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EXAMINING THE IMPACT OF FOSSIL FUEL
DIVESTMENT ON UNIVERSITY ENDOWMENTS

CHRISTOPHER J. RYAN, JR.* & CHRISTOPHER R. MARSICANO**

Between 2011 and 2018, 35 American universities and colleges divested, either partially or completely, their endowments from fossil-fuel holdings, marking a shift toward sustainability in university endowment investment. However, the decision by these universities to divest was often marred by controversy, owing to conflicts between student- and faculty-led coalitions and the university board. Principally, endowment fiduciaries are averse to divestment decisions because they think that it will hurt the endowment's value, but this concern, motivated by a narrow interpretation of fiduciary law, can be empirically examined. To date, the academic study of the effect of divestment on endowment values has focused on the top university endowments and has produced mixed results. Our study is different from the extant but limited literature in this area in that we examine holistically the impact of total or partial divestment on endowment values for all universities as well as a select group of institutions that are illustrative of their peers by endowment size. More importantly, we evaluate the assumption that divestment does injury endowment values through legal and empirical lenses. Results from our difference-in-differences analyses of the effect of full and

* Christopher J. Ryan, Jr., Associate Professor of Law, Roger Williams University School of Law; Affiliated Scholar, American Bar Foundation. Ph.D., Vanderbilt University; J.D., University of Kentucky; M.Ed., University of Notre Dame; A.B., Dartmouth College.

** Christopher R. Marsicano, Visiting Assistant Professor of Educational Studies, Davidson College. Ph.D., Vanderbilt University; M.P.P., Duke University; A.B., Davidson College. We would like to thank Bridget Crawford (Pace University Haub School of Law), Susan Gary (University of Oregon School of Law), and Terri Lynn Helge (Texas A&M University School of Law), whose comments were invaluable to our writing of this Article in its formative stages, as well as the comments received from colleagues during our presentation in the Association of American Law Schools' Section on Trusts & Estates panel in January 2020 and at the Law & Society Association Conference in May 2020. Finally, a special thanks to Troy Lange and Jake Rogers for their diligent research assistance with this Article.

partial divestment suggest that either form of divestment does not yield discernible consequences—either positive or negative—for endowment values, at statistically significant levels. However, we do find evidence that divestment improved the value for three of four universities that we examined through synthetic control analysis, with the greatest increase in value at a university with a very large endowment (Stanford University) and modest increases at two universities with mid-sized and large endowments, respectively (University of Dayton and Syracuse University). Thus, the negative consequences of divestment may be overstated in the near-term. This challenges the assumption that divestment yields negative returns to endowments and cracks open the door for endowment fiduciaries to divest without violating duties of loyalty and prudence. We hope that this study both grounds and advances the debate about endowment divestment with empirical evidence and a reasoned discussion of its costs and benefits.

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INTRODUCTION

Through their endowments, universities increasingly participate in the global financial industry.¹ As recently as 2018,

1. See Michael McDonald, *Wall Street Redoubles Fight to Manage \$100 Billion at Endowments*, BLOOMBERG (Aug. 29, 2016), <https://www.bloomberg.com/news/articles/2016-08-29/wall-street-redoubles-fight-to-manage-100-billion-at-endowments> (discussing how helping universities manage their endowments “has grown into a \$100 billion business that’s attracted stiff competition from banks, consultants and boutiques”). In fact, as universities have increasingly invested their endowments in financial markets, their portfolios have diversified. See Robin Greenwood & David Scharfstein, *The Growth of Finance*, 27 J. ECON. PERSP. 3, 15 (2013) (discussing the reality that, as

the fair-market value of the top 100 university endowments totaled over \$472 billion.² Despite the fact that they control vast sums, universities are more than holders of institutional funds. They are also important social firms, and the manner in which they spend or do not spend their resources carries important social considerations.³

One social consideration is whether universities should divest from fossil fuels—or remove invested assets from companies involved in extracting fossil fuels—taking a stand in the

endowment managers have become more sophisticated over time, the investment by universities in security vehicles and other staples of the financial industry have become more common).

2. Calculations on file with the authors. *See, e.g., Which Colleges Have the Largest Endowments?*, CHRON. HIGHER EDUC. (Jan. 31, 2019), <https://www.chronicle.com/article/Which-Colleges-Have-the/245587> (listing endowments by fair market value). However, it should be noted that university endowments have underperformed their market peers since the 2008 Recession. *See, e.g., Rick Seltzer, Endowment Returns Slow; Survey Offers Peek at Spending*, INSIDE HIGHER ED (Jan. 31, 2019), <https://www.insidehighered.com/news/2019/01/31/college-endowments-returned-82-percent-2018-annual-survey-adds-some-insight-how> (noting that FY 2018 endowment returns fell by a third to 8.2%, but although it remained positive, fell short of inflation adjustment); Thomas Franck, *College Endowments Badly Trail the Market, Would Be Better off Just Buying Treasuries, Study Shows*, CNBC (Dec. 11, 2018), <https://www.cnbc.com/2018/12/11/study-shows-endowments-would-have-fared-better-by-buying-treasuries.html> (describing that median endowment returns were 3.75–1.4 percentage points below a 10-year treasury bond return between 2009–2016—and citing Sandeep Dahiyah & David Yermack, *Investment Returns and Distribution Policies of Non-Profit Funds*, (Nat'l Bureau of Econ. Rsch. Working Paper No. 25323, 2018), <https://www.nber.org/papers/w25323> (studying endowment returns from Georgetown University and New York University, and stating that the median annual returns of endowments brings in returns 5.53%, less than a classic mix of 60-40 equity and treasury bond indexes)); and Christopher J. Ryan, Jr., *Trusting U.: Examining University Endowment Management*, 42 J. C. & U. L. 159 (2015) (demonstrating how many of the top university endowments could have better weathered the storm of the 2008 Recession by investing their fair market value in bonds, as opposed to securities, from FY 2008 to FY 2014).

3. *See* Lee-Ford Tritt & Ryan Scott Teschner, *Re-Imagining the Business Trust as a Sustainable Business Form*, 97 WASH. U. L. REV. 1, 3–4 (2019) (noting that there has been a recent discourse, “in the business world, in academia, and in the popular press, about corporate sustainability . . . aris[ing] from a shift in the business world: companies have gone from focusing solely on the bottom line to making a positive impact on society. Both big and small businesses are considering their environmental, societal, and economic effects on the community rather than focusing solely on shareholder wealth maximization”).

effort to reduce the impact of climate change. Between 2011 and 2015, sixteen American universities and colleges fully divested their endowments from fossil fuels,⁴ and another six American universities and university systems partially divested their endowments.⁵ This social and economic action paved the way for another thirteen American universities to divest their endowments from fossil fuels between 2016 and 2018.⁶

And universities are not alone in the movement to divest, thanks in part to pressure from organizations like the United

4. Universities that immediately and fully divested their endowments from fossil fuels between 2011 and 2015 include: Hampshire College (2011); Unity College (2012); Sterling College (2013); Santa Fe Art Institute (2013); College of the Atlantic (2013); Green Mountain College (2013); Naropa University (2013); Pitzer College (2014); Union Theological Seminary (2014); University of Dayton (2014); California State University at Chico (2014); Goddard College (2015); Syracuse University (2015); University of Hawaii (2015); and University of Maine at Presque Isle (2015). Three universities began a full divestment from fossil fuels within this period but included sunset provisions to their full divestment: Prescott College (Promised in 2014 with a 3-year divestment period); Warren Wilson College (Promised in 2015 with a 5-year divestment period); and Western Oregon University (Promised in 2013 with a 5-year divestment period).

5. Universities that partially divested their endowments from fossil fuels between 2011 and 2015 include: California Institute for the Arts (Partial divestment from fossil fuels, 2014); University of California System (Coal and tar sands only, 2015; Promised a full divestment beginning in 2018 with a 5-year divestment period, the full divestment promise falling outside of the scope of this study); Humboldt State University (No direct investment in fossil fuels, 2013); San Francisco State University (Coal and tar sands only, 2013; Promised full divestment beginning in 2017); Stanford University (Coal only, 2014); University of Maine System (Coal only, 2015); University of Washington (Coal only, 2015);.

6. Universities that fully divested their endowments from fossil fuels between 2016 and 2018 include: Northland College (Promised in 2017 with a 5-year divestment period); University of Maryland (Promised in 2016 but not complete in 2018); University of Massachusetts (2016); Oregon State University (2017); Lewis & Clark College (2018); Salem State University (2018); Seattle University (2018); and Middlebury College (Promised in 2018 with a 15-year divestment period). Universities that partially divested their endowments from fossil fuels between 2016 and 2018 include: Boston University (Coal and tar sands only, 2016); Columbia University (Coal only, 2017); Georgetown University (Coal and tar sands only, 2018); Johns Hopkins University (Coal only, 2017); and Yale University (Partial divestment from fossil fuel funds, 2016). It should be noted here that several universities have quietly drawn down their investments in the fossil fuel industry, but the exact number of institutions is not known.

Nations.⁷ Over 1,000 institutions with assets valued at over \$8 trillion have committed to some form of fossil fuel divestment, such as the Rockefeller Brothers Fund, Guardian Media Group, and the World Council of Churches, as well as the governments of Norway, Ireland, and New York City.⁸ This could possibly signal that fossil fuel investment vehicles may soon lose their historical status as the blue-chip investments, and indeed, in 2020, amidst declining demand for fossil fuels, Exxon Mobil was dropped from the Dow Jones Industrial Average, after nearly a century of inclusion in the index.⁹

Amidst changes in perception about the role of fossil fuel producers in climate change, universities are increasingly pressured to consider divesting from fossil fuel holdings. At a few of the universities that have divested from fossil fuels, the decision was hardly controversial, but for many universities, the decision to divest engendered both considerable support and opposition.¹⁰ Yet, to date, the academic study of the effect of divestment on endowment values has produced mixed results and has only contemplated the possible future effects of divestment at a handful of universities that have partially divested

7. See Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104; see also Damian Carrington, *Fossil Fuel Divestment Funds Double to \$5tn in a Year*, *GUARDIAN* (Dec. 12, 2016), <https://www.theguardian.com/environment/2016/dec/12/fossil-fuel-divestment-funds-double-5tn-in-a-year>.

8. See, e.g., *1000+ Divestment Commitments*, *FOSSIL FREE: DIVESTMENT* (Feb. 22, 2019), <https://gofossilfree.org/divestment/commitments>; Jennie C. Stephens et al., *The Role of College and University Faculty in the Fossil Fuel Divestment Movement*, 6-41 *ELEMENTA SCI. ANTHROPOCENE* 1, 2-3 (2018), <https://www.elementascience.org/articles/10.1525/elementa.297/>.

