choice, Uniformity, and the Reform of Nonprofit State Law, 41 Ga. L. Rev. 1113, 1128 (2007) (reporting fresh survey results).

215. Gary, *supra* note 212, at 622–24.

216. See Dukeminier et al., *supra* note 20, at 760; John H. Langbein, The Uniform Trust Code: Codification of the Law of Trusts in the United States, 15 Tr. L. Int'l 66, 67–68 (2001); see also Mary Grace Blasko et al., Standing to Sue in the Charitable Sector, 28 U.S.F. L. Rev. 37, 49 (1993) ("Lack of resources and lack of interest thus both contribute to the current insufficiency of attorney general enforcement.").

the expense of the trust's charitable purpose.²¹⁷ Brody provides the apt summation: "Political cynics believe that 'A.G.' stands not for 'attorney general' but for 'aspiring governor.'"²¹⁸

Accordingly, a diverse array of scholars have theorized that supervision of charitable trusts by the attorneys general is either lackadaisical, in which case the trustees will lack an incentive to manage the trust's assets in an efficient manner,²¹⁹ or perverse, entailing imposition of local political preference irrespective of whether those preferences are "congruent with the donor's conception of the beneficiary class."²²⁰ The prevailing scholarly view, in other words, is that agency costs are rampant in charitable trust governance.²²¹

217. See Brody, *Parochialism*, *supra* note 8, at 968–79. In Brody's words: "Occasionally, though, we find the reverse problem: a board trying to do the right thing, but thwarted by an overreaching regulator." *Id.* at 975.

218. *Id.* at 946.

219. The literature typically credits Kenneth L. Karst, *The Efficiency of the Charitable Dollar: An Unfulfilled State Responsibility*, 73 *Harv. L. Rev.* 433 (1960), as its foundation. Karst wrote that "supervision and enforcement" by the attorney general "have been irregular and infrequent." *Id.* at 437.

220. Brody, *Parochialism*, *supra* note 8, at 968.

221. For example, Richard Posner argues that "neither the trustees nor the staff" of a charitable entity has "a strong incentive to maximize value." Posner, *Economic Analysis*, *supra* note 4, § 18.5, at 547. Marion Fremont-Smith writes of "the failure of all but a handful of states to police [charitable] fiduciary behavior." Fremont-Smith, *supra* note 3, at 13. Henry Hansmann observes that "in most states there has been little effort to exercise even the substantial powers that the attorney general already has." Henry B. Hansmann, *Reforming Nonprofit Corporation Law*, 129 *U. Pa. L. Rev.* 497, 601 (1981) [hereinafter Hansmann, *Reforming*]. Harvey Dale has said that the state attorneys general "tend to allocate their scarce regulatory resources to other more politically potent portions of their domains. In most states, the Charity Bureau of the Attorney General is inactive, ineffective, overwhelmed, or some combination of these." Peter Swords, *Nonprofit Accountability: The Sector's Response to Government Regulation*, 25 *Exempt Org. Tax Rev.* 413, 413 (1999) (quoting Dale). Evelyn Brody observes that "as a practical matter, few state attorneys general have the funding and inclination to engage in aggressive charity enforcement." Brody, *Parochialism*, *supra* note 8, at 939. Alex Johnson concludes that "attorneys general collectively have failed in their obligation to effectively monitor and pursue breaches of duty" in charitable trusts. Alex M. Johnson, Jr., *Limiting Dead Hand Control of Charitable Trusts: Expanding the Use of the Cy Pres Doctrine*, 21 *U. Haw. L. Rev.* 353, 388 (1999). Dana Brakman Reiser has noted the "significant resource and structural issues unique to the nonprofit context" that make enforcement difficult. Dana Brakman Reiser, *There Ought to Be a Law: The Disclosure Focus of Recent Legislative Proposals for Nonprofit Reform*, 80 *Chi-Kent L. Rev.* 559, 561, 598–606 (2005). Ronald Chester laments that, in light of the ineffectiveness of "politically-influenced attorneys general," the "need for better policing methods for charities" is "increasingly obvious." Ronald Chester, *Improving Enforcement Mechanisms in the Charitable Sector: Can Increased Disclosure of Information Be Utilized Effectively?*, 40 *New Eng. L. Rev.* 447, 452 (2006) [hereinafter Chester, *Improving Enforcement*]. Susan Gary supposes that "[t]he worst abuses receive attention, but many problems probably go undetected or unaddressed." Gary, *supra* note 212, at 623.

Although there is anecdotal evidence that is consistent with the widely held assumption of agency costs in charitable trusts,²²² there exists no quantitative empirical study of the issue. The Trust's 2002 aborted sale of the Company provides an opportunity to undertake such a study. Specifically, daily stock price data from before, during, and after the aborted sale provide a measurement of the value of a prominent charitable trust's principal asset (i.e., a controlling interest in the Company) while in the hands of the trustees as opposed to when that asset was for sale on the open market. These price data also allow for assessment of the broader welfare effects of an intervention by a state attorney general in a publicly salient case.

We posit that effective trustees would already have realized for the Trust the benefits of holding a controlling interest in the Company by using their controlling vote block to impose a value-maximizing strategy on the Company's managers. Such efficiency-inducing actions would inure to the benefit of all the shareholders in the form of a higher stock price. These assumptions yield a testable hypothesis: After controlling for general market trends, the sale announcement should not have had a positive effect on the value of Hershey shares not held by the Trust. On the contrary, a sale would end the ability of the other shareholders to free ride on the trustees' value-inducing efforts. Thus, if the trustees had been successfully imposing a value-maximizing strategy on the Company's managers, we would expect if not a negative then at least a neutral price effect from the sale announcement. By contrast, a positive effect would imply that the takeover threat associated with the market for corporate control better disciplined the Company's managers than the trustees in spite of the trustees' controlling vote block.

We must acknowledge, however, two important limitations in the foregoing research design: (1) a positive result might be consistent with an alternative hypothesis, and (2) our study is by necessity limited to a single charitable trust. We consider each limitation in turn.

1. *Alternative Hypotheses.* — A positive finding is arguably consistent not only with the charitable trust agency cost hypothesis that we state above, but also with two alternative hypotheses: (a) escape from the trust-

222. Perhaps the best known example concerns the egregious mismanagement of the Hawaii Kamehameha Schools/Bishop Estate in the late 1990s. See Dukeminier et al., *supra* note 20, at 763–66 (describing extensive misappropriation of trust assets and mismanagement by trustees of Bishop Estate); Samuel P. King & Randall W. Roth, *Broken Trust: Greed, Mismanagement, and Political Manipulation at America's Largest Charitable Trust* (2006) (same); see also Fishman, *Faithless*, *supra* note 96, at 3 n.1 (collecting "contemporary scandals involving charities"). In a related vein, there have been occasional studies detailing the insufficiency of resources allocated to charity enforcement, see *supra* note 214, and studies of agency problems in not-for-profit firms, see, e.g., Core et al., *supra* note 39, at 32–33 (finding agency costs to be primary force driving accumulation of excess endowments).

ees' non-profit-maximizing objectives, and (b) the control premium phenomenon.²²³

a. *Non-Profit-Maximizing Objectives.* — The first alternative hypothesis is that the trustees' controlling interest depressed the stock price of the Company not because the trustees were lax in monitoring the Company's managers, but rather because the trustees imposed policies that favored the interests of the Trust to the detriment of the other shareholders. On this account, which comes in strong and weak forms, the sale announcement would lead to an increase in the price of the Company's stock by freeing the Company's managers to pursue a profit-maximizing strategy.

The stronger but less plausible form is that the trustees extracted unequal distributions or other payments to the Trust not shared pro rata with the other shareholders. To have affected the stock price positively on news of the sale, however, the fact of inequitable treatment must have been publicly available. Yet our review of the public record for the relevant timeframe uncovered no evidence of such disproportionate extraction. Further, an accepted principle of corporate fiduciary law holds that a controlling shareholder may not secure a pecuniary or other benefit from the company that is not shared proportionally with the company's other shareholders.²²⁴ Had other market participants known of such private benefits, litigation likely would have ensued.

The weaker but more plausible version of this alternative hypothesis is that the trustees imposed a cautious, risk-averse style of management on the Company that favored stable dividends and low risk projects at the expense of the sort of higher risk (but positive net expected value) projects that in the long run are more likely to maximize the return on the firm's underlying assets. For example, suppose the Company could pursue project *A* or project *B*, but not both. Project *A* offers a certain return of \$100 while project *B* offers a 60% chance of a \$200 return (hence an expected return of \$120). Diversified shareholders would prefer project *B* because in the aggregate such shareholders will win often enough to offset the less frequent occasions that they lose.²²⁵ However,

223. Given the Company's dual class stock arrangement, see *supra* note 17 and accompanying text, it might be thought that changes in the relative voting and dividend rules occasioned by the sale might affect the Company's stock price. However, the trustees instructed the Company to solicit bids for a takeover that would be implemented by a merger. In such a merger, all the Company's shares would be exchanged for cash or for cash and stock in the acquiring company. Because all Hershey shares would disappear at the same time, there would be no change in relative rights among the Hershey stockholders.

224. See *Principles of Corporate Governance: Analysis and Recommendations* § 5.11 (1994); James D. Cox, Thomas Lee Hazen & F. Hodge O'Neal, 1 *Corporations* § 11.10 (2002). As one of us has observed elsewhere, "dominant shareholders are held to all the same fiduciary standards that ordinarily apply to management." Robert H. Sitkoff, *Corporate Political Speech, Political Extortion, and the Competition for Corporate Charters*, 69 *U. Chi. L. Rev.* 1103, 1122 (2002).

225. See *Joy v. North*, 692 F.2d 880, 886 (2d Cir. 1982); Sitkoff, *Agency Costs*, *supra* note 37, at 655–57.

because the Trust is not well diversified, the trustees might prefer the certainty of project A in spite of its lower expected value.²²⁶

When viewed in this manner, however, this alternative hypothesis is revealed to be merely a reformulation of ours. The trustees failed to maximize the value of the Trust's most significant asset, its shares in the Company, by sacrificing value for a reduced level of risk that could have been achieved in an alternative fashion without any loss in value.²²⁷ If the trustees judged the risk associated with a profit-maximizing Company to be too great for the Trust to bear, then they could have sold the Trust's shares, realizing the increased price from the market's expectation of the Company's switch to profit-maximization once free of the Trust's control. The trustees could then have invested the resulting larger Trust corpus in a diversified portfolio with the desired balance of risk and return.

The key point is that regardless of the mechanism for the depressed price of the Company's stock—lax monitoring of the Company's managers or imposition of something other than a profit-maximizing strategy—the implication of a positive finding is the same. The trustees unnecessarily sacrificed value, reducing the assets available for the Trust's charitable purpose while at the same time exposing the Trust to uncompensated risk.

b. *The Control Premium Phenomenon.* — The second alternative hypothesis posits that a positive result could reflect the control premium phenomenon. A controlling interest in a publicly-traded company sometimes has a control premium attached to it independent of any beliefs about the firm's underlying value. On this account, the trustees might have been active, efficient monitors of the Company's managers, but owing to a potential buyer's managers' desire to build a larger empire, to become too big to be a takeover target, or to acquire the Company for some other reason, a buyer might nonetheless value a control block in the Company more highly than the sum of the market's valuation of the individual shares.²²⁸ A purchaser also might be willing

226. See D'Antonio, *supra* note 8, at 246 (suggesting that trustees were "interested in minimizing risk and pressed the company for consistent performance rather than quick profits").

227. A closely related scenario involves the trustees failing to diversify because they anticipated political opposition and judged the costs of a diversification effort to outweigh its probable benefits. On this account, for which we hasten to add that there is little supporting evidence, the problem was not agency costs in the Trust's management, but rather defects in the political economy of the supervision of charitable trusts. Either way, the social welfare loss is the same and traces to structural weaknesses in the charitable trust form.

228. In this account, the control premium stems from agency costs within the acquiring firm. See, e.g., Yakov Amihud & Baruch Lev, Risk Reduction as a Managerial Motive for Conglomerate Mergers, 12 *Bell J. Econ.* 605, 606 (1981) (discussing management incentive to diversify to protect the managers' jobs); John C. Coffee, Jr., Regulating the Market for Corporate Control: A Critical Assessment of the Tender Offer's Role in Corporate Governance, 84 *Colum. L. Rev.* 1145, 1157 & n.24 (1984) (describing several empire building models); Michael Jensen, Agency Costs of Free Cash Flow,

to pay a premium in anticipation of the synergies created by the merger.²²⁹

However, the control premium possibility bears only on the mechanism for, not the existence of, agency costs in the Trust's management. Because the trustees already had a controlling interest in the Company, they should have exploited the existence of a potential control premium for the Trust's charitable purpose, if not directly by imposing superior management on the Company (our original hypothesis), then indirectly by selling the Company to a buyer that for whatever reason values control more highly (this alternative hypothesis). Under either scenario, the trustees left money on the table that could have been realized for the benefit of the Trust's charitable purpose.

2. *A Single Charitable Trust.* — The second limitation in our research design is that our study encompasses only a single charitable trust. Here the worry relates to our econometric methodology (i.e., internal validity) and to the generalizability of our results (i.e., external validity).

With respect to internal validity, the concern is that, with only a single trust, the noise to signal ratio might be such that we ascribe statistical significance to what is in fact a random fluctuation in the data. To address this concern, we undertake a host of robustness checks, several of which are designed specifically to address the problem of noise in a sample of one.²³⁰ We may also take comfort from the fact that the magnitudes of some of our findings are so large that, as a mathematical matter, they cannot be artifacts of random fluctuation in the data.²³¹

Regarding external validity, the concern is that our findings with respect to the Trust might not be representative of other charitable trusts more generally. Here the tension is between the quality of the natural quasi-experiment (the more unusual the circumstances, the better the experiment) and the generalizability of the results. Given the unique shock of the trustees' exposure of the Company to the market for corporate control, we must guard against reading our results more aggressively than our research design can justify.

Accordingly, in our view a positive result would indicate agency costs in the Trust structure and would tend to support the large body of theoretical literature that supposes agency costs in charitable trusts more generally. We cannot, however, generalize about the magnitude of agency costs in other charitable trusts from the magnitude of our specific

Corporate Finance and Takeovers, 76 Am. Econ. Rev. (Papers & Proc.) 323, 323 (1986) (arguing that management has an incentive to expand excessively because growth increases manager power and compensation).

229. Strictly speaking, the synergy scenario might more properly be understood as an agency cost arising from the charitable trust form. If such synergies existed, value-maximizing trustees would have used their control to force the Company to exploit those synergies, for example by initiating a merger.

230. See *infra* Part III.C.4.

231. See *infra* Appendix C.

Hershey finding, as each charitable trust operates in a different context. Still, a very large positive finding might imply that the problem is worse than previously believed, as the Trust has a high profile in Pennsylvania. A negative result, by contrast, would indicate that this charitable trust was well managed. But given the Trust's political salience in Pennsylvania, a negative result would not negate the claim in the theoretical literature that lower profile charitable trusts are often poorly managed.

C. *Corporate Governance*

Minimizing agency costs is also a central concern of corporate law. In the corporate context, agency problems arise from what Berle and Means famously dubbed the corporate form's "separation of ownership and control"—that is, the separation of the risk-bearing residual claim, which is held by the shareholders, from managerial authority, which is held by the directors and senior management.²³² To align the incentives of managers with the interests of shareholders, or at least to constrain the extent to which managers can advance their own interests at the expense of shareholders, the law gives shareholders information rights, the right to sue, the right to vote on the composition of the board and to approve certain critical transactions, and the right to sell their shares.²³³

With respect to the large, publicly traded corporation, the prevailing scholarly view, which is supported by abundant empirical evidence, is that shareholder litigation and other such control mechanisms are weak devices for minimizing corporate agency costs when compared to the market for corporate control (i.e., the threat of a takeover).²³⁴ Collective action problems plague diffuse shareholders, leaving each individual shareholder hesitant to engage in litigation, which is in effect a public good. A litigating shareholder will bear most of the litigation costs, but because the typical shareholder owns a tiny percentage of the company, the resulting gains from reducing corporate agency costs will accrue

232. See Adolf A. Berle, Jr. & Gardiner C. Means, *The Modern Corporation and Private Property* 69–70 (1932). For more modern statements, see Stephen M. Bainbridge, *Corporation Law and Economics* 35–38 (2002); Roberta Romano, *Foundations of Corporate Law*, at v (1993).

233. See Julian Velasco, *The Fundamental Rights of the Shareholder*, 40 *U.C. Davis L. Rev.* 407, 413–24 (2006).

234. Michael Jensen famously expressed this view in his 1993 Presidential Address to the American Finance Association. See Michael C. Jensen, *The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems*, 48 *J. Fin.* 831, 850 (1993). For a recent review of the empirical literature, see Bhagat & Romano, *supra* note 29, at 976–77, 978 tbl.3, 987–92; see also Gregg A. Jarrell, James A. Brickley & Jeffrey M. Netter, *The Market for Corporate Control: The Empirical Evidence Since 1980*, *J. Econ. Persp.*, Winter 1988, at 49 (describing empirical studies regarding market for corporate control); Michael Jensen & Richard Ruback, *The Market for Corporate Control: The Scientific Evidence*, 11 *J. Fin. Econ.* 5 (1983) (same).

mainly to the other shareholders.²³⁵ The same intuition applies to other internal control mechanisms such as the right to vote. No individual shareholder has a real incentive to fight for controls that would benefit all shareholders or to engage in the sort of active monitoring that leads to informed voting.²³⁶

The analysis is different when one considers the potential disciplining force of the threat of a takeover. If managers do not maximize the return on a firm's assets, the firm's stock price will be depressed. This depressed stock price represents a profit opportunity for an investor or group of investors that acquires a controlling interest in the firm and replaces the existing management team with one that maximizes the return on the firm's assets. The payoff is the resulting appreciation in the firm's stock price. Accordingly, by threatening managers with the loss of their jobs in the event that they shirk or underperform, the market for corporate control minimizes corporate agency costs.²³⁷ On this account the right to vote and the right to sell are essential to good corporate governance not in their own right, but because they facilitate the operation of the market for corporate control.

An alternative disciplining mechanism arises when the firm has a controlling shareholder or a minority blockholder. Unlike a typical shareholder, for whom diversification plus passivity is a rational strategy, a controlling shareholder might have a sufficient financial incentive to monitor actively and, if necessary, impose new management or new managerial strategies on a company.²³⁸ Thus, some scholars and policymakers have argued that increased activism by controlling shareholders will improve corporate governance.²³⁹ On the other hand, the extent of the

235. For discussion of agency problems in shareholder litigation, see generally Reinier Kraakman et al., *When Are Shareholder Suits in Shareholder Interests?*, 82 *Geo. L.J.* 1733 (1994).

236. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 *J.L. & Econ.* 395, 402 (1983) ("When many are entitled to vote, none of the voters expects his votes to decide the contest. Consequently none of the voters has the appropriate incentive at the margin to study the firm's affairs and vote intelligently.").

237. See, e.g., Manne, *supra* note 37, at 238–39 (arguing that, with regard to for-profit corporations, enforcement of fiduciary duties is backstopped by possibility of takeover).

238. See Andrei Shleifer & Robert W. Vishny, *Large Shareholders and Corporate Control*, 94 *J. Pol. Econ.* 461, 463 (1986) (arguing that large blockholder, because it can capture significant portion of increase in corporate value, will have incentive to monitor management).