9. Julian Lee, *Is Big Oil Still a Big Deal?*, *BLOOMBERG*, (Aug. 30, 2020), <https://www.bloomberg.com/opinion/articles/2020-08-30/as-exxon-mobil-is-removed-from-the-dow-is-this-the-end-for-big-oil> (leaving Chevron Corp. as the only remaining oil company in the DJIA). Certainly, the effect of COVID-19 has a good deal to do with the decline of the value of stock value in fossil fuel companies, but the impact of the socially responsible investment movement should not be overlooked. See Robert G. Eccles & Svetlana Klimenko, *The Investor Revolution*, *HARV. BUS. REV.*, May-June 2019, <https://hbr.org/2019/05/the-investor-revolution>.

10. See, e.g., Kellie Woodhouse, *Does Divestment Cost?*, *INSIDE HIGHER ED* (Sept. 21, 2015), <https://www.insidehighered.com/news/2015/09/21/conflicting-reports-fossil-fuel-divestment-make-decisions-more-difficult> (describing the debate around endowment divestment from fossil fuels).

from fossil fuels.¹¹ That is, no study to date examines holistically the impact of total or partial divestment on endowment values.

This study explores the actual, not merely estimated, impact of divestment on endowment values at universities that both fully and partially divested, using difference-in-differences and synthetic control modeling techniques, with a donor pool of like institutions.¹² Combining data from the Integrated Postsecondary Education Data System (IPEDS) with recently-acquired datasets from the National Association of College and University Business Officers (NACUBO) and Edmit, a college consulting company, for university endowment market values from FY 2007–2016, this study makes use of a robust dataset that is ideal to isolate the changes to endowment values that are directly attributable to divestment and not attributable—directly or indirectly—to external market shocks impacting all university endowment values, such as the 2008 recession.

Part I of this Article places divestment campaigns in historical context. It then turns to the role of index funds, socially responsible investment strategies, and the market effects of divestment. Part II examines pressures placed on universities and their boards to divest as well as principal arguments against divestment. It also discusses recent litigation that endowment divestment decisions have engendered and the possible inefficiencies resulting from the fiduciary requirements of the Uniform Prudent Management of Institutional Funds Act (UPMIFA). Part III reports our data sources, analytical methodology, and findings. Leveraging our rich dataset, this study examines the extent of the fair-market value change—positive or negative—that is attributable to divestment decisions. Results from our difference-in-differences analyses of the effect of full and partial divestment suggest that either form of divestment yields no discernable consequences for university endow-

11. *But see* Bradford Cornell, *The Divestment Penalty: Estimating the Costs of Fossil Fuel Divestment to Select University Endowments*, SSRN (Sept. 3, 2015), <https://dx.doi.org/10.2139/ssrn.2655603> (estimating the future costs to five endowments: Harvard, Yale, Columbia, MIT, and NYU—none of which have divested).

12. The donor pool is based on enrollment, location, size of endowment, Carnegie classification of the school's institutional typology, and other related factors.

ments' fair-market values. We urge the reader to interpret these preliminary results with caution, in part because our second method of analysis, using the synthetic control method for four universities (Pitzer College, University of Dayton, Syracuse University, and Stanford University), suggests that consequences may vary across institutional contexts. Finally, based on these results, we then consider whether universities, as charitable organizations, might have different fiduciary duties that transcend the default "total return" method of investing, and evaluate the extent to which UPMIFA may need to directly contemplate different standards of reasonable investment based on the institutional beneficiary's purpose or mission.

I.

THE EFFECT OF DIVESTMENT

A. *Past Divestment Campaigns*

Divestment, on the basis of social or moral concerns, is something of a latter-day invention. Originating in the early 1980s, Protestant and Roman Catholic churches initiated a wave of divestment from holdings in banks in South Africa on moral grounds, taking a stand against the practice of apartheid, and public organizations—including health-related organizations, such as the American Cancer Society and the World Health Organization—started to divest from the tobacco industry.¹³ By the end of the decade, university endowments—led by Harvard University and Columbia University—followed suit, divesting from holdings in tobacco companies and selling off shares of companies operating in South Africa.¹⁴ In the mid- to late-1990s, public pension funds started to divest from tobacco companies and financial institutions in South Africa, and investors in the wider market began to do the same.¹⁵

13. In many ways, divestment decisions by these organizations can be seen as constituent with their health-related missions. *See* ANTIF ANSAR, BEN CALDECOTT & JAMES TILBURY, STRANDED ASSETS AND THE FOSSIL FUEL DIVESTMENT CAMPAIGN: WHAT DOES DIVESTMENT MEAN FOR THE VALUATION OF FOSSIL FUEL ASSETS? 9–10 (2013).

14. Yet, for universities, these divestment decisions can be seen as more removed from their educational missions. *See id.*

15. *Id.* For a contemporaneous academic discussion of divestment during the apartheid era, see Joel C. Dobris, *Arguments in Favor of Fiduciary Divestment of "South African" Securities*, 65 NEB. L. REV. 209 (1986); Richard A. Pos-

The economic result of these early divestment campaigns often had a negligible impact on the companies within the targeted sector. While the share values in divested companies dropped significantly in a few cases, most did not.¹⁶ In fact, shares in these companies were merely reallocated to share purchasers who were not concerned with the social movement prompting divestment from these companies.¹⁷ While divestment movements *can* be successful, this success rarely results in permanently reducing any firm's share value because other investors, who are unconcerned by the social considerations of the divestment campaign, can buy the divested shares and likely at a reduced rate.¹⁸ For example, "sinvestors"—who invest exclusively in sectors like alcohol, tobacco, firearms, and gambling—can wait in the offing for a divestment campaign to target a firm and scoop up the divested shares at a reduction in share value and hold the assets until they become more profitable again.¹⁹ If the divesting party sells low and the "sinvestor" buys the divested stock low as well, the valuations of

ner & John H. Langbein, *Social Investing and the Law of Trusts*, 79 MICH. L. REV. 72 (1980).

16. See Siew Hong Teoh et al., *The Effect of Socially Activist Investment Policies on the Financial Markets: Evidence from the South African Boycott*, 72 J. BUS. 35 (1999) (finding limited impact of divestment from South African companies during apartheid); Patrick Geddes, *Do the Investment Math: Building a Carbon-Free Portfolio* (Aperio Group 2013) (describing the effect of divestment on a company's stock prices as "statistically irrelevant"). However, the South African divestment movement did have a positive psychological impact for the anti-apartheid protestors in South Africa, as well as a negative psychological impact for the business owners who were impacted by the movement. See Philip I. Levy, *Sanctions on South Africa: What Did They Do?* 1–13, (Econ. Growth Ctr. at Yale Univ., Paper No. 796, 1999), http://www.econ.yale.edu/growth_pdf/cdp796.pdf.

17. William MacAskill, *Does Divestment Work?*, NEW YORKER (Oct. 20, 2015), <https://www.newyorker.com/business/currency/does-divestment-work>.

18. *Id.* In fact, making investment decisions based on social impact usually results in some sort of positive externality, something that the firm or investor cannot internalize or from which it could derive much benefit. See, e.g., Chris Addy, Maya Chorenge & Michael Etzel, *Calculating the Value of Impact Investing*, HARV. BUS. REV., Jan.–Feb. 2019 (evaluating the social returns to social investment and proposing a new metric to do so—but also implicitly suggesting that these returns do not necessarily equate to value realized by the investor).

19. See MacAskill, *supra* note 17.

the divested stock will remain relatively stable and unaffected by this reallocation.²⁰

In other words, stock in a particular company that is the target of divestment is unlikely to be significantly affected by an individual investor's or even an institutional investor's decision to divest from it.²¹ To the extent that the targeted company has a large enough market cap, any anticipated drop in stock valuation associated with divestment from investors with limited holdings in the company are likely to present short-term decreases in value only; however, to the extent that multiple institutional investors with holdings in a targeted company divest at the same time, it is conceivable that declines in valuation would persist into the longer-term.²² A divestment campaign can sow the seeds of uncertainty among investors, who may fear—even if unreasonably—that stock values will drop and thus cause them to also divest.²³ If divestment is coordinated, divestment could impact stock values by changing market norms, so that even if it is economically irrational not to invest in fossil fuel stocks, it could be the norm not to do so, realizing the broader social impact that current proponents of fossil fuel divestment seek.²⁴ Accordingly, it may be instructive to look at how past divestment campaigns were successful in order predict the success of the movement encouraging universities to divest from the fossil fuel sector.²⁵

B. *Index Funds and Socially Responsible Investing*

Since the year 2000, actively managed funds have ceded ground to index funds, which are mainly collections of securities and bonds, or both, tracking an index.²⁶ In theory, the

20. *Id.*

21. See ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 30.

22. See *id.*; see also Noam Bergman, *Impacts of the Fossil Fuel Divestment Movement: Effects on Finance, Policy, and Public Discourse*, SUSTAINABILITY, July 2018, at 6–7, <http://dx.doi.org/10.3390/su10072529>.

23. See ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 34–35; see also BELINDA GAN, *DIVESTMENT – DOES IT DRIVE REAL CHANGE?* 7 (Schroders, 2019), <https://www.schroders.com/getfunddocument/?oid=1.9.3338808>.

24. See ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 31–32; Bergman, *supra* note 22, at 8.

25. See ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 39–41; GAN, *supra* note 23, at 16.

26. Adi Libson & Gideon Parchomovsky, *Reversing the Fortunes of Active Funds* 1–3 (U. Penn. Inst. for L. & Econ. Research Paper No. 20-04, 2020),

value of index funds is that they are designed to increase long-term gains by significant diversification and, as such, they may indeed be superior to active fund management.²⁷ Thus, the increase in popularity of index funds can be viewed as an investor preference for insulation from market sector volatility and away from a focus on short-term returns. But this shift from active to passive asset management has also coincided with the migration of large assets to three main asset firms: BlackRock, Vanguard, and State Street, which manage over 90% of all passive equity assets.²⁸

In the last decade, many index funds have increased their holdings in fossil fuel companies' securities such that fossil fuel companies now make up a large part of major benchmark indices.²⁹ Thus, one could argue that index funds would be unavailable to investors opposed to certain kinds of assets on moral grounds; if the index contains even one such security from a category of asset in which investor does not want to invest, the whole index fund would be unavailable to the investor.³⁰ However, this argument ignores two meaningful realities of investment and asset management.

First, individual investors have substantially less influence than index fund managers. Investors with significant holdings in a firm can use their influence as shareholders to affect firm

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3517849# (discussing the considerable shift from active to passive investment in recent years, culminating in 2019, when passive funds surpassed active funds in terms of assets under management); Patrick Jahnke, *Holders of Last Resort: The Role of Index Funds and Index Providers in Divestment and Climate Change* 5 (SSRN Working Paper, 2019), <https://ssrn.com/abstract=3314906>. The advantage of using an index fund in lieu of an actively managed funds is that the index fund management approach is considerably more passive. However, these funds may not be as passive as they seem, since index creators still make decisions about which firms to include and what criteria to use in creating the index. *See id.* at 10–11.

27. *See* Benjamin Braun, *From Performativity to Political Economy: Index Investing, ETFs and Asset Manager Capitalism*, 21 *NEW POL. ECON.* 257, 263 (2016).

28. Jan Fichtner & Eelke M. Heemskerk, *The New Permanent Universal Owners: Index Funds, (Im)patient Capital, and the Claim of Long-Termism* (CORPNET Working Paper, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3321597.

29. *See* Jahnke, *supra* note 26, at 5–6.

30. *See id.* at 3–4. *See* Geddes, *supra* note 16.

governance.³¹ Exit, or the threat of exit, is an essential part of shareholder voice, even for shareholders that do not actively engage with the firm.³² Yet, critics have argued that the three firms controlling the lion's share of passive equity are not unambiguously dedicated to a long-term outlook—as evidenced by their voting record, which may not reflect a commitment to a long-term return strategy—despite the fact that these three firms are the best-positioned actors to take advantage of long-term investment strategies.³³

As a corollary, even when they are not bound by exclusionary requirements, index fund managers could simply choose to exclude from the fund, for example, securities from coal companies, while still using the rest of the fund's index, carrying a very low tracking error cost.³⁴ Thus, managers of the significant assets invested in index funds could also affect real social change.³⁵ Perhaps this market solution is both efficient and timely. While asset managers have been criticized for changing their investment behavior in response to social concerns, failing to adapt investment principles that are not responsive to the concerns of those calling for social change has reputational repercussions for the fund and may be untenable.³⁶ Moreover, refusal to take action regarding social concerns assets could be detrimental to the value of index funds

31. See Jahnke, *supra* note 26, at 7. While the share size required for voting to opt out of certain funds can vary across fund type, generally a controlling share is required. See *id.*

32. See *id.* at 8–9. Tim Gray, *Funds That Can Put Your Investments on a Low-Carbon Diet*, N.Y. TIMES (Oct. 13, 2017), <https://www.nytimes.com/2017/10/13/business/mutfund/mutual-funds-low-carbon.html>.

33. See Fichtner & Heemskerk, *supra* note 28, at 17–23.

34. See *id.* at 14. See also Ari Weinberg, *Watch an Index Fund's 'Tracking Error'*, WALL ST. J. (July 9, 2012), <https://www.wsj.com/articles/SB10001424052702303734204577466453629079534> (discussing how the tracking error works); and Vladyslav Sushko & Grant Turner, *The Implications of Passive Investing for Securities Markets*, BANK FOR INT'L SETTLEMENTS (Mar. 11, 2018), https://www.bis.org/publ/qrpdf/r_qt1803j.htm

35. Fichtner & Heemskerk, *supra* note 28, at 15–16; see also Gray, *supra* note 32.

36. See, e.g., Fichtner & Heemskerk, *supra* note 28, at 16; and Steven Mufson, *Harvard Says Fighting Climate Change Is a Top Priority. But It Still Won't Divest From Fossil Fuels*, WASH. POST (July 7, 2019), https://www.washingtonpost.com/climate-environment/harvard-says-fighting-climate-change-is-a-top-priority-but-it-still-wont-divest-from-fossil-fuels/2019/07/02/b6547684-9d03-11e9-9ed4-c9089972ad5a_story.html (discussing how

that do not divest if such assets do, as some expect, depreciate in the future.³⁷

Given the function of index funds and the fact that managers of large institutional funds have little incentive to move away from the stable securities on which their funds rely, it could be difficult for asset managers to divest from holdings on the basis of moral or social concerns. However, asset managers' hands are not as tied as many critics suggest, and socially undesirable holdings could be dropped from the fund with a minimal impact on the tracking error of the index fund portfolio.³⁸ In fact, there are many index funds consisting of a portfolio of "environmentally friendly" bonds and securities, suggesting that index fund managers already contemplate and meet the demand for greener investment options for their clients.³⁹ Moreover, making strategic financial decisions to divest can effect change in nuanced ways, such as divesting from fossil fuel companies that are making no efforts to move to renewable energy while not divesting from those that are.⁴⁰

Despite the purported benefits of index fund investment, university endowments have been wary to choose to invest in index funds, and they have done so to their own detriment. In recent years, index funds have led nearly all investment programs, beating returns to highly diversified university endow-

Harvard is under fire from its own student run newspaper as well as public figures like Al Gore).

37. Fichtner & Heemskerk, *supra* note 28, at 17. *See also* Bill McKibben, *At Last, Divestment Is Hitting the Fossil Fuel Industry Where it Hurts*, *GUARDIAN* (Dec. 16, 2018), <https://www.theguardian.com/commentisfree/2018/dec/16/divestment-fossil-fuel-industry-trillions-dollars-investments-carbon>.

38. *See* Fichtner & Heemskerk, *supra* note 28, at 16–17.

39. *See, e.g.*, Mitch Goldberg, *ESG Index Funds Are Hot. That May Be a Risky Thing for Investors*, *CNBC* (Nov. 17, 2019), <https://www.cnbc.com/2019/11/17/esg-index-funds-are-hot-that-may-be-a-risky-thing-for-investors.html>. If the purpose of funds invested using a benchmark index strategy is to decrease tracking error and transaction costs to investors, specialized index funds, such as "green" index funds, may have higher tracking errors and possibly increase transaction costs of investors, given the scarcity of specialized index funds relative to non-specialized index funds. *See id.*

40. Jennie C. Stephens, Peter C. Frumhoff, & Leehi Yona, *The Role of College and University Faculty in the Fossil Fuel Divestment Movement*, 6–41 *ELEMENTA SCI. ANTHROPOCENE* 1, 8 (2018), <https://www.elementascience.org/articles/10.1525/elementa.297/>

ments with substantial holdings.⁴¹ In fact, while some university endowments invest in funds that use a benchmark index, the universities with the largest endowments have recently decreased their holdings in funds tracking benchmark indices.⁴² Perhaps this trend illustrates the fact that large university endowments do not need the same flexibility as individual investors to be able to trade at different values throughout the trading day. Regardless, many of the top university endowments appear to prefer to actively manage their investment rather than delegate investments through an index fund portfolio, but this strategy increases market exposure by as much as 70% as compared to a passive investment strategy, such as an index fund.⁴³

However, market exposure may indeed be a reason why several of the largest university endowments continue to trail index fund returns. For example, the endowment manager of Carthage College in Wisconsin achieved an average annual value of 6.2% for fiscal years 2008 through 2017—beating 90% of all college endowment funds over this period, which included the Recession—by primarily investing in market-tracking index funds.⁴⁴ While it is difficult to come by specific data

41. Andrew Bary, *Ivy League Endowments Are No Match for a Simple Index Fund*, BARRON'S (Oct. 3, 2018), <https://www.barrons.com/articles/ivy-league-endowments-1538530379> (noting that, in FY 2018, index funds returned 14.4% in dividends, beating Yale, Harvard, Penn, and Dartmouth by at least 1.5% and as much as 4.4%, and ten year performance of many of these endowments lag index fund performance by similar margins).

42. David Randall, *Largest U.S. University Endowment Funds Pull Back on ETF Exposure*, REUTERS (Sept. 13, 2017, 3:52 PM), <https://www.reuters.com/article/us-usa-funds-endowment-etfs/largest-u-s-university-endowment-funds-pull-back-on-etf-exposure-idUSKCN1BO2L0>. While exchange-traded funds (ETFs) and index funds are not the same—index funds are essentially mutual funds while ETFs are traded like stocks and thus have higher trading costs—both use an underlying benchmark index. This context is provided because this source compares endowment performance to ETF performance and not to index fund performance, as the other sources in this section do. *See id.*; see also Sophia Bera, *Ask a Financial Planner: 'What's the Difference between an ETF and Index Fund?'*, BUS. INSIDER (May 1, 2016, 12:30 PM), <https://www.businessinsider.com/difference-between-etf-and-index-fund-2016-4>.

43. Randall, *supra* note 42.

44. Janet Lorin, *Beating Goliath*, BLOOMBERG BUSINESSWEEK, May 7, 2018, at 29. It bears noting, however, that Carthage College's endowment is not as diversified as many other college endowments. Thus, it can afford to utilize a more conservative market-tracking strategy, because its endowment returns account for such a low proportion of Carthage College's annual budget

on the participation of university endowments in index funds, a recent study conducted by NACUBO and the Teacher's Insurance and Annuity Association (TIAA) indicates that the largest university endowments tend to underinvest in domestic securities, especially when compared with all other university endowments.⁴⁵ Only 3% of Yale University's formidable endowment is weighted to domestic equities, meaning that its diversification precludes its exposure to securities in some of the world's most successful companies.⁴⁶ On one hand, universities with the largest endowments may be functionally divested from fossil fuels by not investing in index funds with holdings in fossil fuel companies—or by hardly investing in index funds at all. On the other hand, given the favorable market returns of index funds, perhaps the time has come for university endowment managers to consider investment in long-term-focused index funds, and in particular, if they are so inclined, green index funds.