239. See, e.g., Black, *Agents*, *supra* note 5, at 813 (1992) ("Large institutions could overcome the incentives for passivity created by fractional ownership."); Ronald J. Gilson & Reinier Kraakman, *Reinventing the Outside Director: An Agenda for Institutional Investors*, 43 *Stan. L. Rev.* 863, 868 (1991) (describing increased activity by large, institutional investors as "laudatory"). For contrary analysis, see Stephen M. Bainbridge, *Director Primacy and Shareholder Disempowerment*, 119 *Harv. L. Rev.* 1735, 1752–53 (2006) (arguing that costs of widespread monitoring by institutional investors, costs of initiating changes in management, and low probability of benefit undermine advantages of blockholder activism); Thomas A. Smith, *Institutions and Entrepreneurs in American Corporate Finance*, 85 *Cal. L. Rev.* 1, 33–35 (1997) (arguing that institutional oversight is

discipline provided by a controlling shareholder will depend on the controlling shareholder's incentives and, if the controlling shareholder is itself an entity, the quality of the controlling shareholder's internal governance scheme. On this view, an individual or a well-managed, profit-maximizing hedge fund²⁴⁰ might be a more effective monitor than a pension fund²⁴¹ or mutual fund run by managers with an attenuated stake²⁴² in the ultimate performance of the fund.

The aborted 2002 sale of the Company by the Trust provides a fortuitous natural quasi-experiment on the comparative virtues of a controlling shareholder versus the market for corporate control as alternative mechanisms for minimizing corporate agency costs. If the two mechanisms are equally effective in disciplining management, we should find no difference in the value of the Company during the sale window and during the periods immediately before and after that window. By contrast, if the market for corporate control is superior to the control provided by concentrated ownership, whether because blockholders are generally ineffective, because the managers of this particular blockholder (i.e., the trustees) have poor incentives owing to the agency problems that are inherent to the charitable trust form, or some combination of the two, we should find that Hershey's market value improves during the sale window. If the market for corporate control is inferior to control by the Trust in disciplining management, we should find that Hershey is worth less during the sale window.

As in our analysis of charitable trust agency costs above, we must again acknowledge potential limitations in our research design concerning: (1) alternative hypotheses and (2) reliance on observations of a single firm.

impractical because of requirements of risk-increasing concentration of investment and large initial expenditure); see also Roberta Romano, *Less Is More: Making Institutional Investor Activism a Valuable Mechanism of Corporate Governance*, 18 *Yale J. on Reg.* 174, 187 (2001) (surveying empirical literature on institutional activism and concluding that, in general, such activism does not improve shareholder wealth).

240. See Kahan & Rock, *supra* note 48, at 1062–70 (arguing that hedge funds have superior profit-maximizing strategies as result of less stringent regulatory constraints, better-designed incentive structures, and more limited conflicts of interest).

241. Compare Bernard S. Black, *Shareholder Passivity Reexamined*, 89 *Mich. L. Rev.* 520, 606–07 (1990) (arguing that public pension funds are well suited to engage in proshareholder activism), with Roberta Romano, *Public Pension Fund Activism in Corporate Governance Reconsidered*, 93 *Colum. L. Rev.* 795, 799–831 (1993) (arguing that public pension funds have their own perverse incentives to take positions potentially in conflict with shareholder interests generally).

242. This point is made quite forcefully in Edward B. Rock, *The Logic and (Uncertain) Significance of Institutional Shareholder Activism*, 79 *Geo. L.J.* 445, 469–78 (1991) (emphasizing “potential divergence of interests between passive portfolio managers and the beneficiaries of the funds they manage”); see also John C. Coffee, Jr., *Liquidity Versus Control: The Institutional Investor as Corporate Monitor*, 91 *Colum. L. Rev.* 1277, 1338 (1991) [hereinafter *Coffee, Liquidity*] (proposing reforms to overcome fund managers' attenuated incentives to monitor actively).

1. *Alternative Hypotheses.* — We cannot disentangle the role of the Trust's particular governance structure from the role of switching from a controlling shareholder to the market for corporate control as alternative explanations for the Company's price dynamics in and around the sale window. Thus, if we have a positive finding—that is, if we find that the Company is more valuable when subject to the takeover market than when under the thumb of the trustees—we will know only that the market rated the threat of a takeover as superior to control by *this* controlling shareholder. Although such a result would highlight the problem of agency costs within a controlling shareholder's organizational form and would lend modest support to the takeover model, it would not resolve whether the takeover market is preferable to another controlling shareholder with better internal governance (for example, a hedge fund).

Further, to the extent that a positive finding is traceable to agency costs in *this* controlling shareholder, per our discussion in the prior section of alternate hypotheses relating to charitable trust agency costs, we cannot determine the specific form of the Trust's agency costs (e.g., lax oversight by the trustees, imposition of something other than a profit-maximizing strategy by the trustees, etc.).

In sum, our analysis will add to the stock of empirical knowledge on controlling shareholders and the takeover market as alternative devices for minimizing corporate agency costs, but the interpretation of our findings must be sensitive to our inability to disentangle how much of our findings are attributable to general versus specific features of the Hershey incident.

2. *A Single Firm.* — As before, we must consider the possibility that we might ascribe statistical significance to what is in fact random variation in the data because we examine only a single firm.²⁴³

III. EMPIRICAL ANALYSIS

We examine the Company's share prices before, during, and after the period in which the trustees announced their intention to sell the Trust's controlling interest in the Company. Our analysis proceeds in four steps. First, in Part III.A, we describe the nature and sources of our stock market data. Second, in Part III.B, we undertake a graphical analysis of the data for the Company by itself and in comparison to its leading competitors and to the stock market as a whole. The stock price effects of the trustees' plan to sell and abandonment of the sale are so profound that simple graphical depictions are highly suggestive. Third, in Part III.C, we present the results of a more formal event study econometric analysis that measures stock price movements traceable to sale-related events by isolating them from movements related to ordinary market volatility. Finally, in Part III.D, we offer a nontechnical summary of our main

243. See *supra* text accompanying notes 230–231.

empirical findings. Readers interested in our results, but not the formal methodology, will find Parts III.B and III.D of principal interest.

A. Data

We examine daily closing price data for the Company's common stock (ticker symbol HSY), the common stocks of Hershey's closest competitors that are traded on the New York Stock Exchange (NYSE), and a variety of market indexes, including the Standard and Poor's 500 (S&P 500) and the Dow Jones Industrial Average (DJIA). Our timeframe includes the period during which the sale was considered (that is, between July 25, 2002, and September 18, 2002), two years preceding the sale window, and two years following the sale window. We include two years before and after the sale window to put the observed price movements during the window into historical perspective.

We obtained our stock price data from the Center for Research in Security Prices (CRSP) at the University of Chicago Graduate School of Business.²⁴⁴ We accessed these data through Wharton Research Data Services,²⁴⁵ an interface maintained for academic use at the University of Pennsylvania.

A problem with raw stock price data spanning several years is that price movements may reflect nothing more than a stock split or a dividend payment, neither of which affect shareholder wealth.²⁴⁶ To avoid distortion from stock splits and dividends in our examination of stock prices over time, in the graphical and event study analyses that follow we use adjusted closing prices provided by CRSP that account for stock splits and dividends.

B. Graphical Analysis

On July 25, 2002, the day the *Wall Street Journal* broke the news of the trustees' plan to sell, HSY closed at an unadjusted price of \$78.30, an increase of \$15.80 (more than 25%) from the prior day's closing price of

244. See Ctr. for Research in Sec. Prices, at <http://www.crsp.com/> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*).

245. See Wharton Research Data Servs., at <http://wrds.wharton.upenn.edu/> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*). Historical HSY data is also available online at The Hershey Co., Investor Relations: Historical Price Lookup, *supra* note 120.

246. For example, suppose Company A has 100 shares trading at \$10 per share. Then A makes a two-for-one stock split. Assuming no other contemporaneous changes in A, after the split there would be 200 shares trading at \$5 per share. Although A's stock price would have dropped by half, A's shareholders would have twice as many shares, leaving their wealth unchanged. Alternatively, suppose Company B has 100 shares trading at \$10 per share. Then B pays a cash dividend of \$5 per share. Assuming no other contemporaneous changes in B, after the cash dividend the 100 shares in B would trade at \$5 per share because there would be five dollars less per share worth of assets in the company. Yet the shareholders in B would be unharmed by the decline in the stock price, as the decline would be offset by the payment of \$5 per share to those shareholders.

\$62.50. On September 18, 2002, the first trading day after the trustees publicly abandoned their sale plan at close to midnight on September 17, HSY closed at an unadjusted price of \$65.00, a decrease of \$8.81 (almost 12%) from the prior day's closing price of \$73.81.

While these price changes seem striking, it is possible that they are only coincidentally related to news of the sale and its abandonment. For example, the increase at the beginning of the sale window might reflect a preexisting upward trend in HSY, and the decline at the end of the sale window might be picking up the beginning of a downward trend. Another possibility is that these price movements, large though they may be, were the result of normal random variation in the price of HSY—that is, perhaps HSY is a volatile stock and this volatility manifested itself positively on July 25 and negatively on September 18.²⁴⁷ Still another possibility is that these price changes could reflect general market movement common to all similar stocks on those days.

To rule out the possibility that the identified price movements are the result of existing trends or normal variation, we examine in Figure 1 the adjusted closing price of HSY during the sale window and for fifty trading days before and after the sale window. For a broader perspective, Appendix Figure A1 presents 500 trading days before and after the sale window, a practice we repeat for all the graphs in this section.

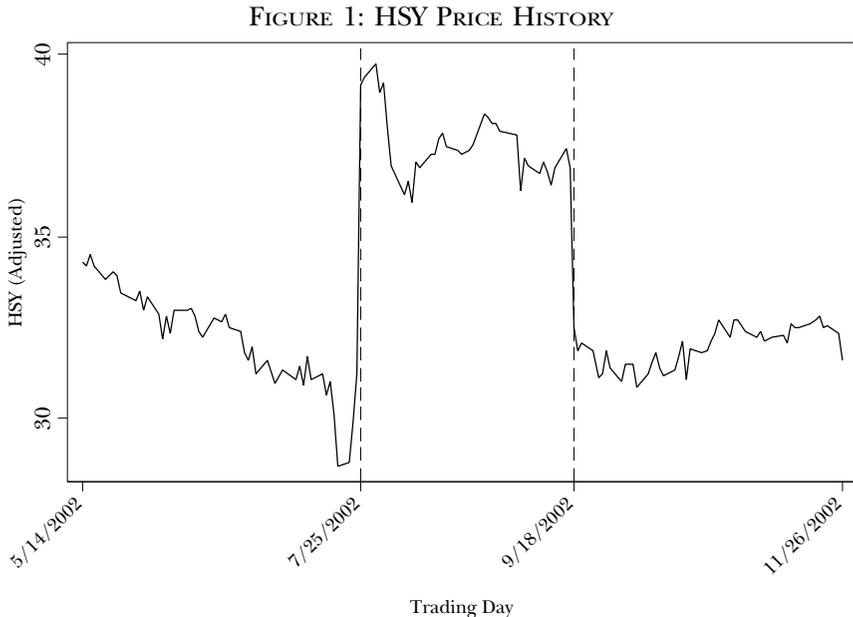


Figure 1 demonstrates that the price increase at the beginning and the decrease at the end of the sale window were not artifacts of preexist-

247. As seen in the graphs that follow, as well as the subsequent regressions, HSY returns are not particularly volatile, which suggests that this possibility is unlikely.

ing trends. On the contrary, the price of HSY was trending downward before July 25, 2002, and began an upward trend not long after the trustees abandoned the sale.²⁴⁸

Another possible explanation for the observed HSY price movements is coincidental change in the chocolate market. To examine this possibility, Figure 2 and Appendix Figure A2 add contemporaneous price movements of three firms that compete with Hershey in the chocolate market: Cadbury Schweppes (CSG), Tootsie Roll (TR), and Rocky Mountain Chocolate Factory (RMCF).²⁴⁹ These firms²⁵⁰ represent Hershey's principal NYSE-traded competitors with important chocolate products.²⁵¹ We consider the potential endogeneity problems with using the performance of a competitor as a control in connection with our formal event study analysis in Part III.C below.

None of Hershey's chocolate market competitors experienced a comparable stock price jump on July 25, 2002, and none dropped as precipitously on September 18, 2002.²⁵² Hence, we infer that the observed HSY price movements on those dates were not related to peculiar coincidental factors in Hershey's primary product market.

The Company's business is broader, however, than just chocolate. In 2002 Hershey "also manufacture[d] and/or market[ed] grocery products in the baking, beverage, peanut butter and toppings categories."²⁵³ Thus, in Figure 3 (and Appendix Figure A3) we compare HSY price

248. Appendix Figure A1 shows that the price of HSY returned to the sale window level about a year later, but per Appendix Figure A2, the subsequent upward trend in HSY resembles the upward trend experienced contemporaneously by other chocolate companies.

249. The RMCF stock price is plotted against the right hand axis in Figure 2 because its price range during the entire period was substantially lower than that of the other stocks.

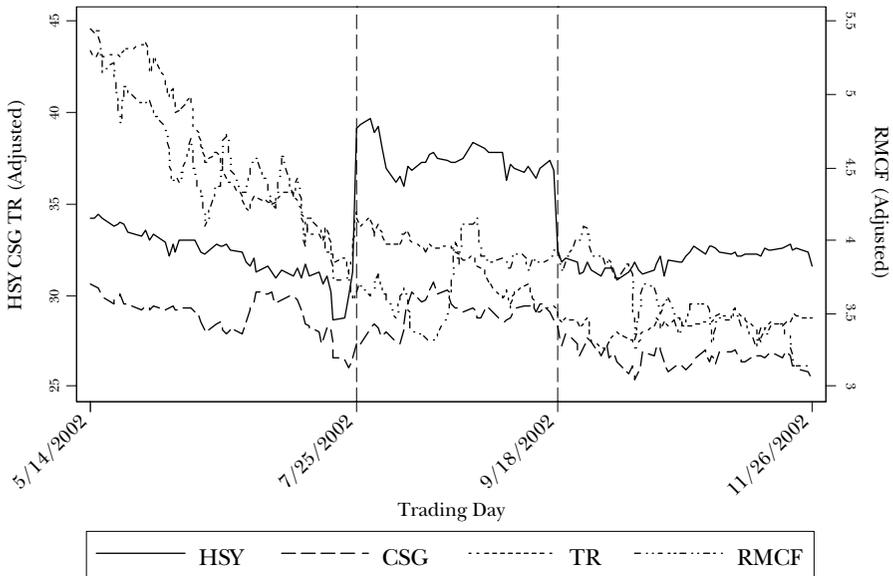
250. A similar picture would emerge if we were to create a single portfolio of Hershey's competitors and plot that portfolio's return against the HSY return.

251. We took our roster of Hershey's chocolate rivals from Google Finance, The Hershey Company: Related Companies, at <http://finance.google.com/finance?q=hsy> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*), and Yahoo! Finance, Hershey Co.: Competitors, at <http://finance.yahoo.com/q/co?s=HSY> (last visited Mar. 3, 2008) (on file with the *Columbia Law Review*), which list these firms as Hershey's primary publicly traded competitors in the chocolate market. The other obvious contenders are Mars and Nestlé, but Mars is a privately held firm, so it has no public stock price data, and Nestlé is not traded on the New York Stock Exchange. While each of these competitors produces more than just chocolate, we categorize them as chocolate competitors because they do not reach the scale or scope of production of the firms that we categorize as food competitors in the analysis that follows in Figure 3.

252. Although TR does appreciate on July 25, 2002, the increase is small relative to the normal variation in TR's price. Likewise, RMCF appears to experience potentially interesting price movement in the middle of the sale window, though this movement also is small relative to the normal variation in RMCF's price. Our econometric analysis in Part III.C yields results consistent with these interpretations.

253. The Hershey Co., Annual Report (Form 10-K), at 1 (Mar. 26, 2003) [hereinafter 2003 Annual Report].

FIGURE 2: HSY VS. CHOCOLATE COMPETITORS



movements with those of ConAgra (CAG), Kraft Foods (KFT), and Tyson Foods (TSN), Hershey's principal food rivals.²⁵⁴

As in the chocolate market comparisons, we find no indication that trends in the food industry drove the observed HSY price movements during the sale window. For each of the comparison stocks, prices are largely flat throughout the sale window. Accordingly, we infer that the observed HSY price movements around the sale window were not related to peculiar coincidental factors in the food industry.

Finally, we examine whether general market trends might explain the observed HSY price dynamics. In Figure 4a and Appendix Figure A4a, we plot HSY against the Standard and Poor's 500 market index (S&P 500 plotted against the right-hand axis). In Figure 4b and Appendix Figure A4b, we do the same for the Dow Jones Industrial Average (DJIA plotted against the right-hand axis).²⁵⁵

254. As in the chocolate market, we took our list of rival food firms from Google Finance and Yahoo! Finance. See *supra* note 251. As before, some companies that would seem like good comparisons (e.g., Frito Lay) are not suitable because they are not publicly traded.

255. A similar picture would emerge if we plotted HSY against CRSP's value-weighted market index, which is often used in the finance literature as a representative market portfolio. See, e.g., Laurence Schumann, *State Regulation of Takeovers and Shareholder Wealth: The Case of New York's 1985 Takeover Statutes*, 19 *RAND J. Econ.* 557, 562 (1988).

FIGURE 3: HSY VS. FOOD COMPETITORS

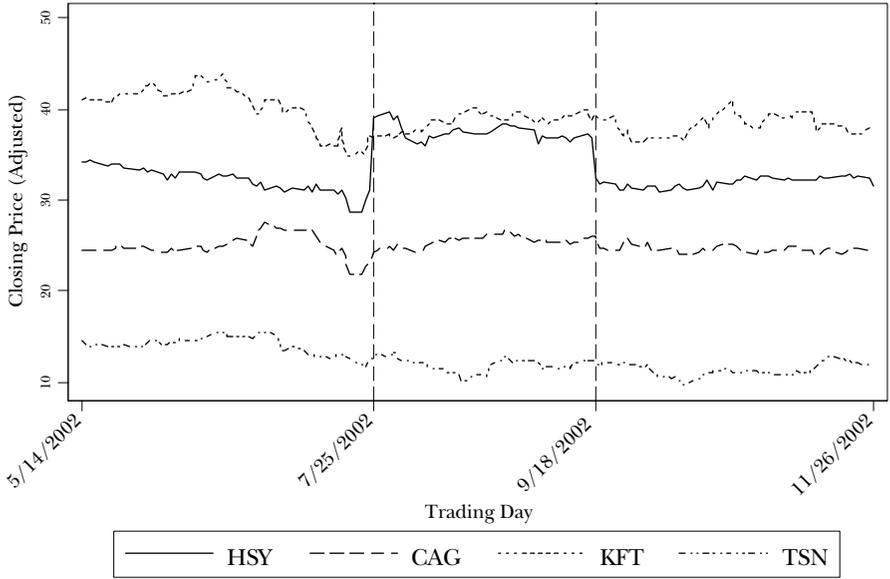


FIGURE 4A: HSY VS. S&P 500

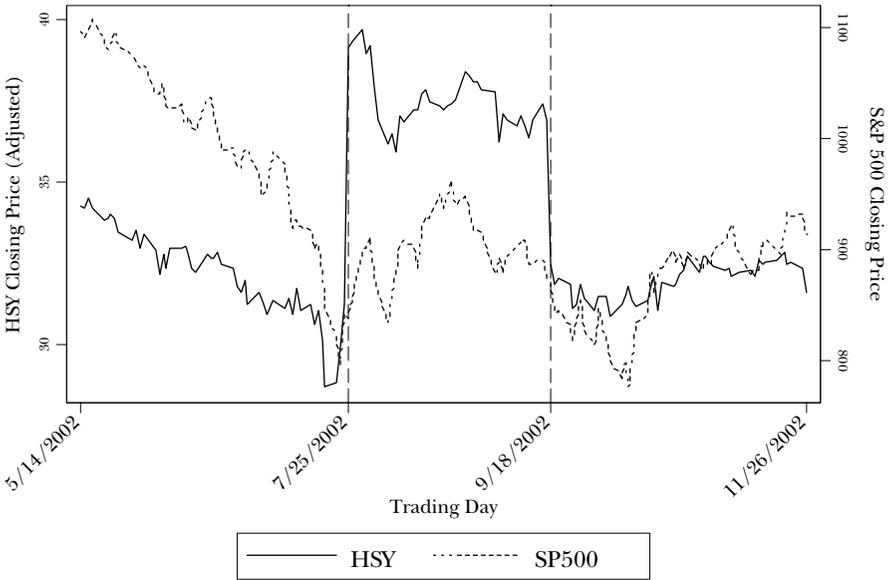
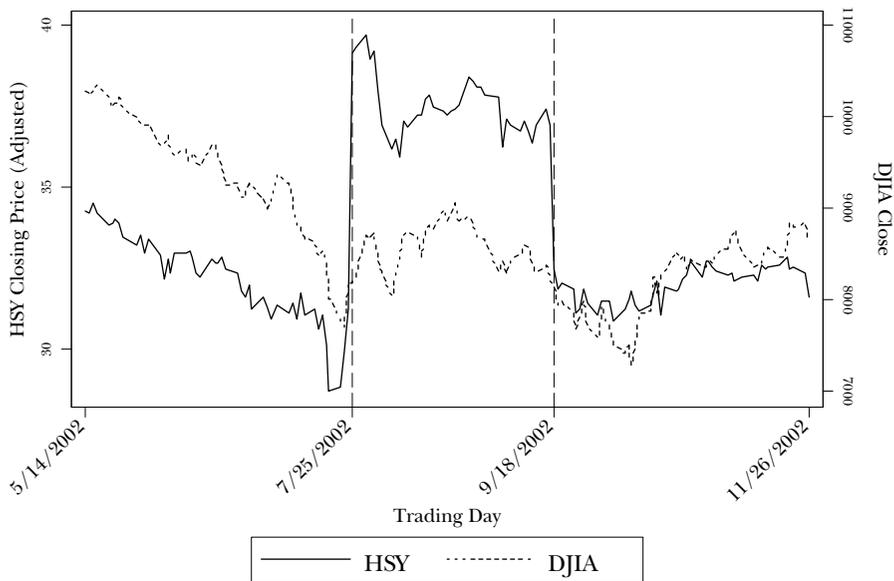


FIGURE 4B: HSY VS. DOW JONES INDUSTRIAL AVERAGE



The differences between HSY's price dynamics and those of the market indexes are not as striking as in the comparisons in Figures 2 and 3. Both the S&P 500 and the DJIA experienced price appreciation toward the beginning of the sale window and depreciation toward the end of the sale window. These market movements do not correspond precisely with that of HSY, however, as the market indexes began their rise after July 25, 2002, and started their downward trend before September 18, 2002. Further, in neither case is the relative price change as great as that experienced by HSY. Nonetheless, the observed comovement of the market indexes and HSY casts some doubt on the causal relationship between the Trust's proposed sale and the movement of Hershey's stock price.²⁵⁶ To sort through these possibilities, in the next section we employ a more formal event study econometric analysis that separates the effect of sale-related news from general market trends.