But a discussion of the financial participation of universities in index funds elides the reality that most of these funds—or at least the firms that manage them—already engage in socially responsible investing strategies. The principal theories on which two notable socially responsible investing strategies rest are based on prudent investment management norms.⁴⁷

(3–5%, as compared to Harvard University, with its endowment returns accounting for roughly 33% of its annual budget). *Id.*

45. *Asset Allocation for College and University Endowments and Affiliated Foundations, FY18*, 2018 NACUBO-TIAA Study of Endowments (2018), <https://www.nacubo.org/-/media/Documents/Research/NTSE-2018-Asset-Allocations-With-More-Details-on-Alternatives—FINAL-January-31-2019.ashx?la=EN&hash=82BBC6F90EA097CA84AAE1B90EE5D1A306B48A08>. Among university endowments valued over \$1 billion participating in the study, only 13% of their endowment was invested in domestic equities, while endowments valued between \$501 million and \$1 billion had 22% of their endowments invested in domestic equities. *Id.*

46. See Bary, *supra* note 41.

47. Charitable endowments are subject to the prudent investor rule by way of the Uniform Prudent Management of Institutional Funds Act. Max M. Schanzenbach & Robert H. Sitkoff, *The Law and Economics of Environmental, Social, and Governance Investing by a Fiduciary*, (Harvard John M. Olin Ctr. For Law, Econ., and Bus., Paper No. 971, 2018), http://www.law.harvard.edu/programs/olin_center/papers/pdf/Sitkoff_971.pdf. Any institutional fund operated for educational purposes could be subject to the broad jurisdictional hook of the Uniform Prudent Management of Institutional Funds Act—or its predecessor, the Uniform Management of Institutional Funds

These strategies include screening—the practice of excluding “securities of certain otherwise attractive companies from an investor’s portfolio because the companies are judged to be socially irresponsible”⁴⁸—and integration, or the combination of traditional financial metrics with material environmental, social, or governance factors in making investment decisions.⁴⁹

Act—“to the extent that [the university] holds funds exclusively for [educational] purposes.” UNIF. MGMT. INST. FUNDS ACT § 1(1), 7A U.L.A. 484 (1972). See also Ryan, *supra* note 2, at 174. Investing based on environmental, social, and governance concerns can conform to—but is not required by—the prudent investor rule under UPMIFA. See Schanzenbach & Sitkoff, *supra* at 48 (stating that “the current theory and evidence on risk-return ESG indicates that use of ESG factors in active investing or active shareholding could possibly generate excess risk-adjusted return—but not necessarily so, and not indefinitely so”). Additionally, the U.S. Department of Labor concludes that consideration of environmental, social, and governance concerns is not explicitly required or endorsed by UPMIFA, while noting that an investor “must not too readily treat ESG factors as economically relevant to the particular investment choices at issue when making a decision.” *Id.* at 48 (quoting EMP. BENEFITS SECURITY ADMIN., U.S. DEP’T OF LABOR, FIELD ASSISTANCE BULL. NO. 2018-01, 2 (Apr. 23, 2018)). A greater discussion of UPMIFA and the prudent-investor and sole-interest rules follows at notes 111–159 *infra*.

48. Posner & Langbein, *supra* note 15, at 73. Screening, then, can be described as financial decision making based on factors that are not purely financial in nature. Note that positive screening is the converse of the socially responsible investment screening discussed here, which is emblematic of negative screening. For instance, “an investor might use ‘clean energy’ as a positive screen and then look for best-in-class companies within the group of companies that meet the standards of the screen.” Susan N. Gary, *Best Interests in the Long Term: Fiduciary Duties and ESG Integration*, 90 COLO. L. REV. 731, 740 (2019).

49. See Gary, *supra* note 48, at 745–46.

ESG integration can be described as an investment strategy that combines material ESG factors with traditional financial metrics to analyze companies. Environmental factors refer to a company’s stewardship of the natural environment, including how the company addresses things like pollution, energy use, or water use. Social factors focus on labor relations, including the treatment of workers, the conditions for workers, and worker compensation. Social factors also include how a company interacts with the communities in which the company operates. Governance factors relate to how the company governs itself, including executive compensation, internal controls, audits, and transparency for shareholders and the public.

See also Mozaffar Khan, George Serafeim & Aaron Yoon, *Corporate Sustainability: First Evidence on Materiality*, 91 ACCT. REV., no. 6, 2016, at 1697

Screening strategies have been widely used for some time, despite claims that their financial value will diminish.⁵⁰ Critics of screening focus on the role that screening factors play in investment decisions and the costs they pose to the portfolios that use them.⁵¹ However, proponents of the strategy submit that, when employed for a passively-managed institutional investor, the use of negative screening procedures may in fact mitigate these costs, relative to actively-managed, non-screened portfolios.⁵² This is because active investing strategies generally involve more transaction costs than passive investing strategies.⁵³ But integration, a more common strategy today than screening, could reduce these costs even further if not eliminate them altogether. Proponents of integration tout that the strategy leads to better short-term returns than non-integrated funds, because the market often misprices firms when investors fail to consider material environmental, social, or governance factors.⁵⁴ And integrated funds also outperform non-integrated funds over the long-term as well, because integration helps to identify long-term risk.⁵⁵ While integration may indeed be the gold standard of institutional investment

(discussing the materiality of environmental, social, or governance factors in evaluating companies).

50. See Schanzenbach & Sitkoff, *supra* note 47, at 7, 40–41.

51. For example, a study commissioned and financed by the Independent Petroleum Association of America discusses the transaction costs of divesting and the possible related costs of under-diversifying by screening the energy sector as a whole. DANIEL R. FISCHER, FOSSIL FUEL DIVESTMENT: A COSTLY AND INEFFECTIVE INVESTMENT STRATEGY 6–11 (2015), http://divestmentfacts.com/pdf/Fischer_Report.pdf.

52. See Schanzenbach & Sitkoff, *supra* note 47, at 42.

53. Max M. Schanzenbach & Robert H. Sitkoff, *Reconciling Fiduciary Duty and Social Conscience: The Law and Economics of ESG Investing by a Trustee*, 72 STAN. L. REV. 381, 4442–43 (2020).

54. See *id.* at 398.

55. Gary, *supra* note 48, at 746 (“Financial analysts use ESG integration to improve stock selection because the ESG factors can identify potential opportunities and risks.”). See also ROBERT G. ECCLES & MIRTHA D. KASTRAPELI, THE INVESTING ENLIGHTENMENT: HOW PRINCIPLE AND PRAGMATISM CAN CREATE SUSTAINABLE VALUE THROUGH ESG 6 (2017) (noting, in pertinent part, that “ESG factors are also seen as signaling tools for volatility and risk”); MARK FULTON ET AL., SUSTAINABLE INVESTING: ESTABLISHING LONG-TERM VALUE AND PERFORMANCE 8 (2012), https://www.db.com/cf/en/docs/Sustainable_Investing_2012.pdf (reporting that, for companies with high ESG ratings, 89% demonstrated market-based outperformance and 85% demonstrated accounting based outperformance).

strategies, given its combined focus on return and social responsibility, many universities do not avail themselves of this strategy, foreclosing their endowments to its several benefits.⁵⁶

C. *Divestment and Market Effects*

Modern Portfolio Theory would suggest that divestment from any industry could be an inefficient investment decision, since the investor would, at the very least, fall short of an opportunity to diversify to the fullest extent possible.⁵⁷ Moreover, in theory, a divestor from securities in the fossil fuel industry would be selling low and buying high into non-fossil fuel investment alternatives, while expecting a lower return on investment.⁵⁸ Thus, from the perspective of Modern Portfolio Theory, funds that practice divestment should underperform compared to broader portfolios without the same divestment constraints.⁵⁹ However, this theoretical assumption may be overstated.

A recent study examined the possible impacts of divesting from fossil fuel companies by constructing twelve portfolios:

56. See, e.g., Michael Cappucci, *The ESG Integration Paradox*, 30 J. APPLIED CORP. FIN. 22 (2018); Matt Turner, *Here is the letter the world's largest investor, BlackRock CEO Larry Fink, just sent to CEOs everywhere*, BUS. INSIDER (Feb. 2, 2016, 8:03 AM), <https://www.businessinsider.com/blackrock-ceo-larry-fink-letter-to-sp-500-ceos-2016-2> (discussing a letter written by the CEO of Blackrock sent to CEOs of S&P 500 companies expressing Blackrock's present and continued use of integration in valuing companies); *Mike Ryan reflects on sustainable investing*, UBS (July 29, 2019, 7:18 PM), https://www.ubs.com/global/en/wealth-management/marketnews/home/article/_jcr_content.1415025131.file/PS9jb250ZW50L2RhbS9pbXBvcnRlZC9jaW9yZXNlYXJjaC9wZGYvMTQvNDMvOTAvNi8xNDQzOTA2L2VuL3VzLzE0NDM5MDYucGRm/1443906.pdf (noting "a profound change in popularity, access, and capability has been in the field of sustainable investing").

57. Arjan Trinks et al., *Fossil Fuel Divestment and Portfolio Performance*, 146 ECOLOGICAL ECON. 740, 741 (2018). The tenets of Modern Portfolio Theory with regard to endowment investment and management can be distilled into the following wisdom: (1) isolation of investments and investment decisions should be avoided; (2) investments should be evaluated in terms of their expected risk and return; (3) diversification of investments is essential and can mitigate firm and industry risk but is not impervious to market risk; and (4) delegation of investments to experts is preferable to actively-managed investment by endowment agents. See also Harry M. Markowitz, *Foundations of Portfolio Theory*, 46 J. FIN. 469 (1991).

58. See Trinks et al., *supra* note 57, at 741. See also Cornell, *supra* note 11.

59. Trinks et al., *supra* note 57, at 741–42; see also Cornell, *supra* note 11, at 4–11.

six fossil fuel-free portfolios and six unconstrained portfolios that included assets in companies involved in coal, natural gas, and fossil fuel production.⁶⁰ The researchers then compared the differences, retrospectively, based on a rich dataset of historic returns.⁶¹ The results from this study demonstrated that there was not a significant abnormal risk-adjusted return for fossil fuel-free portfolios, as compared with unconstrained portfolios, and that these same investment-restricted portfolios were not foreclosed to the diversification opportunities available to unconstrained portfolios.⁶² The authors of the study note that the impact of divestment is more evident for portfolios that are less diversified, but, because fossil fuel stocks are essentially market substitutes, divestment from them does not yield substantial loss of return that is attributable to a corresponding lack of diversification.⁶³ Thus, the results of the study seem to indicate that divestment from fossil fuels presents a viable investment strategy for endowment managers to consider.

The most significant obstacle to endowment divestment having a real effect, however, lies with the paltry global market share for which university endowments account. American university endowments control assets valued at just a quarter of one percent of the global financial market, consisting of equity market capitalization and outstanding bonds and loans.⁶⁴ Even considering university endowments together with public funds, such as pension funds and sovereign wealth funds, the value of assets under management of these combined funds rises to approximately 5% of all of the global financial mar-

60. Trinks et al., *supra* note 57, at 742–44.

61. *Id.* at 745. Currently, the companies targeted by divestment are the fossil fuel *producers*, but future divesting efforts could target companies which *consume* significant levels of fossil fuels, which could also change the diversification-risk factor. Because fossil fuel companies have occupied varied levels of total market share throughout the past few decades, the diversification risk of divesting can change over time. *See id.* at 745.