C. Event Study Analysis

1. *Introduction.* — The comparisons of HSY and the market indexes give us pause in attributing the HSY price dynamics during the sale window to sale-related news. To untangle the effect of general market trends from sale-related news, we make use of an event study methodology that is well accepted in the literature of financial economics.

256. Although Hershey is included in the S&P 500, see Yahoo! Finance, Components for S&P 500 Index, at <http://finance.yahoo.com/q/cp?s=%5EGSPC&alpha=H> (last visited Apr. 5, 2008) (on file with the *Columbia Law Review*), it accounts for less than 0.2% of the S&P 500 index. The movement of the DJIA, which does not include HSY, follows the same general pattern.

Two ideas underpin the market model event study methodology that we employ below.²⁵⁷ The first is the efficient capital markets hypothesis (ECMH). In its semi-strong version, the ECMH posits that the price of a publicly traded security reflects all public information on the present value of the future cash flow associated with ownership of the security.²⁵⁸ Hence, in a semi-strong efficient market, only nonpublic information such as an unanticipated event will affect securities prices, and traders cannot exploit publicly available information for gain. Until recently, the nearly universal view among financial economists was that the domestic stock market is semi-strong efficient; and while some have begun to question this view in the last few years, semi-strong efficiency remains the prevailing view.²⁵⁹

The second idea is that in the short run the relationship between an individual security and the market as a whole is relatively stable.²⁶⁰ On this assumption, it is possible to assess in retrospect whether on a given day a particular stock experienced an “abnormal” price movement, meaning a change in price that deviates in a significant way from the stock’s typical relationship with the market as a whole. Importantly, we do not claim that it is possible to predict a stock’s future price movements based on past performance. Rather, the claim is that on Tuesday we can judge whether a particular stock’s price movement on Monday was “normal” or “abnormal” for that stock in relation to the known movement of the market as a whole on that same Monday.

Taken together, these two ideas imply that it is possible to assess empirically the effect of an unanticipated event on a company’s stock price. Consider a grossly simplified, stylized example. Suppose that for 100 days the price of Company A’s stock increased or decreased in perfect concert with the market as a whole. Then on day 101 A’s managers announce a new business plan and the stock goes up 12%. If the market as a whole went up 5% on that day, so that a “normal” movement of A’s stock would

257. For a more detailed discussion of event study methodology, see Bhagat & Romano, *supra* note 29, at 947–56, on which our discussion draws. For a more technical discussion, see John Y. Campbell, Andrew W. Lo & A. Craig MacKinlay, *The Econometrics of Financial Markets* 149–80 (1997); S.P. Kothari & Jerold B. Warner, *Econometrics of Event Studies*, in 1 *Handbook of Corporate Finance: Empirical Corporate Finance* 3 (B. Espen Eckbo ed., 2007).

258. See Macey, *Introduction*, *supra* note 19, at 38–40, 43–45.

259. See Burton G. Malkiel, *The Efficient Markets Hypothesis and Its Critics*, *J. Econ. Persp.*, Winter 2003, at 59, 59–60 (acknowledging arguments against efficient market hypothesis, but concluding that stock market is generally efficient); see also Eugene F. Fama, *Market Efficiency, Long-Term Returns, and Behavioral Finance*, 49 *J. Fin. Econ.* 283 (1998) (presenting systematic empirical examination of claims regarding market inefficiency). In all events, the ongoing debate over the validity of the ECMH concerns matters that do “not invalidate the event study methodology.” Bhagat & Romano, *supra* note 29, at 948 n.1.

260. See A. Craig MacKinlay, *Event Studies in Economics and Finance*, 35 *J. Econ. Literature* 13, 15 (1997) (“The market model assumes a stable linear relation between the market return and the security return.”).

have been a 5% increase, we could attribute the “abnormal” difference of 7% to the unanticipated news of the new business plan.

2. *HSY Event Study*. — Implementation of the foregoing intuitions in a market model event study may be broken down into five steps:²⁶¹ (1) define the event and identify the date or dates on which information of the event became public; (2) measure the affected security’s actual return on the dates of interest; (3) estimate the security’s expected return on the dates of interest using historical data on the relationship of the affected security to the market as a whole; (4) compute the abnormal return by subtracting the expected return from the actual return; and (5) assess the statistical significance of the abnormal return. Once these five steps are completed, it is possible to evaluate the economic significance, if any, of the abnormal return on the dates of interest. We take each step in turn.

(1) Our event is the aborted sale of the Trust’s controlling interest in the Company. Hence, we focus on the thirty-eight trading day sale window that began on July 25, 2002, and ended on September 18, 2002. Within this window, we are particularly interested in (a) July 25, 2002, the day that news of the sale was broken by the *Wall Street Journal*; (b) September 4, 2002, the day that the trial court issued an injunction against the sale; and (c) September 18, 2002, the first trading day after the trustees abandoned the sale late in the evening on September 17.²⁶²

(a) The impact of the July 25 sale announcement tests our hypotheses regarding agency costs in charitable trust governance and the comparative virtues of a controlling shareholder versus the market for corporate control in minimizing agency costs in corporate governance. For the reasons explained earlier, we predict a large, positive abnormal return on that date.

(b) The impact of the September 4 injunction provides a test of the welfare effects of the Attorney General’s intervention. The September 4 injunction also provides a robustness check on our analysis of the July 25 sale announcement. Because the injunction reduced the probability of a sale, but did not extinguish the possibility of one, we predict a negative

261. Our five-step statement of the mechanics of an event study draws on the four-step statement in Bhagat & Romano, *supra* note 29, at 948–51, except that for expositional clarity we have broken their step four into two separate steps.

262. See *supra* notes 108, 146, 181 and accompanying text. We do not test the effect of the subsequent amendment to the Pennsylvania prudent investor rule, see *supra* text accompanying notes 193–198, for two reasons. First, prior to the amendment, the trustees committed in writing not to sell the Company without first notifying the Attorney General’s office, and the trial court included this requirement in its October 16 order dissolving the preliminary injunction. See *supra* notes 186–187 and accompanying text. Second, it is hard to isolate a clean event date for legislative enactments without introducing bias. See Bhagat & Romano, *supra* note 29, at 949 (describing potential effect of various announcements throughout legislative process). Here the Attorney General made various public announcements about supporting the legislation, which then passed each house of the Pennsylvania legislature on different dates, and then was signed by the Governor on still another date. See Sidel, *Struggle for Hershey*, *supra* note 8, at 39–44.

abnormal return that is smaller in absolute magnitude than July 25's abnormal return.

(c) The impact of the trustees' September 18 abandonment of the sale provides a second test of our agency cost hypotheses, both as a robustness check on our finding for July 25 and to exclude the confounding possibility that the fact of the sale announcement itself supplied new information about the Company.²⁶³ We predict a negative abnormal return that, given the prior injunction, falls in absolute magnitude between that of the September 4 and July 25 dates.²⁶⁴

Table 2 summarizes the key dates of interest and our predicted impacts of the events of those dates.

TABLE 2: KEY EVENTS AND PREDICTED IMPACTS

Date	Event	Predicted Impact
7/25/2002	Sale Announced	Positive
9/4/2002	Sale Enjoined	Negative
9/18/2002	Sale Abandoned	Negative

(2) The next step, which is relatively simple, is to measure the actual return of HSY during the sale window. Actual return is routinely calculated as the price of the stock at time $t + 1$ minus the price at time t divided by the price at time t . Using adjusted daily closing prices, in the third column of Table 3 we present HSY's actual return for each trading day within the sale window.

(3) The third step, estimating the security's expected return, is more complicated. We use a statistical market model that, as is customary, assumes that HSY's expected return may be estimated as a linear function of the return of the market as a whole.²⁶⁵ This relationship is expressed as follows:

263. See *infra* notes 357, 359 and accompanying text.

264. In theory, if there were no other indications during the sale window that the trustees might abandon the sale, we would have expected the September 18 abnormal return to equal the July 25 abnormal return, except oppositely signed. However, the Attorney General's actions during the window, as well as those of the courts and members of the local community, decreased the probability of a sale. Inasmuch as this expectation would have been capitalized (probabilistically) into the HSY price, we expect a large negative abnormal return on September 18, but one that is smaller in magnitude to that observed on July 25.

265. There are three notable alternatives to the statistical market model. Two are economic models (the capital asset pricing model and the arbitrage pricing theory) and the third is another statistical model (the constant expected returns model). See Bhagat & Romano, *supra* note 29, at 950–51. In general, the economic models introduce additional complexity without an offsetting improvement in the estimation. See Campbell et al., *supra* note 257, at 153–57; Bhagat & Romano, *supra* note 29, at 950–51. Moreover, unlike the market model, which accounts for broad market trends, the constant expected returns model looks only to the historical price movement of the security at issue. For simulations indicating some shortcomings with the constant expected returns model, see Stephen J. Brown & Jerold B. Warner, *Using Daily Stock Returns: The Case of Event Studies*, 14 J.

$$E(HSY_t) = \lambda_{HSY} + \phi_{HSY} \cdot Market_t$$

Where $E(HSY_t)$ is the expected return for HSY during time period t , λ_{HSY} is an HSY-specific constant, ϕ_{HSY} is an HSY-specific coefficient (i.e., a measure of how the HSY return has varied historically in relationship to the market return), and $Market_t$ is the market return over timeframe t . To compute the expected return for HSY during the sale window, we multiply the market return during the window by ϕ_{HSY} and then add λ_{HSY} .

To estimate λ_{HSY} and ϕ_{HSY} , we perform an ordinary least squares regression on actual HSY returns for some period before the sale window (the “estimation period”) using the returns for a market portfolio as a predictor variable. For our market portfolio, we use the S&P 500.²⁶⁶ For our estimation period, we use 100 trading days prior to the event (i.e., the sale window), which is a common estimation period in event studies that use a statistical model.²⁶⁷ In the fourth column of Table 3, we present our estimated expected return for HSY during each of the trading days during the sale window. In unreported regressions we also used an estimation period of 200 days before the sale window with similar results.

A potential criticism of using data prior to the sale window to estimate expected returns during the sale window is that the sale window might have coincided with a structural change in the relationship between HSY and the market portfolio. If so, the historical relationship between HSY returns and the market return would no longer hold. As a check on this possibility, we also computed expected returns for HSY during the sale window using estimation periods of 100 days after the sale window, 200 days after the sale window, and a pooled model that included 100 days before and 100 days after the sale window. Each of these alternate approaches yielded results similar to the 100-days-prior results that we report below.

Another potential concern is that during the 100 trading days prior to the sale window, Hershey factory workers went on strike (which lasted from April 26, 2002, to June 8, 2002).²⁶⁸ To determine whether the strike introduced bias into our analysis, we investigated a 100 day estimation period that excluded the strike period as well as an estimation model that included a control variable for days during the strike. In both cases our results were little changed,²⁶⁹ which is consistent with Hershey’s own evaluation of the effect of the strike. In its quarterly filing with the SEC for the period that included the strike, the Company reported that “[t]he

Fin. Econ. 3, 25–26 (1985). The choice of expected return model did not affect the results, however, as our findings were largely unchanged when we used a constant expected returns model or one of the economic models.

266. The principal alternatives to the S&P 500 are the DJIA and the CRSP index. The results were largely unchanged, however, when we used these alternatives.

267. See Bhagat & Romano, *supra* note 29, at 951.

268. See Union Vote Halts Hershey’s Longest Strike, N.Y. Times, June 9, 2002, § 1, at 26.

269. Further, the coefficient on the strike control was itself not statistically significant.

work stoppage did not have a material impact on the Corporation's results of operations for the second quarter."²⁷⁰

(4) The next step is computing the abnormal return for HSY during each trading day in the sale window. The abnormal return is computed by subtracting the expected return from the actual return. The fifth column of Table 3 presents our abnormal return estimates.

(5) The final step is to assess the statistical significance of the abnormal return. By statistical significance we mean a measure of the likelihood that the observed abnormal return reflects random variation rather than the influence of the event under study. A typical significance threshold is 5%, with 2.5% of abnormal returns falling below a negative critical value and 2.5% of abnormal returns falling above a positive critical value that is symmetric to the negative critical value. That is, if the HSY return were to follow its historical relationship with the market return and not be affected by an unanticipated occurrence, then on any given day its observed abnormal return would fall between our positive and negative critical values 95% of the time. The alternative possibility that the day in question experienced an abnormal return owing to random variation would be only 5% likely. Accordingly, if a given day's abnormal return falls outside of these critical values, we may infer that it is very unlikely that the day's abnormal return comes from the same distribution as the abnormal returns from the estimation period. Critical values may also be computed for significance thresholds other than 5%, such as 1% or 0.1% (implying 99% and 99.9% likelihood respectively).

In the sixth column of Table 3 we present the standardized abnormal return for HSY during each day in the sale window. The standardized abnormal return is the ratio between the abnormal return and the standard deviation of the abnormal returns during the estimation period.²⁷¹ For standardized abnormal returns that exceed 1.96 or are less than -1.96, there is less than a 5% chance that the observed abnormal return reflects random variation. That percentage falls to 1% for standardized abnormal returns above 2.575 or below -2.575, and to 0.1% for those above 3.277 or below -3.277.²⁷² In Table 3 and the other tables

270. The Hershey Co., Quarterly Report (Form 10-Q), at 15 (Aug. 7, 2002) [hereinafter Aug. 2002 Quarterly Report].

271. There is concern in the event study literature that the standard deviation of abnormal returns during the estimation period is not a useful measure of variation because of increased volatility around potentially important events. See, e.g., Bhagat & Romano, *supra* note 29, at 951 (discussing problem). Hence, we examined a number of alternative measures of variation including the standard deviation of abnormal returns during the sale window. We also estimated expected returns using a GARCH model that uses a time series technique that allows for a more general variance structure. See James D. Hamilton, *Time Series Analysis* 665-71 (1994). Our results are not affected by these different measures of variation.

272. These significance levels assume that the abnormal returns will be distributed normally with a mean of zero. But in a one-firm event study the abnormal returns might

that follow, we denote statistical significance at the 5, 1, and 0.1% levels with *, **, and *** notations respectively.

Our primary date of interest is July 25, 2002, the day in which the *Wall Street Journal* broke the news of the trustees' plan to sell. As we have seen, on July 25 the price of HSY jumped to an unadjusted closing price of \$78.30 from the prior day's closing price of \$62.50. This increase translates to an adjusted actual return of 0.253 on a day that,²⁷³ given the movement of the market as a whole, HSY would have been expected to experience a return of -0.002 . So the abnormal return for HSY on July 25 was 0.255, which translates to a standardized abnormal return of 21.25. Accordingly, HSY experienced a large, abnormal positive return on the date news of the trustees' plan to sell became public, and it is extremely unlikely that this finding reflects random variation instead of news of the sale plan (the finding is statistically significant at less than the 0.1% level). Indeed, excluding September 4 and September 18 (the dates on which the sale was enjoined and abandoned), the standardized abnormal return for July 25 was 8.5 times larger than the second largest and more than twelve times larger than the third largest standardized abnormal returns for any other day in the sale window.

Our second date of interest is September 4, 2002, the day that the trial court enjoined the sale. HSY dropped to \$72.51 from the prior day's closing price of \$75.60, which translates to an adjusted actual return of -0.041 . The expected return for HSY was 0.006. Hence, on September 4 HSY experienced an abnormal return of -0.047 . This result is statistically significant at less than the 0.1% level (the standardized abnormal return was -3.917).

Interestingly, the next day HSY experienced a positive abnormal return of 0.03 that is statistically significant at the 5% level. Although we did not hypothesize that there would be a large abnormal return on that day, this finding could suggest a number of possibilities. Perhaps the September 5 return represents one of the rare instances where the abnormal return falls outside of the critical values wholly by chance. Or maybe the market overreacted to the court's decision, believing that it represented a larger setback to the trustees than it actually was.²⁷⁴ Perhaps investors believed that the trustees would abandon the sale after the issu-

not be well approximated by the normal distribution. We address this concern in Part III.C.4 and in Appendix C.

273. Recall that in the graphs and econometric analyses we use adjusted closing prices, not actual closing prices. Hence, we report actual return in relation to the adjusted price data.

274. There is an ongoing debate in the finance literature about whether investors systematically overreact to bad news and if so whether sophisticated investors can profit from this tendency by engaging in a contrary investment strategy (e.g., purchasing shares in firms that depreciate after bad news). The empirical evidence of this phenomenon is mixed. For one study finding such an effect, see H. Nejat Seyhun, *Overreaction or Fundamentals: Some Lessons from Insiders' Response to the Market Crash of 1987*, 45 *J. Fin.* 1363, 1386–87 (1990).

TABLE 3: HSY RETURNS DURING SALE WINDOW

Date	Event	Actual	Expected	Abnormal	Standardized Abnormal
7/25/2002	Sale Announced	0.253	-0.002	0.255	21.250***
7/26/2002		0.005	0.006	-0.000	-0.000
7/29/2002		0.010	0.018	-0.008	-0.667
7/30/2002		-0.020	0.001	-0.021	-1.750
7/31/2002		0.007	0.003	0.004	0.333
8/1/2002		-0.031	-0.010	-0.021	-1.750
8/2/2002		-0.028	-0.008	-0.019	-1.583
8/5/2002		-0.021	-0.012	-0.009	-0.750
8/6/2002		0.009	0.010	-0.001	-0.083
8/7/2002		-0.015	0.007	-0.022	-1.833
8/8/2002		0.031	0.011	0.020	1.667
8/9/2002		-0.004	0.001	-0.005	-0.417
8/12/2002		0.011	-0.002	0.013	1.083
8/13/2002		-0.001	-0.008	0.007	0.583
8/14/2002		0.012	0.013	-0.001	-0.083
8/15/2002		-0.004	0.004	-0.000	-0.000
8/16/2002		-0.009	-0.001	-0.008	-0.667
8/19/2002		-0.004	0.008	-0.012	-1.000
8/20/2002		-0.003	-0.005	0.002	0.167
8/21/2002		0.002	0.004	-0.002	-0.167
8/22/2002		0.001	0.005	-0.003	-0.250
8/23/2002		0.003	-0.008	0.011	0.917
8/26/2002		0.024	0.002	0.021	1.750
8/27/2002		-0.003	-0.005	0.002	0.167
8/28/2002		-0.004	-0.006	-0.003	-0.250
8/29/2002		-0.001	-0.000	-0.001	-0.083
8/30/2002		-0.006	-0.001	-0.005	-0.417
9/3/2002		-0.002	-0.014	0.012	1.000
9/4/2002	Sale Enjoined	-0.041	0.006	-0.047	-3.917***
9/5/2002		0.025	-0.006	0.030	2.500*
9/6/2002		-0.006	0.005	-0.012	-1.000
9/9/2002		-0.004	0.003	-0.008	-0.667
9/10/2002		0.008	0.002	0.005	0.417
9/11/2002		-0.007	-0.000	-0.007	-0.583
9/12/2002		-0.010	-0.009	-0.002	-0.167
9/13/2002		0.014	0.001	0.013	1.083
9/16/2002		0.013	0.000	0.013	1.083
9/17/2002		-0.013	-0.007	-0.006	-0.500
9/18/2002	Sale Abandoned	-0.119	-0.002	-0.118	-9.833***

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$ (i.e., abnormal return is statistically significant at the 0.1%, 1%, and 5% levels respectively).

ance of the injunction, but reevaluated those beliefs when the trustees appealed immediately after the court decision. In their September 5 coverage of the trial court's decision, both the *Wall Street Journal* and the *New*

York Times stated that “legal experts” predicted that the injunction would be lifted on appeal.²⁷⁵

In all events, the sum of the abnormal returns for September 4 and 5 is negative and so signed as we predicted for September 4. These results, moreover, undermine the trial court’s conclusion that issuing the injunction would not “cause significant fluctuations” in the Company’s stock.²⁷⁶

Our third date of interest is September 18, 2002, the first trading day after the trustees abandoned the sale close to midnight on September 17. On September 18, HSY dropped to \$65.00 from the prior day’s closing price of \$73.81, which translates to an adjusted actual return of -0.119 . The expected return for HSY was -0.002 . Thus, on September 18 HSY experienced a negative abnormal return of -0.118 .²⁷⁷ This result, which is statistically significant at less than the 0.1% level (the standardized abnormal return was -9.833), belies the Attorney General’s argument in his appellate brief that “nothing suggests that the stock will be priced differently even if a sale does not occur.”²⁷⁸

Accordingly, for all three principal dates of interest, we find highly statistically significant abnormal returns in the direction (that is, positive or negative) predicted by our agency cost hypotheses. The magnitude of the abnormal returns associated with the sale announcement and then the sale abandonment are striking: 25.5% and -11.8% respectively. Apart from the three primary dates of interest and the day after the injunction, there are no other dates during the sale window with abnormal returns that are significant at the 5% level or better. Further, the five abnormal returns that are significant at the 10% level (critical value ± 1.65) are signed as one would expect in view of the events on and around those days.²⁷⁹

To summarize and give greater context to our findings, in Figure 5a we present Hershey’s cumulative abnormal returns (i.e., the sum of the abnormal returns; “CAR”) for the sale window plus twenty-five trading days before and after the sale window.²⁸⁰

275. See *supra* text accompanying note 149.

276. See *supra* note 169 and accompanying text.

277. The discrepancy between the reported abnormal return in column 5 and the sum of the reported expected and actual returns in columns 3 and 4 (i.e., $-0.119 - -0.002 = -0.118$) is the result of rounding.

278. See *supra* note 170 and accompanying text.

279. On both July 30 and August 1, as local opposition to the sale began to organize, HSY experienced negative abnormal returns of 2.1%. On August 7, while the trustees met to consider Fisher’s proposed alternative modes of diversification, HSY experienced a negative abnormal return of 2.2%. That evening, after the stock market closed, the trustees announced that they would press ahead with the sale. The next day, August 8, HSY experienced a positive abnormal return of 2%. Finally, on August 26, the day the trustees filed their papers in opposition to the Attorney General’s petition for a preliminary injunction, HSY experienced a positive abnormal return of 2.1%.

280. Because in this Figure (and in Figures 5b and 5c below) we include abnormal returns for twenty-five trading days before the sale window, in our expected returns

FIGURE 5A: CUMULATIVE ABNORMAL RETURNS

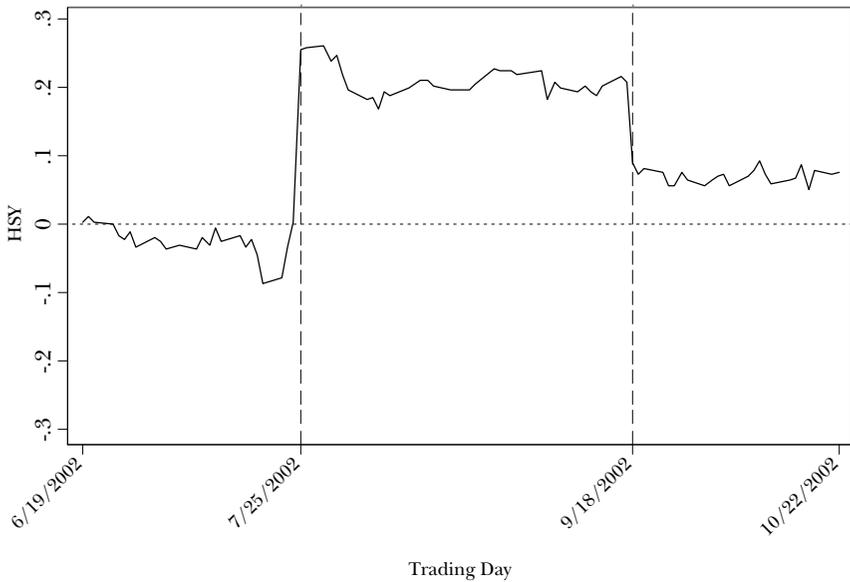


Figure 5a demonstrates that HSY's CAR during the sale window was neither the continuation of a preexisting trend nor the start of a new trend. Consistent with our agency cost hypotheses, the company was simply more valuable to investors during the period when the market expected the trustees to sell the Trust's controlling interest.

Interestingly, the CAR for Hershey remains above zero for some time after the end of the sale window. Assuming this finding is significant,²⁸¹ the data do not allow us to isolate an explanation, except to say that the increased Hershey CAR is probably not an artifact of secular trends in the chocolate or food industries, as Figures 5b and 5c indicate that Hershey's competitors do not likewise exhibit systematically higher CARs after the sale window.²⁸² Early empirical work on failed mergers suggested that

regression we use as our estimation period the 100 trading days before the first trading day plotted.

281. The CAR over the event window is statistically significant with a *t* statistic of 2.59 (i.e., the CAR divided by a measure of the CAR's variance is 2.59, which exceeds the critical value of 2.575 for significance at the 1% level). However, when calculated from the beginning of the event window through the end point in the graph above (October 22, 2002), the CAR drops below the threshold for statistical significance (*t* = 0.54). Thus, at some point during the month after the Hershey sale was abandoned, cumulative abnormal returns dropped to the point where they were no longer statistically distinguishable from zero. As compared to a single day's abnormal returns, CAR over a longer period is a less volatile measure of the effect of the event, albeit with a corresponding loss in clean identification of the event.

282. That Hershey's competitors did not likewise experience increased CARs runs counter to the empirical regularity that rival firms' returns tend to go up after a firm in the industry is involved in a takeover activity. See B. Espen Eckbo, *Horizontal Mergers, Collusion, and Stockholder Wealth*, 11 *J. Fin. Econ.* 241, 257–59 (1983); B. Espen Eckbo, *Mergers and the Market Concentration Doctrine: Evidence from the Capital Market*, 58 *J.*

target firms often exhibit increased CARs after a failed merger.²⁸³ Later work, however, discovered that these gains tend to dissipate over a longer time horizon.²⁸⁴ The literature suggests two possible explanations for these results: (1) a “kick-in-the-pants” idea, in which a target firm’s management is inspired to implement a more efficient business strategy after the failed takeover attempt, and (2) the market’s expectation that another acquiring firm will attempt a takeover in the near future.²⁸⁵ We conjecture that the former pertains here, but we can neither establish nor reject our conjecture empirically.

3. *Competitor-Based Controls.* — As a check to rule out the possibility that factors unrelated to the Hershey sale might explain the observed abnormal returns on the three primary days of interest, we performed a similar abnormal return analysis for Hershey’s principal NYSE-traded competitors identified in the earlier graphical analysis.²⁸⁶ The results are presented in Table 4.

None of Hershey’s competitors experienced an unusually large abnormal return on September 4 or September 18, and there is no consistent relationship between the abnormal returns of Hershey and its competitors on September 5. However, on July 25, the day the Hershey sale was announced, three of Hershey’s competitors (CSG, TR, and CAG) experienced large, positive abnormal returns that were unlikely to have come about by chance. These results are amenable to at least two different interpretations.

Bus. 325, 338 (1985). Although early studies did not find evidence consistent with any particular causal mechanism for this phenomenon, more recent work suggests that the increase in competitors’ CARs stems from an expectation that other firms in the industry will also become takeover targets. See Moon H. Song & Ralph A. Walkling, *Abnormal Returns to Rivals of Acquisition Targets: A Test of the “Acquisition Probability Hypothesis,”* 55 *J. Fin. Econ.* 143, 170 (2000). Our finding that Hershey’s rivals did not experience the typical increase in returns is consistent with this explanation, as the Hershey takeover activity was prompted by the trustees, not by an external buyer that, after failing to acquire the Company, might be expected to try to acquire one of Hershey’s rivals.

283. See, e.g., Michael Bradley, *Interfirm Tender Offers and the Market for Corporate Control*, 53 *J. Bus.* 345, 368–72 (1980) (noting that shareholders of targets “realized a significant capital gain in the wake of an unsuccessful tender offer”); Peter Dodd & Richard Ruback, *Tender Offers and Stockholder Returns: An Empirical Analysis*, 5 *J. Fin. Econ.* 351, 370 (1977) (“[U]nsuccessful targets realize abnormal returns in the event month and normal returns thereafter.”).

284. See, e.g., Michael Bradley, Anand Desai & E. Han Kim, *The Rationale Behind Interfirm Tender Offers: Information or Synergy?*, 11 *J. Fin. Econ.* 183, 194 (1983) [hereinafter Bradley, Desai & Kim, *Rationale*] (noting that abnormal returns from unsuccessful bid dissipate after two years if no other bids materialize); Frank J. Fabozzi, Michael G. Ferri, T. Dessa Fabozzi & Julia Tucker, *A Note on Unsuccessful Tender Offers and Stockholder Returns*, 43 *J. Fin.* 1275, 1282 (1988) (“All average excess returns of the period after withdrawal . . . are close to zero.”).

285. See J. Fred Weston, Juan A. Siu & Brian A. Johnson, *Takeovers, Restructuring, and Corporate Governance* 144–45 (3d ed. 2001).

286. See *supra* notes 251, 254 and accompanying text.

TABLE 4: STANDARDIZED ABNORMAL RETURNS—HSY AND COMPETITORS

Date	Event	HSY	CSG	TR	RMCF	CAG	KFT	TSN
7/25/2002	Sale	21.25***	2.62**	6.17***	0.30	3.25**	-0.43	0.35
	Announced							
9/4/2002	Sale	-3.92***	0.38	0.75	-0.23	0.25	-0.14	-1.43
	Enjoined							
9/5/2002		2.50*	0.39	-2.37*	-0.20	0.52	0.70	2.41*
9/18/2002	Sale	-9.83***	-0.23	1.33	-0.09	-0.19	0.76	-0.30
	Abandoned							

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$ (i.e., abnormal return is statistically significant at the 0.1%, 1%, and 5% levels respectively).

One possible interpretation of Table 4 is that news of the sale positively affected not only the Company's value, but also the value of some of its competitors. There is, in other words, a potential endogeneity problem in using HSY's competitors as controls because changes in HSY might affect the value of the competitors, and vice versa. For example, perhaps the Company's stock price was depressed because the Company was overproducing above the efficient level to protect the jobs of its employees. With new management, the Company might reduce its production to the profit-maximizing level, thereby improving its value. A reduction in the Company's output would also benefit at least some of its competitors, as they would have less competition from the Company for individual sales.²⁸⁷ A further endogeneity problem arises from the possibility that one of these competitors might bid on HSY.

Although the foregoing interpretations are consistent with our agency cost hypotheses (particularly the overproduction story), we do not find them persuasive. If CSG, TR, and CAG experienced positive abnormal returns on July 25 because the market anticipated a decline in output by Hershey, then those companies should have experienced negative abnormal returns on September 18, when the sale was cancelled, and possibly also on September 4, when the sale was enjoined. But only two of those six abnormal returns were negative, both were relatively small, and neither was statistically significant. Unlike HSY, in other words, CSG, TR, and CAG did not experience parallel negative abnormal returns on news that HSY would not be sold. The same evidence militates against the pos-

287. The scenario sketched above would be similar to the result identified in Brian Knight, *Are Policy Platforms Capitalized into Equity Prices? Evidence from the Bush/Gore 2000 Presidential Election*, 90 J. Pub. Econ. 751 (2005). Knight examined the relationship between daily market prices for firms that compete with Microsoft and the probability of a Bush victory in the 2000 presidential election using the Iowa Electronic Markets for the Bush victory probabilities. *Id.* at 752. He found that when the probability of a Bush win was high, the share prices for Microsoft's competitors declined significantly, presumably reflecting a market expectation of more favorable treatment for Microsoft in the pending antitrust litigation under a Bush administration than under a Gore administration. *Id.* at 762. But see George Bittlingmayer & Thomas W. Hazlett, *DOS Kapital: Has Antitrust Action Against Microsoft Created Value in the Computer Industry?*, 55 J. Fin. Econ. 329, 341-43 (2000) (finding that antitrust actions unfavorable to Microsoft hurt entire computer industry, and that actions favorable to Microsoft helped).

sibility that investors were pricing the possibility of acquiring HSY into the competitors' share prices.

The alternative, and in our view more likely, interpretation of Table 4 is that there were other market peculiarities on July 25, 2002. For example, there might have been an exogenous shock, unrelated to the news of the sale, which affected the value of some chocolate and food companies. On this account, the abnormal return experienced by Hershey on July 25 might in part reflect the influence of the exogenous shock. We think that this is a more plausible interpretation because it is consistent with the lack of statistically significant abnormal returns among Hershey's competitors on September 4 or September 18. We hasten to add, however, that Hershey's abnormal return on July 25 is far larger than those of its competitors, and Hershey also experienced large, significant, abnormal returns in the predicted directions on September 4 and September 18. Hence, we remain confident that most of the observed HSY abnormal return on July 25 is attributable to news of the sale.

To get a sense of how much of the HSY abnormal return on July 25 should be attributed to news of the sale, we estimated a market model in which we regressed the HSY return on the S&P 500 return, as before, as well as the returns for CSG, TR, and CAG. This augmented estimation model therefore accounts for correlation among these firms.²⁸⁸ The HSY abnormal return for July 25, 2002, using this augmented estimation model, is presented in Table 5.

TABLE 5: HSY RETURNS
CONTROLLING FOR CORRELATIONS WITH COMPETITORS

Date	Event	Actual	Expected	Abnormal	Standardized Abnormal
7/25/2002	Sale Announced	0.253	0.026	0.226	20.545***

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$ (i.e., abnormal return is statistically significant at the 0.1%, 1%, and 5% levels respectively).

In Table 5, the standardized abnormal return for Hershey on July 25, 2002 is slightly smaller than in Table 3, but it is still quite large and highly statistically significant.²⁸⁹ Accordingly, we conclude that news of the sale was the primary explanation for the run up in HSY on July 25.

As in our analysis of HSY alone, another way to view the results is in a graphical depiction of cumulative abnormal returns. Figures 5b and 5c plot the cumulative abnormal returns for HSY in comparison to its choco-

288. We used the 100 trading days before the Hershey sale window for our estimation period, although, as before, the results are virtually unchanged if we use alternative estimation periods.

289. The results of the augmented model for the other key dates of interest are likewise consistent with those presented in Table 3.

late market competitors and its food manufacturing competitors respectively, each for the sale window plus twenty-five trading days before and after the window.²⁹⁰

FIGURE 5B: CUMULATIVE ABNORMAL RETURNS—CHOCOLATE COMPETITORS

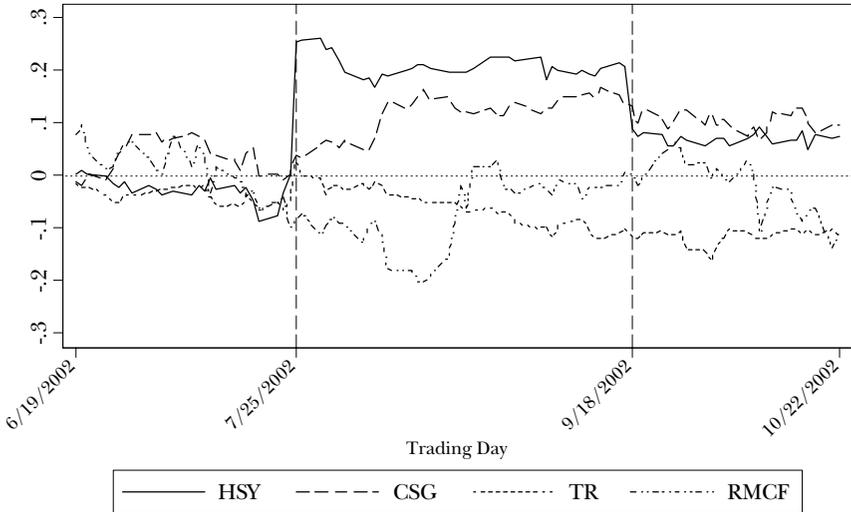
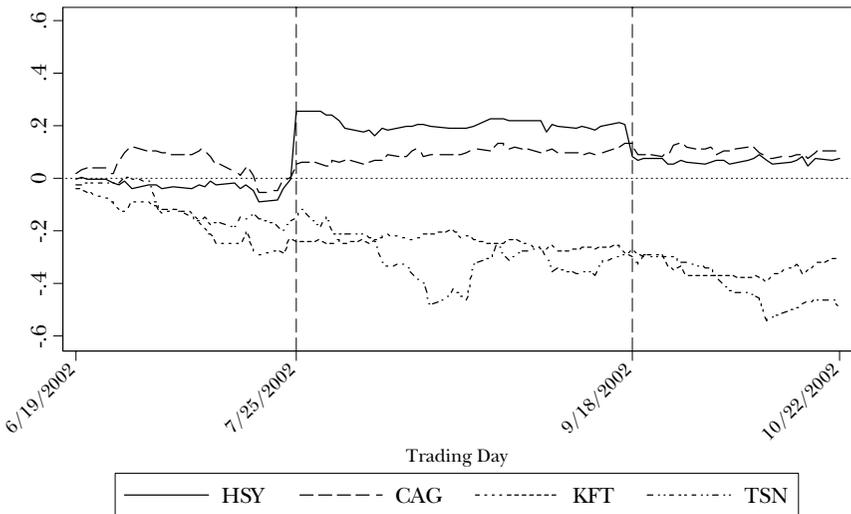


FIGURE 5C: CUMULATIVE ABNORMAL RETURNS—FOOD COMPETITORS



Figures 5b and 5c show that the pattern of HSY's cumulative abnormal returns bears little relation to that of most of its competitors. Although there is some comovement in the cumulative abnormal return of

290. As in Figure 5a, see supra note 280, in our expected returns regression for Figures 5b and 5c we use as our estimation period the 100 trading days before the first trading day plotted.