62. *Id.* at 745–46 (noting that the market accounts for virtually all variation in returns for fossil fuel-free portfolios). This finding is supported as well by Cornell's study of endowment divestment. *See* Cornell, *supra* note 11.

63. Trinks et al., *supra* note 57, at 747. *See also* Zakri Y. Bello, *Socially Responsible Investing and Portfolio Diversification*, 28 J. FIN. RES. 41 (2005).

64. ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 54–55. In fact, in 2013, American universities endowments accounted for just \$450 billion of the \$212 trillion global financial market. *Id.* at 54.

ket.⁶⁵ On average, between 2 and 5% of all assets controlled by university endowments and public pension funds are invested in fossil fuel assets.⁶⁶ Thus, university endowments are remarkably underexposed to the fossil fuel sector already. For example, in 2013, for the average university participating in the NACUBO-Commonfund Study of Endowments, just 2% of its endowment was invested in fossil fuels⁶⁷—lower than almost any other sector. In light of the underinvestment in fossil fuel stocks and the small percentage of the financial market accounted for by university endowments and public funds, divestment actions taken by these investor groups are unlikely to have direct effects on the valuation of the fossil fuel stocks targeted by institutional divestors.⁶⁸

The more credible threat to the fossil fuel sector is the stigmatization of investments in fossil fuel stocks.⁶⁹ Such stigmatization has led to legislative action against targeted companies in the past, and while legislative action against investments in fossil fuel companies is unlikely, the imposition of sanctions against fossil fuel companies, such as a carbon tax, are possible.⁷⁰ But for every action, an equal and opposite re-

65. *Id.* at 54–57. Combining university endowments with public funds would yield a total of \$11.4 trillion in assets—just over 5% of the global financial market.

66. *Id.* at 58–59. Thus, “the plausible upper limit of possible equity divestment for oil and gas companies is in the range of \$240-600 billion. . . .” *Id.* at 59.

67. *Id.* at 11 (citing the NACUBO-Commonfund Study of Endowments as well as other sources).

68. *Id.* at 61; *see also* Bergman, *supra* note 22, at 2.

69. ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 65; *see also* Laura E. Deeks, *Discourse and Duty: University Endowments, Fiduciary Law, and the Cultural Politics of Fossil Fuel Divestment*, 47 ENVTL. L. 335, 343-44 (2017) (noting that non-economic factors are considered in divestment from fossil fuels).

70. ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 66–67. For example, Congress and the President have previously taken a strong stance against the tobacco industry. *See, e.g.*, Public Health Cigarette Smoking Act of 1969, Pub.L. No. 91-222, 84 Stat. 87, 88–89 (requiring health warnings on cigarette packaging and banning cigarette advertisements on radio and television); Federal Leadership on Global Tobacco Control and Prevention, 3 C.F.R. § 13193 (2002) (noting that the executive branch was committed to deterring tobacco use and providing information about the adverse health effects of the same). Congress has also sanctioned South Africa for its practice of apartheid. *See, e.g.*, Comprehensive Anti-Apartheid Act of 1986, Pub.L. No. 99-440, 100 Stat. 1086, 1091 (instantiating congressionally imposed sanctions on South Africa to end apartheid, although the law was repealed following

action should be anticipated. Fossil fuel producers, in an effort to dilute the stigma imposed against them by the divestment movement, may change their behavior, policies, and processes, all of which could mitigate this stigma while nevertheless continuing to extract fossil fuels.⁷¹

Leveraging stigma—such as negative media attention leading to negative social attitudes towards investing in or otherwise supporting fossil fuel companies—may indeed be a better pathway to success in transforming a targeted firm’s or industry’s practices.⁷² But divestment movements may also harm institutions if they are viewed as being too aggressive towards organizations that have not divested from certain firms or industries, even though these institutions might be valuable and responsible social actors.⁷³ For example, critics claim that activist organizations that spend a disproportionate amount of time and resources on divestment campaigns could be overlooking more directly effective strategies, like lobbying for carbon taxes, encouraging people to “adopt life styles with lower carbon footprints, or calling on universities to boycott energy providers that rely on fossil fuels.”⁷⁴ Thus, divestment should be viewed as one part of a larger strategy to achieve sustainability goals.

II.

UNIVERSITIES AND ENDOWMENT DIVESTMENT

A. *The Case on Campus*

The vast majority of American universities maintain their operations by at least some reliance on fossil fuels, and because of this reliance financial divestment from the fossil fuel

South Africa’s ending of apartheid in 1991); Levy, *supra* note 16 (examining the sanctions Congress placed on South Africa). These acts undoubtedly stigmatized tobacco producers and nations practicing apartheid. Thus, it is well within the realm of possibility that Congress could act to stigmatize if not sanction the fossil fuel industry if it so desired.

71. See ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 68–69.

72. *Id. passim*; see also, Bergman, *supra* note 22, at 2–3; Fergus Green, *Anti-Fossil Fuel Norms*, 150 CLIMATIC CHANGE 103, 107–12 (2018).

73. ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 68–69; see also Jeff Tollefson, *Reality Check for Fossil-Fuel Divestment*, 521 NATURE 16, 16–17 (2015).

74. MacAskill, *supra* note 17. See also ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 68–69.

industry is a more pragmatic approach to eliminating support for fossil fuel producers than ceasing consumption of fossil fuels for university operations altogether.⁷⁵ This reliance on fossil fuels, and the fact that this reliance is unlikely to change in the near term, could motivate individuals toward collective action and campaigns for divestment from fossil fuel producers. That is, even though individuals can reduce their own reliance on fossil fuels and perhaps even reduce an institution's reliance as well, the only way individuals can effect systematic change is to cease or reduce financial support for the fossil fuel industry through the institutions in which they are stakeholders.⁷⁶

Universities are institutions that rely on their human capital to produce knowledge and awareness of contemporary problems. In the context of environmental change, universities, as microcosms of society, can be laboratories of innovation for how campuses can sustainably operate.⁷⁷ Universities, as places of higher learning, can promote and advance sustainability through teaching and curriculum as well as through independent research and the free exchange of ideas.⁷⁸ This unique position allows for universities to be influencers of social change through education, research, and engagement

75. That said, many universities are changing the way that they operate not only to reduce costs but to promote energy efficiency and reduce impacts on the local community. To that end, 322 institutions have committed to reaching carbon neutrality by 2050, 6 have become carbon neutral, 29 are taking an accelerated path to carbon neutrality, and 10 purchase 100% renewable energy. SCOTT CARLSON & LAWRENCE BIEMILLER, *THE CAMPUS AS CITY* 20 (2019).

76. See Green, *supra* note 72; and Ellen Dorsey & Richard N. Mott, *Philanthropy Rises to the Fossil Divest-Invest Challenge*, HUFFINGTON POST (Jan. 30, 2014), https://www.huffpost.com/entry/philanthropy-rises-to-the_b_4690774.

77. See D. Ferrer-Balas et al., *An International Comparative Analysis of Sustainability Transformation Across Seven Universities*, 9 INT'L J. SUSTAINABILITY HIGHER EDUC. 295, 296 (2008); Jennie C. Stephens et al., *Higher Education as a Change Agent for Sustainability in Different Cultures and Contexts*, 9 INT'L J. SUSTAINABILITY HIGHER EDUC. 317, 321 (2008). Universities "have always held a critical place in society for advancing science," which is often an effective tool to improve and change social norms. *Id.* at 332.

78. See Stephens et al., *supra* note 77, at 321–22. See generally Laura Colucci-Gray, Elena Camino, Giuseppe Barbiero & Donald Gray, *From Scientific Literacy to Sustainability Literacy: An Ecological Framework for Education*, 90 SCI. EDUC. 277 (2006).

and outreach to society.⁷⁹ Through their human agents—faculty and often students—universities drive engagement with critical social issues, such as fossil fuel divestment.

The call for universities to divest from fossil fuel holdings, given their environmental impact, has grown louder over the last decade. For example, student protestors delayed the Harvard vs. Yale football game in 2019 over climate change concerns and the fact that their universities had not yet divested from fossil fuels.⁸⁰ It should come as no surprise that this movement, like many other social movements on university campuses, has been advanced by student-led groups as well as faculty-led coalitions, using their collective action to effect institutional change.⁸¹ In fact, faculty and students are the primary forces behind divestment movements on university campuses. A recent study examining 30 letters sent to administrators by faculty at university campuses located in the United States and Canada revealed that more than 4,550 faculty across disciplines support fossil fuel divestment.⁸² At the heart of the movement is a core message: “the act of disinvesting from fossil fuel companies provides a powerful signal with potential to accelerate a just societal transformation” to clean energy.⁸³

University endowments are apt targets for divestment movements led by faculties and students alike because these two groups—perhaps more than any other two groups of stakeholders—are core participants in the enterprise of the university.⁸⁴ However, a decision by a university to divest from

79. See Stephens et al., *supra* note 77, at 322.

80. See, e.g., Sam Gringlas, *Activists Disrupt Harvard-Yale Rivalry Game to Protest Climate Change*, NAT'L PUB. RADIO (Nov. 24, 2019, 2:39 PM), <https://www.npr.org/2019/11/24/782427425/activists-disrupt-harvard-yale-rivalry-game-to-protest-climate-change>.

81. See Jessica Grady-Benson & Brinda Sarathy, *Fossil Fuel Divestment in US Higher Education: Student-Led Organising for Climate Justice*, 21 *LOC. ENV'T* 661, 666 (2016).

82. See Stephens, Frumhoff & Yona, *supra* note 40. Not surprisingly, these letters revealed a greater proportion of tenured faculty signatories than non-tenured faculty signatories. See *id.*

83. *Id.* at 1.

84. For a history of student-led efforts at getting university endowments to divest from fossil fuels, as well as faculty involvement in such efforts, see Grady-Benson & Sarathy, *supra* note 81.

fossil fuels is not always an easy one because it usually requires ratification by the university board of trustees.⁸⁵

B. *Buy-In From the Board*

Occasionally, getting trustees to approve a proposed university divestment strategy is not an insurmountable challenge, even for student-led groups, when the board buys in to the stated goals of divestment. For example, in 2018, the Board of Trustees at Whitman College approved a policy, without much controversy, directing its endowment managers to begin divestment over the next 10 years in response to a student-led campaign for total divestment.⁸⁶ On other occasions, boards—while carefully considering campaigns for total divestment—elect to take a more conservative approach. For instance, the Board of Trustees at Johns Hopkins University voted to divest its holdings from coal producers in 2017 on the theory that coal contributes more greenhouse gases per unit than any other type of fossil fuel.⁸⁷ But even boards that initially took conservative steps toward divestment have left the door open to total divestment. Stanford University's Board of Trustees voted to divest its endowment from coal producers' stock after calls to divest from a panel of students, staff, and alumni.⁸⁸ However, Stanford's endowment policy now allows trustees to

85. See, e.g., Damian Garcia, *GU Fossil Free Petitions University to End Investments in Fossil Fuel*, GEORGETOWN VOICE (Feb. 27, 2019), <https://georgetownvoice.com/2019/02/27/gu-fossil-free-petitions-university-to-end-investments-in-fossil-fuel/>. See generally Celia Buckman, Opinion, *A New Strategy for Fossil Fuels Divestment*, GEORGETOWN VOICE (Apr. 5, 2019), <https://georgetownvoice.com/2019/04/05/a-new-strategy-for-fossil-fuels-divestment/>. These stories chronicle the efforts of a student-led group, GU Fossil Free, to urge Georgetown University's administration to move beyond its divestment from coal to a total divestment from fossil fuels. A final decision on the complete divestment has not been announced.

86. *Whitman College Board of Trustees Statement on Divestment from Fossil Fuels*, WHITMAN COLL. (Nov. 9, 2018), <https://www.whitman.edu/documents/Offices/Treasurers-Office/nov-2018-fossil-fuel-divestment.pdf>.

87. *Johns Hopkins University to Divest Holdings in Major Coal Producers*, HUB (Dec. 12, 2017), <https://hub.jhu.edu/2017/12/12/thermal-coal-divestment-board-vote/>.

88. *Stanford University to Divest Endowment of Coal Stock*, PHILANTHROPY NEWS DIGEST (May 8, 2014), <https://philanthropynewsdigest.org/news/stanford-university-to-divest-endowment-of-coal-stock>. Additionally, Stanford's president stated that the university "has a responsibility as a global citizen to promote sustainability for our planet, and we work intensively to do so

consider corporate policies that create “substantial social injury” when making investment choices, leaving the option for total divestment available.⁸⁹ And, while the Board of Trustees at Smith College denied a proposal from a student campaign to divest in 2018, they also adopted measures to not acquire more fossil fuel holdings and to contribute further investments to environmentally conscious areas.⁹⁰ The main apprehension of the Board at Smith—shared by many university boards—is the possibility of compromising endowment values.⁹¹

Most of the time, pressures from student- and faculty-led groups to divest are insufficient to overcome the board’s concerns about either compromising the university’s endowment values through divestment, which could violate the board’s fiduciary duties, or subjecting the board to scrutiny for giving into the demands of divestment campaigners.⁹² Notably, the Board of Trustees at the University of Pennsylvania has dismissed two proposals for divestment—the first in 2015 and the second in 2018—citing a duty to keep the University endowment as diversified as possible.⁹³

But perhaps no example better illustrates the tension between fiduciary duty and social responsibility than the ongoing divestment debate at Harvard University. The University made

through our research, our educational programs, and our campus operations.” *Id.*

89. *Id.*

90. Letter from April Foley & Deborah L. Duncan to Members of Divest Smith, *Response to Divest Smith*, SMITH COLL. (Mar. 28, 2018), <https://www.smith.edu/about-smith/investments/climate-change/response-to-divest-smith>.

91. Importantly, boards of trust at universities are concerned about preventing financial harm to their endowments’ values, because of the fiduciary duties they owe to the endowment’s beneficiary—the university. For a more complete discussion of these duties, see *infra* notes 105–53.

92. The “ideological origins and radical political undertones of the [fossil fuel divestment] campaign may impact the ability of the campaigners to effectively” appear legitimate in reference to the fiduciary law that governs endowment management. See Deeks, *supra* note 69, at 339.

93. Julia Klayman, *Penn Dismisses Second Major Fossil Fuel Divestment Proposal After First Round of Consideration*, DAILY PENNSYLVANIAN (Nov. 1, 2018, 1:05 PM), <https://www.thedp.com/article/2018/11/upenn-fossil-free-penn-divestment-university-council-climate-change-philadelphia>.

its position clear in a 2013 statement: it would not divest.⁹⁴ In 2015, the Kennedy School at Harvard hosted a debate between two professors, James Engell and Rebecca Henderson, on whether Harvard should divest from fossil fuels. Engell, an English Professor, whose position that Harvard should divest was supported by an open letter signed by more than 250 faculty members calling for the University to divest, argued in favor of divestment as a catalyst for better energy policies and social change.⁹⁵ Henderson, a Management Professor, took the opposite position, contending that divestment risks the University's mission to teach and research by interfering with the endowment returns that are spent on the University's core mission.⁹⁶ Instead, she suggested that Harvard's research efforts provided a more effective way to demonstrate the harms of fossil fuel consumption.⁹⁷

In the wake of this debate, the Board of Overseers at Harvard was reluctant to contemplate divestment until 2018, when a board member requested that the University divest despite the fact that many of her colleagues on the board felt that it would be inappropriate to use the endowment for political ends or to interfere with their duty to maximize the endowment's value.⁹⁸ As an alternative to total divestment, Harvard signed on to a set of principles for "responsible investment" supported by the United Nations.⁹⁹ And in February of 2018, Harvard's former President, Drew Faust, outlined plans

94. Drew Gilpin Faust, *Fossil Fuel Divestment Statement*, HARV. U. (Oct. 3, 2013), <https://www.harvard.edu/president/news/2013/fossil-fuel-divestment-statement>. "The funds in the endowment have been given to us by generous benefactors over many years to advance academic aims, not to serve other purposes, however worthy." *Id.*

95. Christine Russell, *Divestment Debate: Should Harvard Divest from Fossil Fuels*, HARV. KENNEDY SCH. BELFER CTR. FOR SCI. & INT'L AFF. (May 8, 2015), <https://www.belfercenter.org/publication/divestment-debate-should-harvard-divest-fossil-fuels>.

96. *Id.*

97. *Id.*

98. Ross Kerber, *Harvard Board Member Makes Rare Call for Fossil Fuel Divestment*, REUTERS (Mar. 28, 2018, 12:30 AM), <https://www.reuters.com/article/us-harvard-divestment/harvard-board-member-makes-rare-call-for-fossil-fuel-divestment-idUSKBN1H40FF>. It bears noting that the board of overseers at Harvard does not have direct oversight in how its endowment is managed.

Id.

99. *Id.*

to make the University fossil fuel-free by 2050.¹⁰⁰ However, current Harvard President, Lawrence Bacow, contended that there were practical concerns that would complicate any attempts at divestment and that any meaningful change could only be brought about by working with the fossil fuel industry.¹⁰¹

The argument that divestment would negatively impact the University's endowment value has not been persuasive to several boards of trustees. Yet, four of the eleven schools that divested prior to 2015 cited a minimal expected harm to the endowment value in supporting their decision.¹⁰² Indeed, Unity College, in Maine, which is among the earliest higher education institutions to divest, met or exceeded market benchmarks in the five-year period following its divestment.¹⁰³ Perhaps this evidence of post-divestment performance has convinced some university boards that previously took the wait-and-see approach to divestment to elect to divest in the last two years.¹⁰⁴ Still, other boards have been more skeptical,

100. *Id.*

101. Alexandria A. Chaidez, *Harvard Presidents Have Long Opposed Fossil Fuel Divestment. Bacow Offers a New Reason Why*, HARV. CRIMSON (Dec. 14, 2018), <https://www.thecrimson.com/article/2018/12/14/bacow-new-rationale-divestment/>.

102. Grady-Benson & Sarathy, *supra* note 81, at 668. Among these four universities is Green Mountain College in Vermont, with an estimated endowment of just \$3.4 million, and has ceased operations. Scott Jaschik, *Another Small College Will Close*, INSIDE HIGHER ED (Jan. 24, 2019, 3:00 AM), <https://www.insidehighered.com/news/2019/01/24/green-mountain-latest-small-college-close>. However, it is highly unlikely that Green Mountain's divestment caused the school any significant financial harm, especially in light of its relatively small endowment. The school's stated reasons—a general decrease in the number of college-aged people and thus a drop in enrollment coupled with an increase in the cost of providing an education—were far more impactful in bringing about the school's downfall. *See id.*

103. Grady-Benson & Sarathy, *supra* note 81, at 669–70 (quoting Tom Groening, *Unity College Takes Stand Against Fossil Fuels, Aims at 'Sustainability Science'*, BANGOR DAILY NEWS (Nov. 9, 2012), <http://bangordailynews.com/2012/11/09/news/midcoast/unity-college-takes-stand-against-fossil-fuels-aims-at-sustainability-science/>).

104. *See Brevard College Commits to Fossil Fuel Divestments*, BREVARD COLL. <https://brevard.edu/brevard-college-commits-to-fossil-fuel-divestment/> (last visited Mar. 2, 2019) (discussing Brevard College's decision to completely divest its \$25 million endowment from fossil fuels); Nick Garber, *After Student and Faculty Pressure, Middlebury College Will Divest from Fossil Fuels*, BURLINGTON FREE PRESS (Jan. 29, 2019), <https://www.burlingtonfreepress.com/story/>

electing not to divest because of anticipated negative consequences to endowment values.¹⁰⁵

news/2019/01/29/middlebury-college-announces-fossil-fuel-divestment-bill-mckibben/2713830002/ (reporting Middlebury College's 15-year sunset period of divesting its \$1 billion endowment from fossil fuels beginning in 2019, after the board had rejected calls for divestment in 2013); Letter from Ron Liebowitz, President, Brandeis Univ., to Brandeisians (Nov. 28, 2018), <https://www.brandeis.edu/president/letters/2018-11-28-fossil-fuel-investment-policies.html> (noting that Brandeis University has ceased direct investment in coal companies, among other divestment-related changes, but will reevaluate the decision in 3-years time, indicating that Brandeis' board may still be taking the wait-and-see approach); Katherine Long, *Seattle University Will Become First College in State to Divest of Fossil Fuels*, SEATTLE TIMES (Sept. 19, 2018), <https://www.seattletimes.com/seattle-news/seattle-university-says-it-will-become-first-college-in-state-to-divest-from-fossil-fuels/> (discussing Seattle University's 5-year phase-out toward complete divestment of its \$230 million endowment from fossil fuels); William Dowd, *Salem State University Fully Divested from Fossil Fuels*, WICKED LOC. (June 13, 2018), <https://salem.wickedlocal.com/news/20180613/salem-state-university-fully-divested-from-fossil-fuels> (announcing that Salem State University has fully divested from its prior holdings in Carbon 200 companies); Romel Hernandez, *The Dividends of Divestment*, LEWIS & CLARK COLL., <https://www.lclark.edu/live/news/38897-the-dividends-of-divestment> (last visited May 31, 2018) (outlining the 5-year divestment plan at Lewis & Clark College); and Arleen Jacobius, *Fossil Fuels to Be History for UC Investment Office*, PENSIONS & INV. (Apr. 2, 2018) (noting that the University of California System divested its endowment and pensions totaling \$11.5 billion and \$66.6 billion, respectively, from fossil fuel investments).