HSY with those of CSG, TR, and CAG at the beginning of the sale window, for CSG and TR this correlation does not continue through the rest of the window, and there is no appreciable comovement in the periods before or after the sale window. With respect to CAG, although the relationship appears to persist even at the end of the sale window and beyond, CAG's decline at the end of the sale window is not as pronounced as that observed for HSY. Moreover, HSY's cumulative abnormal return exceeds CAG's during the sale window but trails CAG's before and after the window. Accordingly, these graphs provide further evidence that news related to the proposed sale, not generic chocolate or food market forces, drove HSY's abnormal returns during the sale window.

4. *The Problem of a Single-Firm Event Study.* — Our study is limited by necessity to a single firm. Although one-firm event studies appear in the academic literature²⁹¹ and are used routinely in securities litigation,²⁹² they nonetheless pose special problems owing to the greater volatility experienced by a portfolio of one security than a portfolio of many securities. In Appendix Table B1, for example, we find that six of the ten days prior to the sale announcement experienced a statistically significant abnormal return. Here the concern is that we might attribute statistical significance to an abnormal return that in fact reflects nothing more than random variation if the abnormal returns of the single firm are not well approximated by the normal distribution. In other words, our worry is that the normal critical values used to determine statistical significance (i.e., ± 1.96 , ± 2.575 , and ± 3.277 for .05, .01, and .001 respectively) may not be appropriate given the weakened signal to noise ratio in a single-firm event study.

An initial answer to this concern is that the magnitudes of the abnormal returns for July 25 (the sale announcement) and September 18 (the sale cancellation) are so large that as a mathematical matter they are statistically significant in all possible abnormal return distributions. This is

291. See, e.g., Stephen P. Baginski, Richard B. Corbett & William R. Ortega, Catastrophic Events and Retroactive Liability Insurance: The Case of the MGM Grand Fire, 58 J. Risk & Ins. 247 (1991) (applying event study methodology to MGM Grand fire and purchase of retroactive liability insurance); Frederick R. Warren-Boulton & Serdar Dalkir, Staples and Office Depot: An Event-Probability Case Study, 19 Rev. Indus. Org. 469 (2001) (applying event study methodology to proposed merger between Staples and Office Depot); Mark Weinstein, Don't Leave Home Without It: Limited Liability and American Express, 37 J. Legal Stud. (forthcoming 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=665741 (on file with the *Columbia Law Review*) (applying event study methodology to incorporation of American Express).

292. See, e.g., In re Xcelera.com Sec. Litig., 430 F.3d 503, 512–14 (1st Cir. 2005) (discussing expert witness's event study in securities fraud case); U.S. v. Grabske, 260 F. Supp. 2d 866, 867–69 (N.D. Cal. 2002) (examining appropriateness of reliance upon event study with relation to restatement of income and revelation of fraud); see also In re Imperial Credit Indus., Inc. Sec. Litig., 252 F. Supp. 2d 1005, 1014 (C.D. Cal. 2003) (stating that plaintiffs' expert's report was "deficient for failure to provide an 'event study' or similar analysis").

an application of Chebyshev's inequality that we detail more formally in Appendix C.

However, reliance on Chebyshev's inequality assumes that we have correctly estimated the HSY abnormal returns. That assumption is problematic if the observed volatility of HSY in the 100 days prior to the event is not a reliable indicator of the volatility that HSY would have experienced during the event period but for the event. Here the limitation to a single firm is worrisome if the firm's volatility (that is, the variance in HSY's abnormal returns) could be changing over time. Accordingly, we must consider the possibility that the variance we estimated in the presale period was coincidentally low relative to other periods.

As an initial check against this worry, as detailed above, we also computed HSY's abnormal returns with reference to the observed volatility of HSY in a variety of alternative estimation windows. Some of those alternatives used only days after the sale window. Others were pooled models in which we used days before and after the sale window.²⁹³

As a further cautionary measure, we undertook a randomization inference robustness check by performing event studies (i.e., performed steps 2 and 3 as described in Part III.C.2 above) on HSY's returns for 600 days randomly chosen during the three years before and after the sale window.²⁹⁴ We then calculated the standardized abnormal returns for each of those dates (i.e., performed step 4 as described in Part III.C.2 above) to determine how frequently various standardized abnormal return levels occurred in the random sample. Next, we used these values to generate a probability density function. This randomization inference approach has been used in other applications,²⁹⁵ but we believe that we are the first to use it in an event study in the law and economics literature.

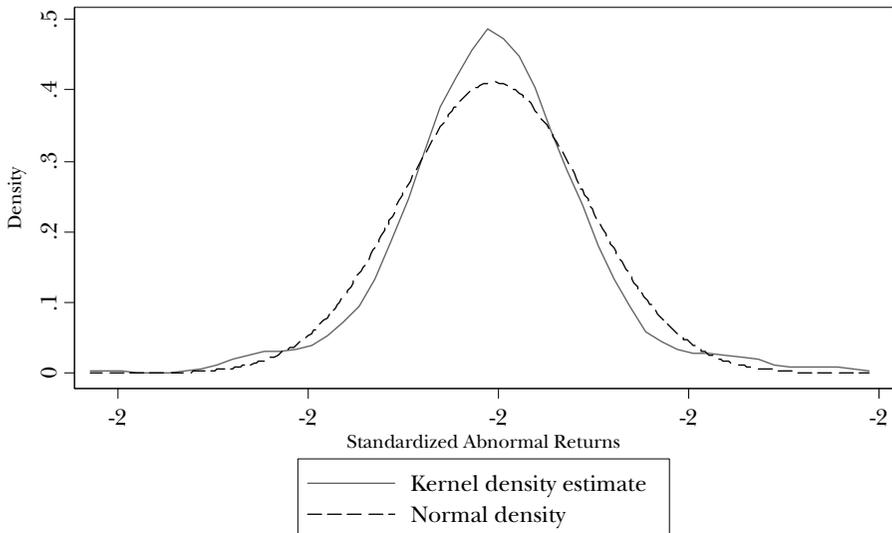
The estimated probability distribution, superimposed over a standard normal distribution, is presented in Figure 6a.

293. See *supra* text preceding and accompanying notes 269–270.

294. We used the Eventus software available through Wharton Data Services and the CRSP value weighted index as our market portfolio. For the output from this analysis, see Jonathan Klick & Robert H. Sitkoff, *Eventus Hershey Output* (Aug. 23, 2007), at <http://mailer.fsu.edu/~jclick/HSYrobust.pdf> (on file with the *Columbia Law Review*).

295. See, e.g., John J. Donohue III & Daniel E. Ho, *The Impact of Damage Caps on Malpractice Claims: Randomization Inference with Difference-in-Differences*, 4 *J. Empirical Legal Stud.* 69, 90–96 (2007) (applying randomization inference methodology to study of malpractice caps); Daniel E. Ho & Kosuke Imai, *Randomization Inference with Natural Experiments: An Analysis of Ballot Effects in the 2003 California Recall Election*, 101 *J. Am. Stat. Ass'n* 888, 893–98 (2006) (using randomization inference methodology in study of 2003 California recall election).

FIGURE 6A: DISTRIBUTION OF ABNORMAL RETURNS FOR HERSHEY



600 Days Randomly Selected from Period July 1999 to July 2005 (excluding sale window)

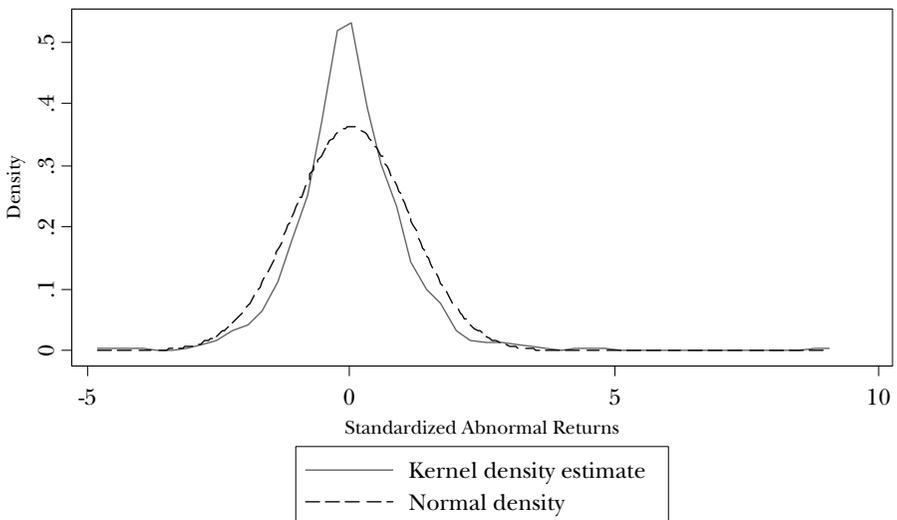
Although the HSY-specific probability distribution appears roughly to approximate the normal distribution, the two are not perfectly congruent. Using the estimated probability distribution, we computed a set of HSY-specific critical values or significance thresholds. These HSY-specific critical values are not perfect, of course, because some of the 600 randomly chosen days might in fact have experienced an abnormal return owing to unanticipated events on those days. Nonetheless, these HSY-specific critical values provide a useful check on whether our findings are artifacts of normal volatility rather than news of the sale.

Using our Figure 6a HSY-specific critical values, the observed HSY abnormal return on July 25, the date the sale plan was made public, was still highly statistically significant (less than 0.1% level). The observed HSY abnormal return on September 18, the first trading day after the sale was abandoned, also remained strongly significant, though somewhat less so (0.2% level, still highly significant). By contrast, the significance level of the observed HSY abnormal return on September 4 (the date of the injunction) fell to the 9% level. Accordingly, assessing statistical significance in relation to our estimated HSY-specific probability function largely confirms our earlier results using the normal distribution. Although the September 4 date falls below the conventional threshold of 5% for statistical significance, the results for the date the sale was announced and the date the sale was abandoned remain strongly significant.

We performed a similar analysis using the abnormal returns from event studies on 100 randomly chosen days for each of Hershey's six competitors identified above during the three years before and after the sale

window.²⁹⁶ The results of this analysis provide us with another benchmark against which to compare HSY's abnormal returns. For example, perhaps during this general time period abnormal returns for companies in this general industry are not well approximated by the normal distribution because of industry-wide increased volatility or structural changes in the market. While the distribution in Figure 6a addresses this worry, a second comparison is useful to put our major results into additional context. Figure 6b presents the estimated probability distribution from our examination of Hershey's competitors superimposed over a standard normal distribution.

FIGURE 6B: DISTRIBUTION OF ABNORMAL RETURNS FOR
HERSHEY COMPETITORS



100 Days Randomly Selected from Period July 1999 to July 2005 (excluding sale window)
Firms Included: CSG; TR; RMCF; CAG; KFT; TSN

Using the critical values from the distribution depicted in Figure 6b, the statistical significance of the abnormal returns presented in Table 3 associated with news of the trustees' plan to sell and the abandonment of the sale are literally off the chart. No competitor in the sample had a

296. As before, we used the Eventus software and the CRSP value weighted index as our market portfolio. For the output from this analysis, see Jonathan Klick & Robert H. Sitkoff, *Eventus Competitor Output* (Aug. 23, 2007), at <http://mailer.fsu.edu/~jklick/COMProbust.pdf> (on file with the *Columbia Law Review*). Note that this analysis does not actually include 600 data points as would be expected with six firms and 100 randomly chosen days. During a few of the randomly chosen days early in the sample, RMCF and KFT were not traded on the NYSE, leaving us with 556 observations on which we could base this analysis. RMCF was newly listed during our sample period and KFT was private during the early part of our period. While it would have been possible to restrict date selection to only those days during which all firms traded, doing so has the potential to introduce a bias into our analysis, so we opted to allow for the selection of days where some of the firms were not trading.

standardized abnormal return greater than 8.9, but HSY's standardized abnormal returns on July 25 and September 18 (the sale announcement and termination dates) were 21.25 and 9.83 respectively. Further, the statistical significance of the abnormal return on the day of the injunction goes from 9% in the prior analysis (using the distribution of Figure 6a) to 1.3% using the distribution of Figure 6b. Hence, under this approach, we find no reason to suspect that HSY's abnormal returns on the days of interest were the result of mere random variation.²⁹⁷

D. *Summary of Empirical Findings*

The evidence presented above is strongly consistent with our hypothesis of agency costs in charitable trust governance. The evidence is also strongly consistent with the widely held belief that supervision of charitable trusts by state attorneys general is deficient. Indeed, in this case the Attorney General's intervention was counterproductive, both reducing aggregate social welfare and imposing unnecessary agency costs on the Trust. Finally, the evidence indicates that the capital markets rated the threat of a takeover as superior to the Trust's controlling position for minimizing agency costs in the Company. We summarize the evidence and our specific findings here.

Graphical examination of Hershey's stock price, both by itself and in comparison to that of its main NYSE-traded competitors, strongly suggests that news of the trustees' plan to sell the Trust's controlling interest in the Company led to an increase in the Company's stock price. Graphical analysis likewise strongly implies that abandonment of the sale led to a decrease. However, comparison of Hershey's stock price dynamics with those of broad market indexes reveals some comovement of Hershey's stock with the market as a whole, leading us to apply more rigorous methodology to isolate the effects of the proposed sale from other effects.

Using a standard event study econometric analysis that isolates stock price movement attributable to sale-related news from general market trends, we find that Hershey's stock experienced a large and statistically significant positive abnormal return on news of the sale and a large and statistically significant negative abnormal return on the trustees' abandonment of the sale. These findings endure across a variety of specifications and numerous robustness checks.²⁹⁸ In most specifications we also

297. Our approach of benchmarking abnormal returns to a distribution generated from HSY during periods outside the sale window and to a distribution generated from HSY's competitors bears some similarity to the bootstrapping methods introduced in John D. Lyon, Brad M. Barber & Chih-Ling Tsai, *Improved Methods for Tests of Long-Run Abnormal Stock Returns*, 54 *J. Fin.* 165 (1999). We thank Dan Rubinfeld and Max Schanzbach for stimulating our thinking on alternative benchmarks and bootstrapping.

298. Indeed, our findings regarding the effect of the sale announcement and sale abandonment were significant in all specifications at better than the 99.8% level and in all but one at the 99.9% level.

find that the trial court's issuance of the preliminary injunction against the sale led to a statistically significant negative abnormal return.

Put into numerical terms, we find that news of the trustees' plan to sell the Trust's controlling interest in the Company was associated with a statistically significant positive abnormal return of 25.5%. This finding implies that the Company was worth \$2.7 billion more on the open market than when under the control of the trustees.²⁹⁹ Accordingly, in this case the existence of a controlling shareholder was manifestly inferior to the market for corporate control as an alternative mechanism for minimizing corporate agency costs.

Regarding trust law, our findings imply agency costs arising from the Trust's charitable trust form on the order of \$850 million,³⁰⁰ about 15% of the 2002 value of the Trust.³⁰¹ Although the trustees controlled more than three-quarters of the shareholder votes in the Company, they failed to impose a value-maximizing strategy on the Company's managers. As we have seen, the market judged the Company as being \$2.7 billion (or 25.5%) more valuable when the Company's managers were expected to be subject to the market for corporate control instead of supervision by the trustees.

Moreover, instead of reducing the agency costs associated with the Trust's charitable trust form, the Attorney General's intervention made those agency costs permanent. Without any offsetting financial benefit to the Trust, the Attorney General forced the Trust to retain an asset that was worth \$850 million more on the open market than in the hands of the trustees. While the sale's detractors argued that the sale would hurt

299. The \$2.7 billion figure is the product of a back-of-the-envelope calculation that reflects 25.5% (our point estimate of Hershey's abnormal return) of Hershey's market capitalization of \$10.7 billion on July 25, 2002. The 95% confidence interval implies that the loss lies within the range of \$2.4 billion and \$3 billion. We computed Hershey's market capitalization by multiplying the number of outstanding shares by Hershey's July 25, 2002, closing price of \$78.30. Our share volume data, which reflects the number of shares outstanding on July 26, 2002, comes from Aug. 2002 Quarterly Report, *supra* note 270, at 1.

An alternate measure of the social cost might be possible using the negative abnormal return that occurred when the sale was abandoned. We hesitate to use this measure, however, because at various dates in the sale window the abandonment of the sale was probabilistically capitalized into the HSY price. This can be seen most clearly on the day the court issued a preliminary injunction against the sale. Thus, using this alternate measure requires subjective judgments about what total abnormal return we can attribute to expectations that the sale would be abandoned. The first public disclosure of the proposed sale is a cleaner and better identified shock to Hershey's exposure to the market for corporate control.

300. As with our \$2.7 billion figure, this \$850 million figure reflects a back-of-the-envelope calculation that extrapolates from our point estimates. Specifically, \$850 million is the rounded-down product of multiplying the percent of outstanding HSY stock held by the Trust in 2002 as noted in *supra* Table 1 by the \$2.7 billion figure computed in *supra* note 299. The 95% confidence interval implies that the loss lies within the range of \$760 million and \$940 million.

301. See *supra* Table 1.

other stakeholders, such as the residents of Hershey and the Company's employees, one wonders whether their gain offsets the preservation of such enormous agency costs. The \$850 million in Trust assets destroyed translates roughly into \$67,000 per resident of Hershey, or \$62,000 per employee of the Company—plus the Trust's exposure to uncompensated risk was continued.³⁰²

Given the analysis in Appendix Table B1 regarding potential leakage, the foregoing estimates may well understate the true measure of agency costs and hence the social welfare loss. If we included the abnormal returns for the three-day potential leakage period before the announcement, our estimates would be roughly 8% higher.³⁰³

IV. IMPLICATIONS FOR POLICY ANALYSIS

A. *Charitable Trusts*

We have shown that the Trust's principal asset, its stock in the Company, was worth \$850 million more (about 15% of the Trust's 2002 value) on the open market than when in the hands of the trustees—a damning indictment of the trustees' inability to use their voting control of the Company to maximize value. We have also shown that the Attorney General's intervention to block the sale of the Company forced the Trust to maintain an undiversified and smaller portfolio. Our analysis therefore provides the first quantitative empirical evidence of agency costs in the charitable trust form and the inadequacy of supervision of charitable trusts by state attorneys general. Further, our findings highlight the related but less often remarked upon concern that, even if the attorney general does intervene in the administration of a charitable trust, such intervention might be designed to promote the attorney general's political interests at the expense of the trust's charitable purpose.

302. The population and employment figures used in this computation come from the 2000 Census and filings by the Hershey Company with the SEC. See U.S. Census Bureau, Profile of General Demographic Characteristics: 2000: Hershey CDP, PA, available at <http://censtats.census.gov/data/PA/1604234144.pdf> (on file with the *Columbia Law Review*) (indicating Hershey population of 12,771); 2003 Annual Report, *supra* note 253, at 4 (claiming roughly 13,700 full-time employees).