105. See Foley & Duncan, *supra* note 90; Becky Kramer, *GU's Board Votes Against Fossil Fuel Divestiture, but Will Invest \$10 Million to Combat Climate Change*, SPOKESMAN – REVIEW (Dec. 10, 2018), <http://www.spokesman.com/stories/2018/dec/10/gus-board-votes-against-fossil-fuel-divestiture-bu/> (discussing the decision by board of trustees at Gonzaga University not to divest its \$228 million endowment from fossil fuels but instead to invest \$10 million in companies combating climate change, given its approximate endowment returns of \$8.7 million annually and an estimated \$1.7 million loss from divestment); *Sustainable Investments Task Force Recommendations*, DICKINSON COLL. (May 5, 2013), https://www.dickinson.edu/info/20281/sustainable_investments_task_force/2134/sustainable_investments_task_force_recommendations (recommending that Dickinson College not divest the 4% of its endowment in fossil fuel holdings because of anticipated reduced returns); and Daniel Weiss, *Fossil Fuels Divestment*, HAVERFORD COLL. (Nov. 5, 2013), <https://www.haverford.edu/sites/default/files/Office/President/Haverford-College-Fossil-Fuels-Divestment.pdf> (claiming that the Haverford College endowment must be properly managed in order to educate students not just for the future but forever).

C. *Divestment Litigation*

Despite the rapid growth of the divestment movement, almost no litigation has resulted from a university's decision to divest or not to divest.¹⁰⁶ The first and only case of divestment litigation was lodged in 2014 by seven student members of the Harvard Climate Justice Coalition, which sought to compel Harvard University to divest its endowment from fossil fuels.¹⁰⁷ The students brought their suit on two theories. First, the students alleged that the University's investments in fossil fuel companies breached the University's fiduciary and charitable duties.¹⁰⁸ Second, the students asserted a tort claim, on behalf of future generations, to be free from intentional investment in abnormally dangerous activity. The court disagreed with the students' complaint that they were eligible for the relief sought and dismissed both claims for lack of standing.¹⁰⁹

The court's decision in this case is illustrative of the fact that endowments are necessarily different from other charitable trusts in two notable respects. The first difference is that the beneficiary of an endowment is the university itself and not some other constituent group who benefits from the endowment, distinguishing endowments from other institutional funds, such as pension plans.¹¹⁰ In the absence of identifiable endowment beneficiaries beyond the university itself, a challenge to a university's divestment decision could likely only be lodged by donors who have placed restrictions on gifts to the university, or a state's attorney general to litigate endowment

106. See Benjamin Franta, *Litigation in the Fossil Fuel Divestment Movement*, 39 L. & POL'Y 393 (2017) (discussing the only case of fossil fuel divestment-related litigation thus far).

107. *Harvard Climate Justice Coal. v. President & Fellows of Harvard Coll.*, 60 N.E.3d 380 (Mass. App. Ct. 2016).

108. *Id.* at 381.

109. *Id.*

110. See Benjamin J. Richardson, *Universities Unloading on Fossil Fuels: The Legality of Divesting*, 10 CARBON & CLIMATE L. REV. 62, 69 (2016). For example, this is not the case with pension funds, where pensioners are the beneficiaries and thus have standing to bring claims regarding the management of the pension fund. See, e.g., *Withers v. Teachers' Ret. Sys.*, 447 F. Supp. 1248, 1254 (S.D.N.Y. 1978), *aff'd*, 595 F.2d 1210 (2d Cir. 1979); and *Bd. of Trs. of Emps.' Ret. Sys. of Baltimore v. Mayor and City Council of Baltimore*, 562 A.2d 720, 729 (Md. 1989).

management decisions.¹¹¹ The second difference is related to the first but may be somewhat less overt. Because individual constituents of the university are unlikely to have standing to compel divestment by the university, fiduciaries of the university endowment remain bound by the longstanding interpretation of their duty to increase the endowment's short- and long-term value. This narrow view of the duties of fiduciaries to endowments would seem to prohibit a potentially imprudent decision to divest, even if a significant proportion of university constituents wanted the university to do so or other similarly situated universities were doing so.

While the Harvard students were unsuccessful in their claim, a successful challenge to compel divestment could lead to a rapid increase in the divestment movement. Yet, outside of *Harvard Climate Justice Coalition v. President & Fellows of Harvard College*, there are no other judicial decisions from cases challenging a university's decision to divest or not to divest.¹¹² But courts are not the only forum through which

111. As noted above, endowments notably differ from pension funds in that most decisions about endowment investment are made irrespective of a donor's intent. While little is known about how endowment investment decisions are made systematically, it is fair to say that—because the several endowed funds comprising a university's endowment are invested collectively—the donor's voice in the investment decision is all but missing. Given that donors often lack a cause of action for challenging investment decisions, because this cause of action has largely been delegated to state attorneys general, there is little recourse for donors who disagree with endowment investment decisions. Richardson, *supra* note 110, at 73. See also Robert Steyer, *New Jersey Grappling with Role of Divesting Investments, Strategies*, PENSIONS & INVS. (Sept. 4, 2018, 1:00 AM), <https://www.pionline.com/article/20180904/ONLINE/180909970/new-jersey-grappling-with-role-of-divesting-investments-strategies> (discussing how managers of New Jersey's state pension fund are weighing their options over divesting from fossil fuel holdings in light of political pressure but noting that any decision would require pre-approval from the state attorney general).

112. Franta, *supra* note 106, at 394. Quite possibly, the dearth of cases in this area are the result of a relative inertia in the understanding of the duties of fiduciaries of endowments. For an eloquent discussion of this inertia, see Surbhi Sarang, Note, *Combating Climate Change Through a Duty to Divest*, 49 COLUM. J.L. & SOC. PROBS. 295, 327-31 (2015).

Though fiduciary duty has the ability to change over time (and has changed significantly over time) to keep up with changing social conditions, the change is incremental and slow. While in theory, even under a strict interpretation of fiduciary duty, managers should be able to take into account climate change when making

proponents of divestment can seek to advance their cause. Some state legislatures have already passed more flexible prudent investor statutes. Others, like the Massachusetts legislature, are beginning to consider ways to free managers of institutional funds to divest from fossil fuels, if divestment can be accomplished prudently, possibly presenting a path forward for proponents of divestment to achieve their goals.¹¹³

While legislatures have been reluctant to wade into the politically charged waters of divestment, statutory guidance may be instructive, if not conclusive, on this matter. Regulatory bodies and legislatures often issue advisory rules and laws which clarify that making investment decisions based on social responsibility factors are not contrary to fiduciary management principles.¹¹⁴ And litigation, while unsuccessful to date, might provide another avenue to strengthen the requirement for fiduciaries of charitable trusts—such as endowments—to consider the social and environmental ramifications of their

investment decisions, in practice inertia and uncertainty prevents this from happening. Some have linked this “legal inertia” to the prudent man standard. Because the standard compares actions to that of a prudent man, investors typically look to their peers to assess what kind of investment behavior is acceptable, which makes any kind of innovation or deviation from current prevailing standards difficult.

Id. at 328.

113. For states that have adopted more flexible prudent investor rules, see OR. REV. STAT. § 130.755(j) (2019) and DEL. CODE ANN. tit. 12, § 3302(a) (2018). As previously stated, pension funds are distinct from endowments. At the time of this writing, both houses of the Massachusetts legislature have separate bills which would allow town and city pension funds to divest from fossil fuel holdings. See Sarah Shemkus, *Massachusetts Bill Would Free Local Retirement Systems to Divest from Fossil Fuels*, ENERGY NEWS NETWORK (Mar. 26, 2019), <https://energynews.us/2019/03/26/northeast/massachusetts-bill-would-free-local-retirement-systems-to-divest-from-fossil-fuels/>. Under the current framework, a state-level agency oversees town-level investment decisions and has the power to order reversal or prospectively block decisions. *Id.* The state agency ordered a town in 2017 to reverse a decision to divest its fossil fuel holdings from its pension funds, because the agency asserted that a decision to disregard an entire class of investments constituted a breach of fiduciary duty. *Id.* The town disagreed and filed a home rule petition—a request to the legislature that the town be granted autonomy over a certain matter—concerning the dispute, which was denied. *Id.* However, the passage of either bill could open the door for similar statutes to be adopted with regard to other public funds, such as public university endowment funds.

114. See Sarang, *supra* note 112, at 328–30.

investment decisions, assuming the public nature of these charitable trusts and the purported social missions of universities.¹¹⁵

D. *A Duty to Divest?*

Historically, the legal lever, while a fairly reliable catalyst for practical reform, has not been a trigger for change in the area of trust administration. One notable exception was the Massachusetts Supreme Court's decision in *Harvard College v. Amory*, which led fiduciaries to shift away from investing in the safest assets available to investing in investment vehicles that were considered to be speculative prior to the decision.¹¹⁶ While this landmark decision brought about a sea change in trust administration in the late Nineteenth Century, its hold on trust administration lasted longer than it probably should have. By the late Twentieth Century, the Prudent Person Rule, advanced in *Amory*, was outmoded and could not keep pace with the innovative investment strategies furthered by Modern Portfolio Theory, requiring a reactive change to institutional investing that centers on a strategy of total return.¹¹⁷

In 1972, the National Conference of Commissioners on Uniform State Laws (NCCUSL) adopted the Uniform Management of Institutional Funds Act (UMIFA), which was passed

115. *See id.* at 332, 335–38. There is also an argument by analogy that the public trust doctrine could be applied to the atmosphere, which would give a common law right to enjoin actions causing “waste” to the subject of the trust (or, at the very least, force investors to consider climate-harming factors when making investment decisions). *See id.* at 338–40.