303. Still another alternate measure of the loss to shareholders (including the Trust) from abandoning the sale might be derived from Wrigley's \$12.5 billion bid. That bid translates to \$89 per share, which is \$26.50 or 42.4% more than HSY's closing price of \$62.50 on July 24, 2002, the day before news of the sale broke. Using these figures (see *supra* notes 299–300 for discussion of methodology), the total loss to shareholders amounts to roughly \$5.1 billion, of which the Trust's share is \$1.6 billion. However, we are skeptical of using the Wrigley bid for this purpose. While Wrigley's \$12.5 billion bid might represent the value of the Hershey Company's assets under the control of Wrigley's management, a portion of that sum might also reflect agency costs in the Wrigley corporate structure. For example, the bid might include a control premium that Wrigley's management was willing to pay for the purposes of empire building or takeover protection. See *supra* Part II.B.1.b. As such, the Wrigley bid is a less reliable benchmark for assessing the welfare effects of terminating the sale than our estimate of the Hershey Company's abnormal return on July 25. The same analysis applies to the use of other bids.

As such, our findings provide an empirical grounding for at least three policy debates in the law of trusts: (1) the utility of alternative modes of charitable trust supervision; (2) the authorization of cy pres of charitable trusts on the ground of “wastefulness”; and (3) the propriety of social investing by trustees and other fiduciaries.

1. *Alternative Modes of Supervision.* — Although it is widely believed that the supervision of charitable trusts by the state attorneys general is inadequate, there is disagreement over the reasons and best remedy for that inadequacy. According to one view, supervision is inadequate because of insufficient resources.³⁰⁴ Proponents of this view contend that increasing the budget for charitable supervision and perhaps also increasing the mandatory disclosure obligations of charitable organizations will improve oversight.³⁰⁵ Another view holds that state attorneys general are lackadaisical monitors of charities because active supervision has little political payoff outside of isolated incidents where the charity’s public salience makes imposing local preferences politically expedient.³⁰⁶ On this view, increased funding and disclosure will have minimal effect because the problem is structural. Instead, alternative modes of supervision by people or entities with better incentives are required.

Our findings tend to support the latter view. As we have seen, even if the attorney general does intervene, the attorney general’s political interests might not be congruent with the best interests of the trust or social welfare—here to the tune of \$850 million and \$2.7 billion respectively. More broadly, no amount of additional funding or increased disclosure will ameliorate the underlying structural problem that the attorney general is typically a political officer whose ambition toward higher office provides either little incentive to supervise charitable trusts or, as in the case of the Hershey Trust, perverse incentives to impose local political preferences.³⁰⁷ In either scenario, monitoring by the state attorneys gen-

304. See, e.g., Johnson, *supra* note 221, at 389 (“I attribute the failure of the attorneys general not to lack of interest or improper motive, but to the lack of funds devoted specifically to this purpose.”); see also Brody, *Parochialism*, *supra* note 8, at 951 & n.50 (collecting studies on few resources allocated to charity enforcement).

305. See Gary, *supra* note 212, at 639–41, 646 (urging increased disclosure and proposing increased funding); Johnson, *supra* note 221, at 390 (proposing that charitable trusts pay fee proportional to size of corpus to fund attorney general’s supervision); see also Chester, *Improving Enforcement*, *supra* note 221, at 475 (arguing that increased disclosure will not increase private enforcement absent relaxation of standing requirements); Fishman, *Improving*, *supra* note 211, at 270–72 (discussing recent federal disclosure requirements); Reiser, *supra* note 221, at 580–606 (analyzing legislative proposals for increased disclosure requirements for charitable trusts).

306. See, e.g., Brody, *Parochialism*, *supra* note 8, at 947–49 (“The incentives of this nearly universally elective office impel the incumbent to ignore cases that are politically dangerous and to jump into matters that are politically irresistible but implicate only ‘business’ decisions of charity managers.” (footnote omitted)).

307. See *id.* at 991–92 (discussing Attorney General’s problematic role in Hershey affair); see also Mark Sidel, *The Nonprofit Sector and the New State Activism*, 100 Mich. L. Rev. 1312, 1334–35 (2002) (reviewing Norman I. Silber, *A Corporate Form of Freedom*:

eral is inadequate to ensure that resources held by tax-exempt and, therefore, publicly-subsidized charitable trusts are deployed in efficient pursuit of a bona fide charitable purpose for the public good.

To be sure, we do not claim that all charitable trusts host the same magnitude of agency costs as the Hershey Trust. Nor do we claim that all interventions by state attorneys general are as maladroit as the intervention here. Instead our claim is that our results tend to validate the assumption in the theoretical literature, heretofore based chiefly on qualitative anecdotal evidence, of the prevalence of agency costs in charitable trusts and the failure by state attorneys general adequately to superintend such trusts.³⁰⁸ Further, by showing that the Attorney General's intervention here reduced the value of the Trust and continued its exposure to uncompensated risk, our findings tend to support the view that the incentives of the state attorneys general may well be misaligned with the best interests of the charitable organizations that they superintend. Our findings, therefore, offer tentative support for alternative modes of supervision by agents with better incentives.

Legislators and academic commentators have proposed a variety of alternative forms of monitoring. For example, some have contended that the role of the IRS in supervising the operation of charitable entities should be expanded.³⁰⁹ Others have argued for an independent federal agency, perhaps on the model of the Securities and Exchange Commission.³¹⁰ Almost half the states have given donors standing con-

The Emergence of the Nonprofit Sector (2001)) (discussing potential disadvantages of "[a]ctivist state authorities").

308. See *supra* notes 218–222 and accompanying text.

309. For discussion, see Evelyn Brody, *A Taxing Time for Bishop Estate: What Is the I.R.S. Role in Charity Governance?*, 21 *U. Haw. L. Rev.* 537, 543–48 (1999); Gary, *supra* note 212, at 644–45; see also *supra* note 96 (describing exemption of Trust from various IRS requirements).

310. See, e.g., Joel L. Fleishman, *The Foundation: A Great American Secret: How Private Wealth Is Changing the World* 256–59 (2007) [hereinafter *Fleishman, Foundation*] (“My strong recommendation, therefore, is that the first important action to increase foundation accountability be the establishment by Congress of such an NASD-like private, nonprofit organization . . . with sufficient resources to oversee the entire U.S. civic sector . . .”); *Fleishman, Public Trust*, *supra* note 2, at 188–91 (“If we were starting from scratch, I would favor the creation of an independent agency . . . and would empower the agency with all aspects of the regulation of not-for-profit organizations . . .”). But see Karst, *supra* note 219, at 481–83 (noting possibility of eventual federal regulation, but arguing that increased state regulation is superior). However, such an agency might be vulnerable to capture by charitable managers. Cf. Jonathan R. Macey, *Administrative Agency Obsolescence and Interest Group Formation: A Case Study of the SEC at Sixty*, 15 *Cardozo L. Rev.* 909, 913–15 (1994) (discussing problem of capture in context of purportedly obsolete agencies). Further, the English experience with a charities regulatory agency, the English Charity Commission, has not been entirely happy. See generally James J. Fishman, *Charitable Accountability and Reform in Nineteenth-Century England: The Case of the Charity Commission*, 80 *Chi.-Kent L. Rev.* 723 (2005) (providing overview of English Charity Commission and associated difficulties); Debra Morris, *New Charity Regulation Proposals for England and Wales: Overdue or Overdone?*, 80 *Chi.-Kent L. Rev.* 779 (2005) (same).

current with the attorney general to enforce a charitable trust.³¹¹ And a handful of states allow relator standing to enforce charitable trusts—that is, standing for individuals in cases where the attorney general elects not to pursue the matter.³¹² Perhaps most intriguing (albeit still theoretical), Geoffrey Manne has urged “the creation of private, for-profit monitoring companies” that would contract with charitable organizations “to monitor both the financial and charitable aspects of the nonprofit’s operation.”³¹³

Each of these proposals presents pros and cons in the particulars that we pass over here. Analyzing the specifics of the various reform proposals is beyond the scope of this paper; hence the qualifier that our findings offer “tentative” support. For present purposes, it suffices to note that the theme that ties each of these reforms together—and what makes each potentially attractive in view of our findings—is that they are more sensitive than the status quo to the incentives of the agents charged with supervision. Indeed, several, particularly donor standing, are designed specifically to harness those incentives.

2. *Cy Pres for Wastefulness.* — Under the traditional understanding of the cy pres doctrine, a court may direct the trustees of a charitable trust to apply the trust property to another charitable purpose that approximates the donor’s original purpose if the original purpose becomes impossible, impracticable, or illegal.³¹⁴ The principal justification for the doctrine is the risk that, because a charitable trust may have a perpetual existence, changed circumstances will render the trust’s original purpose obsolete.³¹⁵ As Bruce Mann has explained, “the law of charitable trusts

311. See supra note 44; see also Restatement (Third) of Trusts § 94 cmt. g (Preliminary Draft No. 8, 2007) (on file with the *Columbia Law Review*) (allowing persons possessing “‘special interest’ in the performance of a charitable trust,” including donors, to bring suit for enforcement of trust terms). Henry Hansmann urged this reform over twenty-five years ago. See Hansmann, *Reforming*, supra note 221, at 606–13. For more recent analysis, see Evelyn Brody, *From the Dead Hand to the Living Hand: The Conundrum of Charitable-Donor Standing*, 41 Ga. L. Rev. 1183 (2007); Ronald Chester, *Grantor Standing to Enforce Charitable Transfers Under Section 405(C) of the Uniform Trust Code and Related Law: How Important Is It and How Extensive Should It Be?*, 37 Real Prop. Probs. & Tr. J. 611 (2003); Iris J. Goodwin, *Donor Standing to Enforce Charitable Gifts: Civil Society vs. Donor Empowerment*, 58 Vand. L. Rev. 1093 (2005). For a contrary analysis, see Rob Atkinson, *Unsettled Standing: Who (Else) Should Enforce the Duties of Charitable Fiduciaries?*, 23 J. Corp. L. 655 (1998).

312. See Gary, supra note 212, at 626–27; see also Restatement (Third) of Trusts § 94 cmt. e (Preliminary Draft No. 8, 2007) (on file with the *Columbia Law Review*) (discussing relator standing). A related idea is the appointment of a trustee ad litem. See Kaufman, supra note 211, at 736–37.

313. Manne, supra note 37, at 229. A public variant is Fishman’s proposal for local charity commissions with members appointed by the governor and attorney general. See Fishman, *Improving*, supra note 211, at 272–75.

314. See Restatement (Second) of Trusts § 399 (1959).

315. See, e.g., Restatement (Third) of Trusts § 67 cmt. a (2003) (“The cy pres doctrine’s modern rationale rests primarily in the perpetual duration allowed charitable trusts and in the resulting risk that designated charitable purposes may become obsolete . . .”); Posner, *Economic Analysis*, supra note 4, § 18.3, at 546 (“But since no one

has never regarded a donor's wishes as inviolate, regardless of what anyone, donors included, might think or want. All the law promises is that it will do its best to honor those wishes—literally if possible, by approximation if not.”³¹⁶ The leading casebook offers the example of a “nineteenth-century trust to care for old horses retired from pulling fire wagons and streetcars” as a good candidate for cy pres.³¹⁷

Recently, however, there has been a movement to broaden the grounds for cy pres to include “wasteful” allocation of resources. The idea is to account for “the increasingly frequent problem of trust funds that have become excessive for their stated charitable purposes.”³¹⁸ Under this reformed conception of cy pres, if the trust property so “exceeds what is needed for the particular charitable purpose . . . that the continued expenditure of all of the funds for that purpose . . . would be wasteful,” then a court “might broaden the purposes of the trust,” for example by “direct[ing] application of the surplus funds to a like purpose in a different community.”³¹⁹ The 2000 Uniform Trust Code, the 2003 Restatement (Third) of Trusts, and the most recent preliminary draft of the Principles of Nonprofit Organizations all adopt “wasteful” as a basis for cy pres.³²⁰

Whatever the other merits of broadening the grounds for cy pres, our findings suggest that cy pres in the case of an excess endowment may have the salutary effect of minimizing agency costs. Given the Trust's excess endowment, another \$850 million would not affect the Trust's ability to fund the day-to-day operation of the School. As a result, there was little pressure on the trustees to maximize value and little risk for the Attorney General that blocking the sale would immediately imperil the School. Indeed, opponents of the trustees' diversification plan argued

can foresee the future, a rational donor knows that his intentions might eventually be thwarted by unpredictable circumstances . . .”).

316. See Bruce H. Mann, *In the End, a Move Was Only Way Out*, *Phila. Inquirer*, Dec. 15, 2004, at A23.

317. Dukeminier et al., *supra* note 20, at 738.

318. Edward C. Halbach, Jr., *Uniform Acts, Restatements, and Trends in American Trust Law at Century's End*, 88 *Cal. L. Rev.* 1877, 1902 (2000); see also Johnny Rex Buckles, *When Charitable Gifts Soar Above Twin Towers: A Federal Income Tax Solution to the Problem of Publicly Solicited Surplus Donations Raised for a Designated Charitable Purpose*, 71 *Fordham L. Rev.* 1827, 1864–92 (2003) (examining potential law reform to address problem of surplus charitable funds).

319. Restatement (Third) of Trusts § 67 cmt. c(1) (2003). The movement toward allowing cy pres in cases of “waste” is in part a reaction to the infamous Buck Trust of Marin County. See Dukeminier et al., *supra* note 20, at 743–46.

320. See *Unif. Trust Code* § 413(a) (amended 2005), 7C *U.L.A.* 509 (2006); Restatement (Third) of Trusts § 67 (2003); Principles of the Law of Nonprofit Orgs. §§ 240, 440 (Preliminary Draft No. 4, 2007). For information on adoptions of the UTC, see UTC Enactment Charts, *supra* note 44. For discussion of the meaning of “wasteful” under the UTC, see David M. English, *The Uniform Trust Code (2000): Significant Provisions and Policy Issues*, 67 *Mo. L. Rev.* 143, 179 & n.164 (2002) (explaining that, under UTC, cases of waste would “normally involve situations where the funds allocated to the particular charitable scheme far exceed what is needed”).

that the Trust had more money than it needed for its specific purpose and hence the Trust did not need to sell its interest in the Company.³²¹

By contrast, if the trustees were under pressure to use the Trust's excess endowment to fund similar schools in other communities, the social welfare loss from failing to maximize the value of the Trust would have been more apparent. Consider that the trust instrument gives preference to local orphans but also allows for admission of orphans from across the country.³²² Yet even though the Trust's corpus has grown dramatically, the School "served no more children at the start of 2005 than it did in 1963."³²³ What is more, the Trust's current plans for expansion of the School are both modest and limited to the single existing campus.³²⁴

A further benefit of "waste" as a basis for cy pres is that it would draw attention to considerations of scale versus scope. Before seeking to expand a charitable trust's scope, the trustees should exhaust possible extensions in scale. In the case of the Trust, by contrast, there has been an implicit expansion of scope to include the interests of the local community rather than an explicit expansion of scale (i.e., more students and additional schools).³²⁵

Put more broadly, our findings tend to confirm the theoretical intuitions that an excess endowment provides a cushion for managerial laxity³²⁶ and invites imposition of local political preferences by state offi-

321. See Brief of Appellee, *supra* note 110, at 30 & n.16.

322. See *supra* text accompanying note 74. Further, Milton Hershey founded a similar school in Cuba while the Hershey Company operated sugar factories there. See Brenner, *supra* note 21, at 137-38.

323. D'Antonio, *supra* note 8, at 266.

324. The School plans to expand to 2,000 students by 2013. See Press Release, Milton Hershey Sch., Hershey Trust Board Chair Announced (Jan. 23, 2006), available at <http://www.mhs-pa.org/newsroom/news-releases/4836/default.asp> (on file with the *Columbia Law Review*).

325. The Trust has been involved in two prior cy pres litigations. In 1999 the Trust sought unsuccessfully to spend \$25 million a year on a research and teaching institute. In 1963 the Trust was allowed to divert \$50 million to Pennsylvania State University for a medical facility to be located in Hershey. See Brody, *Parochialism*, *supra* note 8, at 987-89. Ironically, the same judge who issued the injunction against the 2002 sale had in the context of the 1999 cy pres proceeding found that "the dominant intent of the Hersheys [was] to care for as many children at the School as the income will permit." *Id.* at 989 (quoting *In re Milton Hershey Sch.*, No. 712-1963, slip op. at 7 (Ct. C.P., Orphans' Ct. Div., Dauphin County, Pa. Dec. 7, 1999) (on file with the *Columbia Law Review*)).

326. See Henry Hansmann, *Why Do Universities Have Endowments?*, 19 *J. Legal Stud.* 3, 29 (1990) (arguing that large endowments enable trustees to withstand pressure from both beneficiaries and donors). Our agency costs justification of permitting cy pres on the ground of "wastefulness" shares an analytical overlap with the proposal by Richard Posner and others that charitable foundations be required to spend down all property received within a limited timeframe. See Fleishman, *Foundation*, *supra* note 310, at 235-48; Posner, *Economic Analysis*, *supra* note 4, § 18.5, at 547. Perhaps the most prominent example is the Gates Foundation's decision to terminate fifty years after the death of the survivor of Bill Gates, Melinda Gates, and Warren Buffett. See Sally Beatty, *Gates Foundation Sets Time Frame To Spend Assets*, *Wall St. J.*, Dec. 1, 2006, at A10. Our analysis also fits neatly with the literature on agency problems associated with excess

cials.³²⁷ Recall that upon amending the state's prudent investor law to make it difficult for future trustees to sell the Trust's interest in the Company, the State Senate majority leader explained that "[w]e have to be active and protect our economic assets."³²⁸

3. *Propriety of Social Investing by Trustees and Other Fiduciaries.* — There is ongoing debate about whether trustees and other fiduciaries may properly engage in social investing, that is, investing in "pursuit of an investment strategy that tempers the conventional objective of maximizing the investor's financial interests by seeking to promote nonfinancial social goals as well."³²⁹ As we have seen, the \$850 million in assets not realized by the Trust equates roughly to \$67,000 per resident of Hershey, or \$62,000 per worker at the Company.³³⁰ By quantifying the loss to the Trust, our findings bring into sharp relief the important policy questions of (a) whether the gain to these other constituencies offsets the wealth destruction experienced by the Trust, the Trust's continuing exposure to uncompensated risk, and the wealth destruction experienced by the Company's other shareholders, and (b) whether that question is even relevant as a matter of law or policy.³³¹

endowments in operating nonprofit firms. See Core et al., *supra* note 39, at 4 ("[O]verall evidence suggests that excess endowments are associated with greater agency problems."); Raymond Fisman & R. Glenn Hubbard, *The Role of Nonprofit Endowments*, in Glaeser, *supra* note 39, at 217, 218–23 ("[P]roviding managers with this precautionary savings device may allow them to 'steal' from the organization, by pursuing interests that diverge from those of the donors . . .").

327. See Brody, *Parochialism*, *supra* note 8, at 940 (noting that attorneys general often seek to "confine the charity to its 'community'"); see also *supra* text accompanying note 198.

328. See *supra* notes 193–198 and accompanying text.

329. Langbein & Posner, *supra* note 46, at 73; see, e.g., Joel C. Dobris, *Arguments in Favor of Fiduciary Divestment of "South African" Securities*, 65 Neb. L. Rev. 209, 221 (1986) (arguing that it is "appropriate to consider moral factors when dealing with fiduciary matters"); Michael S. Knoll, *Ethical Screening in Modern Financial Markets: The Conflicting Claims Underlying Socially Responsible Investment*, 57 Bus. Law. 681, 713–26 (2002) (arguing that socially responsible investor cannot influence market behavior without undertaking significant financial sacrifice); Lewis D. Solomon & Karen C. Coe, *Social Investments by Nonprofit Corporations and Charitable Trusts: A Legal and Business Primer for Foundation Managers and Other Nonprofit Fiduciaries*, 66 UMKC L. Rev. 213, 217 (1997) ("[W]hether bound by the common law prudent investor rule or the business care rule, fiduciaries of nonprofit entities are permitted to consider social and environmental factors when making investment decisions.").

330. See *supra* note 302 and accompanying text.

331. Our analysis has an analogy in the question of whether corporate managers should consider the welfare of constituencies other than shareholders. See, e.g., Einer Elhauge, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. Rev. 733, 738 (2005) (arguing that corporate managers "have always had some legal discretion . . . to sacrifice corporate profits in the public interest"); Jonathan R. Macey, *An Economic Analysis of the Various Rationales for Making Shareholders the Exclusive Beneficiaries of Corporate Fiduciary Duties*, 21 Stetson L. Rev. 23, 24 (1991) (arguing that residual claimants should be sole beneficiaries of corporate fiduciary duties because they face unique contracting difficulties); Larry E. Ribstein, *Accountability and Responsibility in Corporate Governance*, 81 Notre Dame L. Rev. 1431, 1460–65 (2006) (arguing that

Under orthodox trust fiduciary law, “[n]o form of so-called ‘social investing’ is consistent with the duty of loyalty if the investment activity entails sacrificing the interests of trust beneficiaries . . . in favor of the interests of the persons supposedly benefited by pursuing the particular social cause.”³³² Because the Trust’s charitable purpose is to board and educate needy children from across the country, not to subsidize life in Hershey, Pennsylvania, the Trustees could not permissibly maintain the Trust’s controlling interest in the Company for the purpose of promoting the interests of the town and the Company’s workers.

Opponents of the 2002 sale argued that Milton Hershey would have wanted the trustees to consider the interests of the community. They pointed to the provision in the trust instrument that privileged applications to the School from local orphans over orphans from the rest of the country,³³³ arguing that it evidenced an intent to give the community something of a beneficial interest in the Trust.³³⁴ But an equally plausible interpretation is that the Hersheys’ primary aim was to care for orphans above all other purposes. If, after admitting all suitable local orphans, the School could accommodate more, then the School was to look outside the immediate community for additional students. Consistent with this interpretation, the trust instrument provided explicitly that the Trust’s income was to be “exclusively devoted” to the School.³³⁵

More generally, there are two inherent weaknesses in the what-the-founder-would-have-wanted mode of reasoning. First, charitable trusts have perpetual existence. Eventually, after the inevitable change of circumstances, assessments of what the founder would have wanted devolve into rank conjecture. Second, even if we could know with certainty what the founder would have wanted, it is not obvious that we should defer to those wishes if they have undesirable social welfare consequences. Although American law is solicitous of the dead hand, it does not blindly enforce all donor wishes—for example, a parent’s gift to a child conditioned on the child’s marrying someone of a particular religious faith is

management’s duty to shareholders should not be relaxed in favor of public interest as agency and information costs will overwhelm any social gain).

332. Unif. Prudent Investor Act § 5 cmt. (1994), 7B U.L.A. 34–35 (2006). For a more general treatment, see Langbein & Posner, *supra* note 46. Federal pension law follows the orthodox view. See Interpretive Bulletin Relating to the Fiduciary Standard Under ERISA in Considering Economically Targeted Investments, 29 C.F.R. § 2509.94-1 (2007) (“The Department has construed the requirements . . . as prohibiting a fiduciary from subordinating the interests of participants and beneficiaries in their retirement income to unrelated objectives.”); Ian D. Lanoff, *The Social Investment of Private Pension Plan Assets: May It Be Done Lawfully Under ERISA?*, 31 Labor L.J. 387, 390 (1980) (noting that ERISA does not permit fiduciaries to sacrifice investment performance “in order to advance the social welfare of a group”).

333. See *supra* note 74 and accompanying text.

334. See *In re Milton Hershey Sch. Trust*, 807 A.2d 324, 328–29, 331–32 (Pa. Commw. Ct. 2002).

335. 1909 Deed of Trust, *supra* note 70, ¶ 8.

enforced only if judged reasonable.³³⁶ Indeed, the case for disregarding the donor's preference in the face of a contrary public policy is stronger in a charitable trust than in other donative contexts such as a private trust because a charitable trust is in effect subsidized by state and federal tax exemptions. To be sure, the presumption should be in favor of the donor's intent. But in the case of a charitable trust, donative freedom is constrained by the necessity of a bona fide charitable purpose that confers a sufficient social benefit to justify the quid pro quo of perpetual existence and exemption from taxation.³³⁷

But suppose that there was no doubt that the Hersheys would have wanted to favor the community in the event of surplus funds, and suppose further that the law allowed the trustees to take into account the interests of the community in such a scenario.³³⁸ Even then, it is hardly obvious that maintaining control of the Company would be an efficient way to benefit the community or subsidize life in Hershey. For example, the Trust could have sold its interest in the Company, thereby realizing the \$850 million gain and diversifying its portfolio, and then it could have paid out every dollar of that \$850 million gain to the local community, either in cash or through a program of community enrichment. In this scenario, the community would have received an actual \$850 million transfer from the Trust, the Company would thereafter be subject to the pressures of the takeover market, and the Trust would have at least achieved salutary portfolio diversification.

Instead, the Trust was forced to maintain its interest in the Company (and so an undiversified portfolio), the community did not receive a cash transfer, and the Company remained subject to the less efficient monitoring of the trustees. The bill for this inefficiency came due in early 2007 when, after further erosion of the Company's market share, the Company announced that it would close one-third of its assembly lines, layoff 1,500

336. See, e.g., *Shapira v. Union Nat'l Bank*, 315 N.E.2d 825, 829 (Ohio Ct. C.P. 1974) ("A partial restraint of marriage which imposes only reasonable restrictions is valid, and not contrary to public policy."); Restatement (Third) of Property: Wills and Other Donative Transfers § 10.1 cmt. g (2003) ("Among the rules of law that prohibit or restrict freedom of disposition in certain instances are . . . unreasonable restraints on alienation or marriage . . ."); Restatement (Third) of Trusts § 29(c) (2003) ("An intended trust or trust provision is invalid if . . . it is contrary to public policy."); Restatement (Second) of Property: Donative Transfers § 6.2 (1983) ("[A]n otherwise effective restriction in a donative transfer . . . is valid if . . . the restraint does not unreasonably limit the transferee's opportunity to marry.").

337. See *supra* note 206 and accompanying text.

338. Indeed, as amended in 2002 in the wake of the aborted sale, see *supra* notes 193–198 and accompanying text, the Pennsylvania prudent investor law now deviates from the norm by expressly allowing the trustee of a charitable trust to consider "the special relationship of the asset and its economic impact as a principal business enterprise on the community in which the beneficiary of the trust is located and the special value of the integration of the beneficiary's activities with the community where that asset is located" when making investment decisions. 20 Pa. Cons. Stat. Ann. § 7203(c)(6) (West 2005).

workers (12% of its workforce), and open a new factory in Mexico.³³⁹ The Trust's controlling interest can shield the Company from the take-over market, but it provides no defense against the vicissitudes of the products market.

True, in late 2007 the Trust forced a shakeup in the Company's top leadership and expressed dissatisfaction with the Company's "unsatisfactory performance."³⁴⁰ Indeed, in a letter addressed to the Company's Board of Directors, the chair of the board of trustees complained that since January 2002, the price of the Company's stock grew "at *half* the rate of the S&P 500 Index."³⁴¹ Yet the Trust also pledged publicly to maintain its controlling interest in the Company.³⁴² That announcement put a formal end to informal merger talks started in January 2007 between Cadbury and the Hershey Company.³⁴³ A merger with Cadbury would have given the Company the international presence that it currently lacks.³⁴⁴ So long as the Trust remains unwilling to sell, the Company's suboptimal control structure will continue to hinder its development.³⁴⁵

A similar analysis pertains to shareholder welfare. To make the abandonment of the sale welfare neutral (i.e., Kaldor-Hicks efficient) with respect to shareholders, each of Hershey's 13,700 workers on average would have to value blocking the sale at more than \$199,000, or, alternately, each of Hershey's 12,771 residents on average would have to

339. See Food—Hershey Co.: Work Force Will Be Cut 12% in Three-Year Restructuring, Wall St. J., Feb. 16, 2007, at B5; Hershey Cutting Work Force 12%, N.Y. Times, Feb. 16, 2007, at C2. Local media coverage suggested that 3,000 local jobs would be lost and replaced by 1,500 new workers in Mexico. See Barbara Miller & Monica Von Dobeneck, Hershey May Cut 3000, Workers Say, Patriot-News (Harrisburg, Pa.), Feb. 17, 2007, at A1.

340. Julie Jargon, At Hershey, Sweetness Is in Perilously Short Supply, Wall St. J., Oct. 10, 2007, at B1 (quoting Press Release, LeRoy S. Zimmerman, Chairman, Bd. Of Dirs., Hershey Trust Co. (Oct. 10, 2007), available at <http://online.wsj.com/public/resources/documents/hershey-02232008L.pdf> (on file with the *Columbia Law Review*) [hereinafter Trust Release]); see also Julie Jargon, Hershey CEO Richard Lenny to Step Down, Wall St. J., Oct. 2, 2007, at A3 (describing effects of replacement of management and board); Julie Jargon, Most of Hershey Board Replaced in Shake-Up, Wall St. J., Nov. 12, 2007, at A2 (same).

341. Letter from LeRoy S. Zimmerman, Chairman, Bd. of Dirs., Hershey Trust Co., to Bd. of Dirs., The Hershey Co. 2 (Oct. 25, 2007), available at <http://online.wsj.com/public/resources/documents/hershey-02232008L.pdf> (on file with the *Columbia Law Review*).

342. See Trust Release, *supra* note 340 (noting "Trust's frequently reiterated resolve to retain its controlling interest in the Hershey Company" and arguing that there is "no inherent conflict" between that principle and strong company growth).

343. See Julie Jargon, Matthew Karnitschnig & Joann S. Lublin, How Hershey Went Sour, Wall St. J., Feb. 23–24, 2008, at B1.

344. See *id.*

345. The current chairman of the Trust Board is one of the lawyers who advised opponents of the 2002 sale. See Julie Jargon, Trust Head May Mold Hershey's Future, Wall St. J., Nov. 15, 2007, at C3.

value blocking the sale at \$214,000.³⁴⁶ True, the public shareholders knew or should have known that the Trust had voting control over the Company and those shareholders bought their shares at a discount reflecting the Trust's continuing control. Nonetheless, from an aggregate social welfare perspective, canceling the sale preserved a suboptimal capital structure on the order of \$2.7 billion.

B. *Corporate Governance*

Our analysis bears on two policy debates in corporate governance: (1) the role of controlling shareholders or large blockholders in minimizing corporate agency costs, and (2) the role of the market for corporate control (i.e., the takeover market) in minimizing corporate agency costs.

1. *Controlling Shareholders in Corporate Governance.* — The incidence of controlling shareholders and minority blockholders is increasing among public U.S. firms and is even more common among public companies in Europe.³⁴⁷ We have shown, however, that the markets valued the Company as being \$2.7 billion more valuable (an increase of more than 25%) when its managers were subject to market discipline instead of supervision by the trustees as agents for the Trust. This finding suggests that a controlling shareholder, at least one whose agents are poorly motivated, provides less discipline against corporate agency costs than the takeover market. Indeed, the existence of a listless controlling shareholder or minority blockholder might have perverse governance consequences if it insulates the managers by foreclosing the possibility of a takeover.

To be sure, our results do not imply that a controlling shareholder can never effectively monitor agency costs within the firm. We cannot disentangle the role of the agency costs owing to the Trust's weak governance structure from the role of switching from a controlling shareholder to the market for corporate control as alternative explanations for our findings. But our findings do suggest that corporate agency costs will not be controlled if the individuals who make decisions for the controlling shareholder have little to gain from better performance. Although this

346. These figures were computed using the same employment and population figures as before, see *supra* note 302, but substituting \$2.7 billion for \$850 million. The Kaldor-Hicks efficiency criterion holds that an action is efficient if those who gain from the action benefit, in the aggregate, more than those who lose from the action, in the aggregate. As a result, it would be possible for the winners to compensate the losers, leaving everyone better off after the action is taken. In this case, if the workers (or residents) valued blocking the sale, on average, at an amount less than those provided above, it would not be possible for them to compensate shareholders for the wealth loss from blocking the sale. For a useful introductory discussion of efficiency measures, see William T. Allen, Reinier Kraakman & Guhan Subramanian, Commentaries and Cases on the Law of Business Organization 3–5 (2d ed. 2007); Francesco Parisi & Jonathan Klick, Functional Law and Economics: The Search for Value-Neutral Principles of Lawmaking, 79 Chi.-Kent L. Rev. 431, 438–42 (2004).

347. See *supra* note 7 and accompanying text.

point has been made in general terms before,³⁴⁸ our empirical analysis puts the problem into sharp relief, suggesting a pair of related implications—one concerning the future empirical research agenda and the other concerning policy.

First, our analysis suggests that a blockholder's organizational form should be included as a variable in future empirical work on whether the existence of the blockholder has a positive effect on firm value. Indeed, the failure to control systematically for agency problems within the blockholder's form may explain why existing studies generally do not arrive at robust conclusions.³⁴⁹ By contrast, because our study is by necessity limited to a single blockholder whose governance structure is evident, we can speculate that it was the agency costs inherent to the Trust's charitable trust form that caused it to be a deficient monitor. With only one firm, however, we are not able to identify this incentive effect separately from Hershey's other idiosyncrasies. Accordingly, our hypothesis regarding the importance of the blockholder's organizational form calls out to be tested in future studies.

Second, our analysis tends to validate the existing, generalized concern about agency costs within a controlling shareholder's internal structure. As we have seen, the Trust was a poor monitor of the Company, but the fact of the Trust's deficient supervision does not negate the possibility of efficacious supervision by a blockholder that is not impaired by its own agency problems. Thus, perhaps hedge fund activism, as championed by Marcel Kahan and Edward Rock,³⁵⁰ will be more effective and occur more frequently³⁵¹ than activism on the part of mutual funds and pen-

348. See, e.g., Black, Agents, *supra* note 5, at 873 (discussing factors influencing monitoring by money managers); Coffee, Liquidity, *supra* note 242, at 1326 (“[A]gency problems at the institutional level can frustrate efforts to correct agency cost problems at the corporate level, even if institutional shareholders own sufficiently large blocks to be able to resolve their collective action problems.”).

349. See Holderness, *supra* note 7, at 60 (“First, it has not been definitely established whether the impact of blockholders on firm value is positive or negative. Second, there is little evidence that the impact of blockholders on firm value—whatever that impact may be—is pronounced.”).

350. See Kahan & Rock, *supra* note 48, at 1062–70.

351. Consistent with the notion that hedge fund managers will have an incentive to engage in activism, April Klein and Emanuel Zur found that, in a sample covering 2003 to 2005, hedge funds did engage in significant activism and were generally successful in their efforts. See April Klein & Emanuel Zur, Entrepreneurial Shareholder Activism: Hedge Funds and Other Private Investors 59 *tbl.6* (N.Y.U. Sch. of Law, Law and Econ. Research Paper No. 06-41, 2006), available at <http://ssrn.com/abstract=913362> (on file with the *Columbia Law Review*). Klein and Zur, however, did not find that hedge funds target underperforming firms, see *id.* at 56 *tbl.3*, and they found mixed evidence regarding whether the hedge fund activism improved target firm efficiency, see *id.* at 57 *tbl.4*, 58 *tbl.5*, 63 *tbl.8*. Another paper presents complementary evidence for a longer time series of hedge fund activism. See Alon Brav et al., Hedge Fund Activism, Corporate Governance, and Firm Performance 47 *tbl.5*, 48 *tbl.6*, 50 *tbl.7* (European Corporate Governance Inst., Fin. Working Paper No. 139/2006, 2006), available at <http://ssrn.com/abstract=948907> (on file with the *Columbia Law Review*). In a sample covering roughly the same time

sion funds.³⁵² Unlike mutual fund and pension fund managers, who receive management fees on the order of 0.5% to 3%,³⁵³ hedge fund managers receive performance rewards in the neighborhood of an additional 15%.³⁵⁴ Further, because hedge funds tend to have fewer investors, the investors themselves may have more of an incentive to monitor actively.³⁵⁵

2. *The Market for Corporate Control.* — Our results make a modest contribution to the empirical literature that investigates the takeover model. Consistent with previous studies of the effect of a takeover bid on share prices,³⁵⁶ our finding of a large, significant positive abnormal return on exposing the Company's managers to the market for corporate control suggests that the disciplining effect of the takeover threat improves shareholder value. Indeed, we improve on those studies in that we are better able to exclude the alternative hypotheses that the observed increase in the target's price reflects (a) new information provided by the fact of the takeover attempt itself,³⁵⁷ or (b) the accumulation of shares by a bidder in advance of announcing the bid.³⁵⁸ We can exclude (a) because the Hershey sale was not instigated by an outside party and the observed price appreciation largely disappeared once the sale was abandoned for exogenous reasons.³⁵⁹ We can exclude (b) because the attempted take-

period, a third study also finds that hedge funds appear to play relatively activist roles in target firms and that they exhibit a high level of success with respect to their proposals. See William W. Bratton, *Hedge Funds and Governance Targets*, 95 *Geo. L.J.* 1375, 1405 (2007).

352. As pointed out in Rock, *supra* note 242, at 479–80, however, in some cases mutual fund and pension managers will indeed find it in their self-interest to engage in monitoring and activism.

353. See Brad M. Barber, Terrance Odean & Lu Zheng, *Out of Sight, Out of Mind: The Effect of Expenses on Mutual Fund Flows*, 78 *J. Bus.* 2095, 2102 tbl.1 (2005) (providing expense ratios for large sample of diversified U.S. equity funds). Management fees are a subset of expenses, so the numbers presented here are upper bound estimates.

354. See William N. Goetzmann, Jonathan E. Ingersoll, Jr. & Stephen A. Ross, *High-Water Marks and Hedge Fund Management Contracts*, 58 *J. Fin.* 1685, 1685–86 (2003).

355. In fact, it is common for the hedge fund managers themselves to have a significant portion of their own capital invested in the fund. See Erik J. Greupner, *Comment, Hedge Funds Are Headed Down-Market: A Call for Increased Regulation?*, 40 *San Diego L. Rev.* 1555, 1559 (2003).

356. See Bhagat & Romano, *supra* note 29, at 987–92 (surveying literature).

357. See Jensen & Ruback, *supra* note 234, at 15 n.10.

358. See Jarrell, Brickley & Netter, *supra* note 234, at 53. Further, relative to studies that examine changes in state takeover law, our results do not suffer from the potential omitted variables bias inherent in such studies. Changes in state takeover laws may themselves be the result of broader changes in the state's business climate.

359. Although others have found that takeover premiums tend to disappear after a takeover is abandoned, see Bradley, Desai & Kim, *Rationale*, *supra* note 284, at 194, it is difficult to rule out the possibility that a takeover is abandoned for reasons that are germane to firm value such as a downward revision of expected future profit streams or the implementation of a new takeover defense. In our case, this endogeneity problem may be ruled out because the sale was abandoned for reasons unrelated to the Hershey Company's underlying business prospects.

over of the Company was invited by the Trust, before a prospective outside bidder would have begun buying shares to obtain a toehold in the Company.³⁶⁰

Like other existing studies of share price movement on news of a takeover, we cannot rule out the possibility that the observed appreciation was driven by a capitalized control premium or expected synergies between the Company and the eventual acquirer. However, compared to the existing studies, these effects should be attenuated in our study because the takeover announcement came from the target before a buyer had been identified. The existence of a bidder-specific control premium or synergy was therefore uncertain when news of the trustees' plan to sell broke.

Although we improve on the existing literature in the foregoing ways, we nonetheless characterize our contribution to the takeover literature as modest for two reasons. First, given the possibility that the Trust might have imposed something other than profit maximization on the Company's managers, we cannot exclude the possibility that the observed price movement represents the market's expectation of a shift in management objective rather than the containment of corporate agency costs. In other words, our results may reflect only charitable trust agency costs. Second, our study is by necessity limited to a single firm. Given these limitations, the existing literature, which includes a host of multiple-firm takeover studies, supplies crucial interpretive context for our findings. When multiple studies using different research designs with different strengths and weaknesses produce similar results, confidence in the general validity of those results increases.³⁶¹

CONCLUSION

This Article uses the aborted 2002 sale of the Hershey Company by the Hershey Trust as a quasi-natural experiment to investigate theoretical claims in the literatures of trust law and corporate law. In so doing, this Article makes fresh contributions to both literatures, and it also contributes to the technical literature on event study methodology.

360. For a discussion of the role of upward sloping supply curves for shares in a target firm as a determinant of takeover premiums, see Michael Bradley, Anand Desai & E. Han Kim, Synergistic Gains from Corporate Acquisitions and Their Division Between the Stockholders of Target and Acquiring Firms, 21 *J. Fin. Econ.* 3, 15–19 (1988). For evidence of this possibility generally, see Andrei Shleifer, Do Demand Curves for Stocks Slope Down?, 41 *J. Fin.* 579 (1986), although the notion of nonhorizontal demand curves for equities is controversial in both law and finance. This debate has also been touched on in the case law. See, e.g., *West v. Prudential Sec., Inc.*, 282 F.3d 935, 939 (7th Cir. 2002) (“There are so many substitutes for any one firm’s stock that the effective demand curve is horizontal.”).

361. Cf. Roberta Romano, The Need for Competition in International Securities Regulation, 2 *Theoretical Inquiries L.* 387, 505–06 (2001) (discussing similar convergence of results between different methodologies in context of regulatory competition).

Trust Law

Our analysis provides the first quantitative empirical assessment of the prevailing scholarly view that agency costs are rampant in charitable trusts. Because a charitable trust must be for the benefit of a charitable purpose, not an identifiable beneficiary, there is no one with both an economic interest and legal standing to ensure that the trustee efficiently pursues the trust's charitable purpose. State attorneys general have formal authority to enforce charitable trusts, but the attorney general is typically a political official for whom supervision of such trusts has little political payoff. Further, when a charitable trust does achieve enough political salience to attract the attention of the attorney general, the attorney general's political interests often militate toward imposing local political preferences, which may not be congruent with the charitable purpose or the interests of society more broadly.

Our findings imply agency costs in the high-profile, politically salient Hershey Trust on the order of \$850 million (about 15% of the 2002 value of the Trust). Moreover, instead of reducing the agency costs associated with the Trust's charitable trust form, the Attorney General's intervention to block the Trust's sale of the Company made those agency costs permanent. The question thus arises, can these results be generalized? The answer is yes and no. We do not claim that all charitable trusts host the same magnitude of agency costs as the Hershey Trust or that all interventions by state attorneys general are as maladroit as the intervention here. Instead, we suggest that our results tend to validate the assumption in the theoretical literature, heretofore based chiefly on qualitative anecdotal evidence, of the prevalence of agency costs in charitable trusts and the shortcomings in supervision of charitable entities by the state attorneys general. Accordingly, our analysis throws light on current policy debates in trust law such as (1) alternative modes of supervision for charitable trusts, (2) expanding the *cy pres* doctrine to address excess endowments, and (3) the propriety of social investing by trustees.

Corporate Law

Agency costs are the central concern of the study and practice of corporate law. The difficult task is to align the incentives of managers with the interests of shareholders, or at least to constrain the extent to which managers can advance their own interests at the expense of shareholders. A growing empirical literature suggests that the takeover threat posed by exposure to the market for corporate control and monitoring by controlling shareholders or large blockholders are among the most powerful levers available to induce managers to act in the best interests of shareholders. Our analysis contributes to this literature by suggesting that, at least in the case of the Hershey Trust and Hershey Company, the takeover threat provided more managerial discipline than the presence

of a controlling shareholder.³⁶² Although we cannot disentangle the role of the Trust's weak internal governance structure from the role of switching from a controlling shareholder to the takeover market as alternative explanations for this finding, our results nonetheless highlight the need to consider the incentives of a blockholder's agents when analyzing the efficacy of relying on the blockholder to police managerial agency costs. The \$2.7 billion increase in the value of the Company on exposure to the takeover market is a damning indictment of the trustee's failure as agents of the Trust to maximize value.

Financial Econometrics

Although the event study technique is a well-accepted tool of financial econometrics, and single-firm event studies appear in the academic literature and are routinely employed in securities litigation,³⁶³ such a study poses special problems on account of the increased volatility associated with a portfolio of one. The concern is that a single firm's observed abnormal returns might not be normally distributed, and if so, that we might attribute statistical significance to an abnormal return that in fact reflects only random variation. To address this worry, we develop and present a method of assessing statistical significance that uses an empirical distribution of abnormal returns based on randomization inference as a substitute for using the critical values for statistical significance from the standard normal distribution. This randomization inference technique has been used in other applications outside of financial economics, and it bears a similarity to recently developed bootstrapping methods, but we believe that we are the first to use it in an event study in the law and economics literature. Because the technique can easily be implemented in most single-firm event studies, and because it improves confidence in assessments of statistical significance, we commend its use in future single-firm event studies.

362. We consider the potentially conflating influences of a capitalized control premium or expected synergies in the text following *supra* note 360.

363. See *supra* notes 291–292.

APPENDIX A: EXTENDED PRICE DYNAMIC GRAPHS

FIGURE A1: HSY PRICE HISTORY

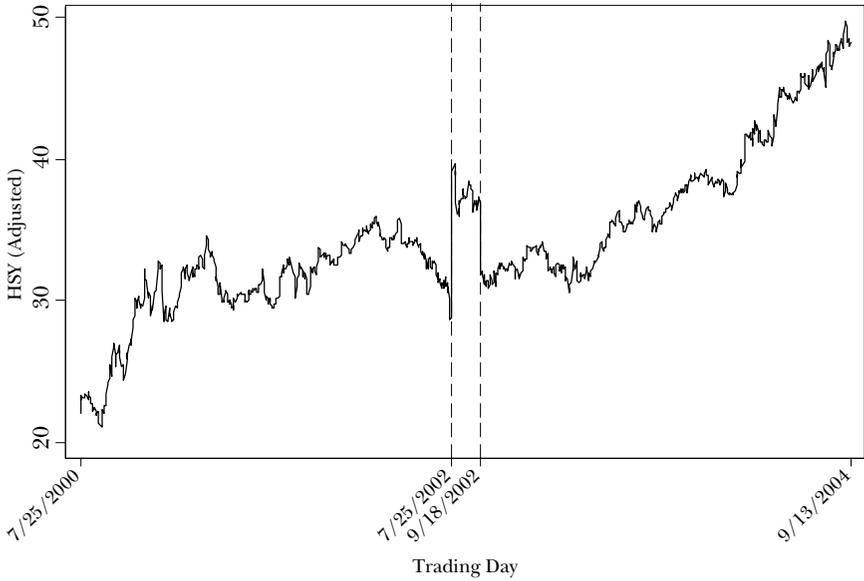


FIGURE A2: HSY VS. CHOCOLATE COMPETITORS

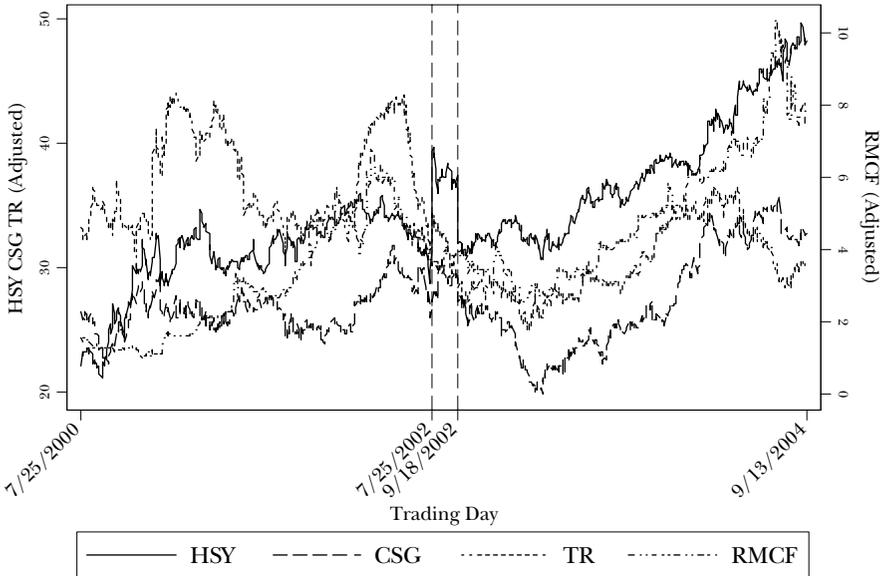


FIGURE A3: HSY VS. FOOD COMPETITORS

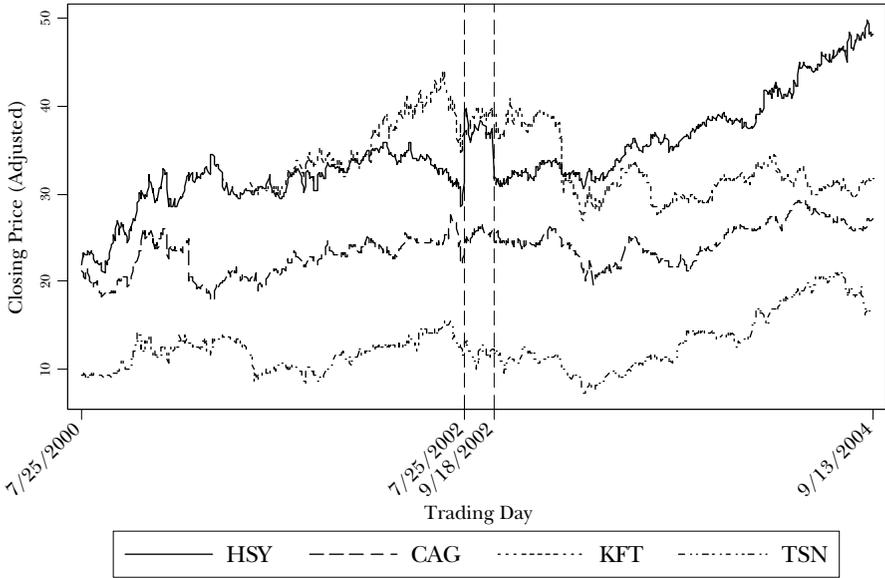


FIGURE A4A: HSY VS. S&P 500

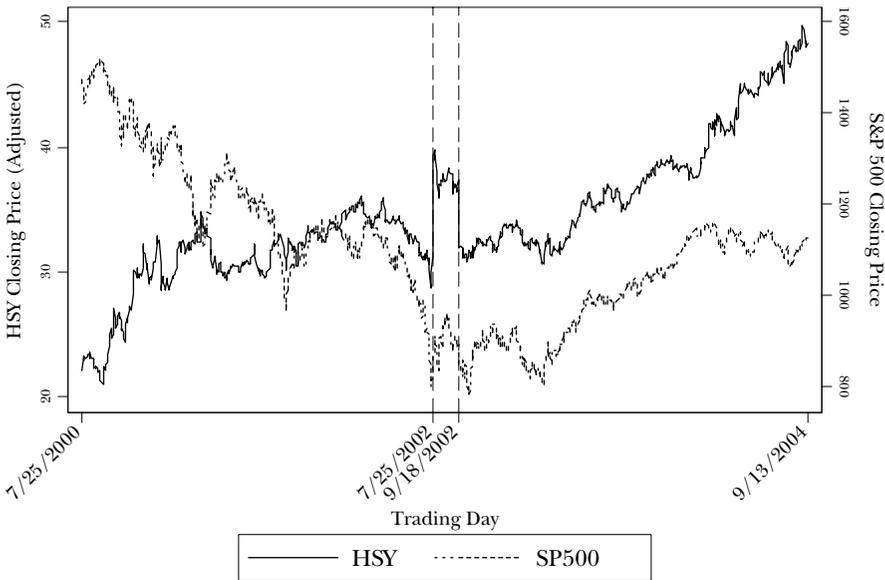
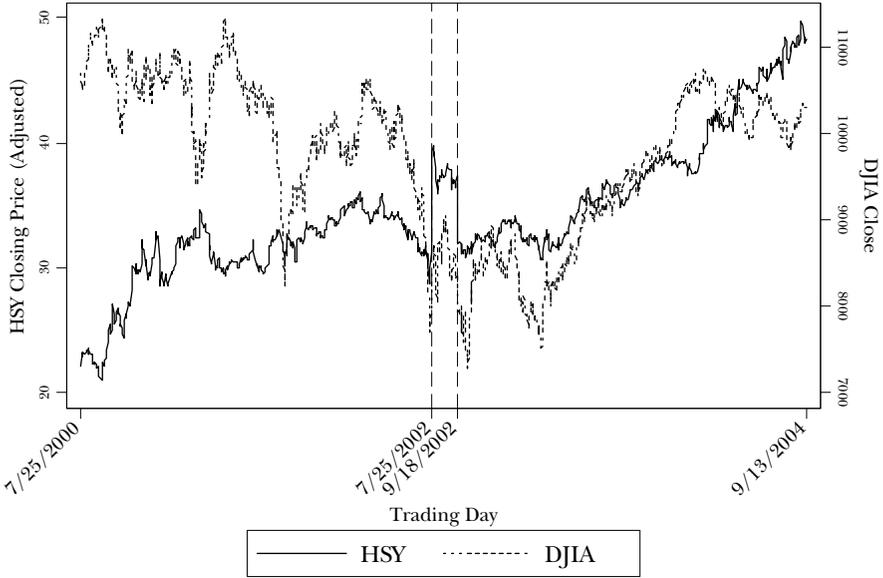


FIGURE A4B: HSY VS. DOW JONES INDUSTRIAL AVERAGE



APPENDIX B: THE POSSIBILITY OF LEAKAGE

A common concern in event studies is the possibility that insiders might use their advance knowledge of a pending material announcement to trade for their own gain or for the benefit of third parties.³⁶⁴ In the present case, leakage would have caused HSY to appreciate in a non-random way before the July 25, 2002 sale announcement. If the price of HSY started climbing earlier as a result of leakage trading, our measure of the abnormal return associated with the sale is underestimated. Such a scenario is consistent with the depiction of cumulative abnormal returns in Figure 5a. To examine the possibility of leakage more formally, we present the abnormal returns for the ten days before and after the sale window in Appendix Table B1.³⁶⁵

We do find some evidence of leakage during the two trading days prior to the sale announcement, as the abnormal returns for those days were about 5% and 3% respectively, both statistically significant at the 0.1% level. If these abnormal positive returns indeed represent leakage, our original measure of the effect of the sale announcement is underestimated by about 8%. Our confidence in this evidence of leakage, however, is weak, as the price movements during the ten day presale window appear to be especially volatile. Given the large negative abnormal returns earlier in the ten day period before the sale announcement, the positive abnormal returns on the two days prior to the sale announcement could simply represent reversion to the mean.³⁶⁶ Moreover, on July 23 the Company issued a positive earnings announcement,³⁶⁷ which further undermines the inference of leakage trading from the July 23 and 24 abnormal returns. Accordingly, in the main text we do not increase our estimate of the abnormal return associated with the sale announcement to account for the possibility of leakage.

We observe no significant abnormal returns in the ten day period after the sale window.

364. Under semi-strong form market efficiency, stock prices reflect all public information, so there are potential gains from trading on nonpublic information.

365. Because in Appendix Table B1 we examine the ten trading days prior to the July 25 sale announcement, we used 100 trading days prior to those ten days as our estimation period. In Table 3, by contrast, we used the 100 trading days prior to July 25 for our estimation period. The results in Table 3 would not change, however, if we used the same estimation period as in Appendix Table B1.

366. These results bring into view the related concern of volatility in a one-firm event study. We address the problem of a one-firm event study in *supra* Part III.C.4.

367. See Hershey Foods Corp.: Net Rises 20% Despite a Strike; Full Year Outlook Is Raised, Wall St. J., July 24, 2002, at A10.

TABLE B1: EVIDENCE OF LEAKAGE BEFORE SALE ANNOUNCEMENT

Date	Actual	Expected	Abnormal	Standardized Abnormal
Pre Sale Window				
7/11/2002	0.027	0.001	0.026	2.737**
7/12/2002	-0.021	-0.002	-0.019	-2.000*
7/15/2002	0.006	-0.002	0.007	0.737
7/16/2002	-0.020	-0.005	-0.015	-1.579
7/17/2002	0.013	0.000	0.012	1.263
7/18/2002	-0.029	-0.007	-0.022	-2.316*
7/19/2002	-0.048	-0.009	-0.039	-4.105***
7/22/2002	0.004	-0.008	0.012	1.263
7/23/2002	0.039	-0.007	0.045	4.737***
7/24/2002	0.045	0.012	0.033	3.474***
Post Sale Window				
9/19/2002	-0.020	-0.007	-0.012	-1.263
9/20/2002	0.007	-0.000	0.007	0.737
9/23/2002	-0.006	-0.004	-0.003	-0.316
9/24/2002	-0.023	-0.005	-0.018	-1.895
9/25/2002	0.003	0.005	-0.001	-0.105
9/26/2002	0.020	0.003	0.017	1.789
9/27/2002	-0.015	-0.008	-0.007	-0.737
9/30/2002	-0.012	-0.004	-0.008	-0.842
10/1/2002	0.015	0.008	0.007	0.737
10/2/2002	0.000	-0.006	0.006	0.632

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$ (i.e., abnormal return is statistically significant at the 0.1%, 1%, and 5% levels respectively).

APPENDIX C: HOW UNLIKELY ARE THE ABNORMAL RETURNS?

Hypothesis testing in econometrics involves comparing a test statistic to critical values for statistical significance that are chosen from the standard normal distribution. This is the method implied by the discussion in *supra* Part III.C. Use of the standard normal distribution, however, assumes the applicability of a central limit theorem, which holds that the sample average of abnormal returns converges to the standard normal distribution, regardless of the population distribution.³⁶⁸ Unfortunately, in our study we have relatively few sample draws arising from the sale “shock” (and, arguably, those draws are not independent of each other), which limits our ability to rely on a central limit theorem.³⁶⁹

However, for our primary results of interest (i.e., the abnormal return on the day the sale was announced and the abnormal return on the day the sale was abandoned), it turns out that the observed abnormal returns are so large that they would rarely occur by chance under any feasible distribution of abnormal returns. That is, we do not need to rely on a central limit theorem or on any assumptions about the underlying “true” distribution of abnormal returns for Hershey to have confidence that it is unlikely that the observed abnormal returns were simply the result of normal variation in returns.

This claim hinges on the Chebyshev inequality,³⁷⁰ which states that:

$$\Pr\left(\left|\frac{x - \mu}{\sigma}\right| > \alpha\right) \leq \frac{1}{\alpha^2}$$

In our application, x is the observed abnormal return, μ is the hypothesized value (i.e., 0), and σ is the standard deviation of observed abnormal returns, making the entire argument inside of the absolute value operator equivalent to our standardized abnormal return. Thus, for our purposes, Chebyshev’s inequality states that the probability that the absolute value of a standardized abnormal return is greater than some arbitrary value α is less than or equal to one over α squared. Crucially, Chebyshev’s inequality holds for any possible distribution, which means that a claim of statistical significance derived from it does not require any assumptions about the generation of the underlying data or convergence via a central limit theorem.

Applied to our data, Chebyshev’s inequality implies that the likelihood of observing the standardized abnormal return associated with the day the Hershey sale was announced (21.250) by random coincidence is less than or equal to 0.0022. For the abnormal return observed on the day the preliminary injunction was announced (3.917), the likelihood of

368. See William H. Greene, *Econometric Analysis* 116–18 (4th ed. 2000); James H. Stock & Mark W. Watson, *Introduction to Econometrics* 52–55 (2d ed. 2007).

369. See Jack Johnston & John DiNardo, *Econometric Methods* 55–56 (4th ed. 1997).

370. See Russell Davidson & James G. MacKinnon, *Estimation and Inference in Econometrics* 799–800 (1993).

observing this by chance is less than or equal to 0.0652. Finally, the likelihood associated with the abnormal return on the day the sale was abandoned (9.833) is less than or equal to 0.0103.