116. *Harvard Coll. v. Amory*, 9 Pick. 446 (Mass. 1830). This decision articulated the formula for the prudent person rule, which became the national benchmark for endowment management for over a century. The court in *Harvard College v. Amory* adopted—and coined—the “prudent person” rule, holding that a trustee’s fiduciary duty in the governance of a trust was based on “how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, and as well as the probable safety of the capital to be invested.” *Id.* at 461; *see also* JOSHUA HUMPHREYS, TELLUS INST., EDUCATIONAL ENDOWMENTS AND THE FINANCIAL CRISIS: SOCIAL COSTS AND SYSTEMIC RISKS IN THE SHADOW BANKING SYSTEM 17 (2010), <https://www.tellus.org/pub/Tellusendowmentcrisis.pdf>.

117. *See HUMPHREYS, supra* note 116, at 19. *See also* Ryan, *supra* note 2, at 174. While Modern Portfolio Theory has dominated the institutional investment space for the last fifty years, it may have run its course in light of new economic and social concerns. *See generally infra* notes 122–59.

into law nearly contemporaneously by a vast majority of states, instantiating a total return strategy as a requirement of trust administration.¹¹⁸ And this focus persisted in the 2006 adoption of the Uniform Prudent Management of Institutional Funds Act (UPMIFA) by the Uniform Law Commission, the successor of the NCCUSL.¹¹⁹ UPMIFA has now been adopted in forty-nine of the fifty states, and it requires that the manager of institutional funds act—*inter alia*—in accordance with the manager’s duty of loyalty, in good faith, and in a prudent manner in managing the funds.¹²⁰ Importantly, UPMIFA adopted language from UMIFA, requiring institutional fund managers to diversify the fund, unless “the institution reasonably determines that, because of special circumstances, the purposes of the funds are better served without diversification.”¹²¹

Thus, when read strictly, UPMIFA’s emphasis on the diversification tenet of Modern Portfolio Theory might indeed influence trust fiduciaries to conclude that they cannot consider socially responsible investment factors.¹²² Accordingly, considering socially responsible investment factors in the absence of special circumstances is *per se* impermissible under UPMIFA. However, UPMIFA also requires the fund manager consider all a broad range of circumstances when making management decisions, including those that directly and indirectly impact the institution’s mission.¹²³ As such, considering

118. UMIFA made into law many of the late Twentieth Century understandings of sound institutional fund investment strategy for adopting states. Specifically, it created more flexible fiduciary duty standards, making way for riskier investment strategies. See HUMPHREYS, *supra* note 116, at 18–19.

119. UNIF. PRUDENT MGMT. OF INSTITUTIONAL FUNDS ACT (NAT’L CONF. OF COMM’RS ON UNIF. STATE L. 2006).

120. See *id.* § 3(b). All of these requirements are standard fiduciary duties, and none are objectionable. However, the only state that has not adopted UPMIFA is Pennsylvania.

121. *Id.* § 3(e)(4).

122. See generally Gary, *supra* note 48 (noting the misconceptions of fiduciaries in thinking about sustainable investment strategies).

123. See UNIF. PRUDENT MGMT. OF INSTITUTIONAL FUNDS ACT § 3(e) (NAT’L CONF. OF COMM’RS ON UNIF. STATE L. 2006) (stating in part that “[i]n managing and investing an institutional fund, the follow factors, if relevant, *must* be considered: (A) general economic conditions; (B) the possible effect of inflation or deflation; (C) the expected tax consequences, if any, of investment decisions or strategies; (D) the role that each investment or course of action plays within the overall investment portfolio of the fund; (E) the expected total return from income and the appreciation of investments; (F)

socially responsible investment factors in any circumstance directly or indirectly impacting the institution's mission may indeed be permissible.

Recent trends in institutional investment involve consideration of environmental, social, and governance (ESG) concerns.¹²⁴ And this new strategy comports with recent consumer trends in index funds.¹²⁵ Proponents of investing based on ESG concerns argue that this method of investment management can actually improve risk-adjusted returns.¹²⁶ As such, in terms of institutional investment strategies, there is nothing to distinguish ESG-motivated investing strategies from any other investing strategy if claims about ESG-motivated investing are

other resources of the institution; (G) the needs of the institution and the fund to make distributions and to preserve capital; and (H) an asset's special relationship or special value, if any, to the charitable purposes of the institution" (emphasis added)). See also *id.* § 3(e)(4).

124. This kind of investing has alternatively been called ESG investing—standing for environmental, social, and governance investing—or SRI, an acronym for socially responsible investing. See Schanzenbach & Sitkoff, *supra* note 47, at 2–3.

125. See, e.g., Ross Kerber, *Sustainable Investors Face Squeeze as Larger Firms Move In*, REUTERS (Nov. 14, 2019, 7:11 AM), <https://www.reuters.com/article/us-investment-funds-sustainability/sustainable-investors-face-squeeze-as-larger-firms-move-in-idUSKBN1XT1LH> (discussing how general business models and practices are responding to social and political changes and transitioning into low-carbon and environmentally friendly means of operating and investing); Trisha Taneja, *Trends in Sustainable Finance for 2019*, SUSTAINALYTICS, <https://www.sustainalytics.com/sustainable-finance/2019/03/06/trends-in-sustainable-finance-for-2019/> (noting that, in 2018, “approximately USD 58.8 billion in social and sustainability bonds were issued. Investors are increasingly using the UN Sustainable Development Goals (SDGs) as a benchmark for impact and are creating more demand for sustainability bonds”); UNEP COLLABORATING CTR. FOR CLIMATE & SUSTAINABLE ENERGY FIN., *GLOBAL TRENDS IN RENEWABLE ENERGY INVESTMENT 2018*, FRANKFURT SCHOOL 12–15 (2018) (breaking out all environmental and green investing trends in 2018); and Mats Andersson, Patrick Bolton & Frédéric Samama, *Hedging Climate Risk*, 72 FIN. ANALYSTS J., May–June 2016, at 13, 14–15 (evaluating green investment strategies).

126. For example, proponents indicate that risk-adjusted returns will not be penalized by divestment: “instead of avoiding the fossil fuel industry to achieve collateral benefits from reduced pollution, the new suggestion [i]s that a fossil fuel company should be divested because its litigation and regulatory risks were underestimated by its share price, and therefore divestment would improve risk-adjusted return.” Schanzenbach & Sitkoff, *supra* note 47, at 3.

taken as true.¹²⁷ However, in practice, ESG-motivated investment decisions may not be made because of a desire to improve portfolio performance and instead could be motivated by a desire to have some positive social impact.¹²⁸ This distinction has important implications in light of the total-return rule to which fiduciaries of institutional funds must adhere, which precludes consideration of factors that do not directly benefit the beneficiary.¹²⁹

Because ESG investing is new to the scene of investment strategies, it has created some confusion about what sorts of factors count as ESG factors and whether those factors are considered positive or negative for purposes of sound trust administration.¹³⁰ If a fiduciary is motivated by collateral benefits—such as social good—then, this motivation may violate the sole-interest rule, which is prized by UPMIFA and similar statutes.¹³¹ The sole-interest rule, which is similar to the total-return rule, can be violated “for example, [when] a trustee . . . does ‘not act for personal advantage,’ and instead is ‘motivated by a desire to assist a worthy project,’ . . . because such a motive or desire is something other than the sole interest of the beneficiary.”¹³² The sole-interest rule is nested within the

127. *See id.* at 5. However, there may be a distinction to be drawn between a “collateral benefit” ESG and improved risk-adjusted return ESG. The former is *not* motivated by a desire to improve portfolio performance—and is instead motivated by a desire to have some positive social impact—while the latter is the type of consideration that would be explicitly permissible under UPMIFA in most, if not all, cases. *See id.* Yet, some have argued that this distinction is academic at best; in fact, many fiduciaries might have both views in making investment decisions. *See generally* Gary, *supra* note 48.

128. *See* Schanzenbach & Sitkoff, *supra* note 47, at 6.

129. *See id.* at 8–9.

130. *See id.* at 11–12 (discussing, for example, how nuclear energy may be considered positive for those concerned about carbon emissions, but it could be negative considering catastrophic nuclear meltdowns).

131. *See id.* at 18–19. Meanwhile, the prudent investor rule requires that a fiduciary manage a trust with an investment strategy with risk and return objectives suitable for the fund under management, while diversifying the fund where possible. *See* UNIF. PRUDENT MGMT. OF INSTITUTIONAL FUNDS ACT §§ 3(e)(1)(D)-(H), 3(e)(4), 3(e)(5) (2006), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=D7b95667-ae72-0a3f-c293-cd8621ad1e44&forceDialog=0>; and Schanzenbach & Sitkoff, *supra* note 47, at 33–34 (citing RESTATEMENT (THIRD) OF TRUSTS § 90 (AM. LAW INST. 2007)).

132. *Id.* at 17 (citing *Conway v. Emeny*, 96 A.2d 221, 225 (Conn. 1953)). It should be noted that the sole-interest rule is closely related to the total-re-

fiduciary duty of loyalty, and, to the extent that an endowment is considered a the property of a nonprofit corporation and not a trust, their corporate fiduciaries might be subject to the more lenient best-interest rule—rather than the sole-interest rule.¹³³ But even construing endowments as the charitable trusts that they are, recent changes to prudent investor statutes allow trust fiduciaries to consider not only the financial interests of but also the values of the beneficiary.¹³⁴ Another possible counterbalance to reading the sole-interest rule as strictly precluding ESG considerations in the context of endowment investment decisions may be the fact that divestment could increase donations to the institution, thereby serving the intent of the sole-interest rule.¹³⁵ But the opposite could be true if the institution counts fossil fuel magnates among its donor pool, muddying the waters for endowment fiduciaries considering ESG factors.

The fiduciary duties of an endowment manager are defined by the endowment's purpose, which for many institutions is to generate as much annual return as possible to support the institution's mission.¹³⁶ It follows that, if an investment in a firm or sector is inconsistent with an institution's

turn rule in that both are animated by the desire to produce immediate and long-term returns for the beneficiary. *See id.* at 8.

133. *See, e.g.,* Gary, *supra* note 48, at 788 (arguing that “‘best interests’ should be interpreted to mean more than financial interests”).

134. *See, e.g.,* OR. REV. STAT. ANN. § 130.755(j) (2019) (noting that fiduciaries may consider “[t]he needs of the beneficiaries, including but not limited to the beneficiaries’ personal values and desire that the trustee engage in sustainable or socially responsible investing strategies that align with the beneficiaries’ social, environmental, governance or other values or beliefs, as well as the financial needs of the beneficiaries.”); and DEL. CODE. ANN. tit. 12, § 3302(a) (2018) (allowing that fiduciaries “may take into account the financial needs of the beneficiaries as well as the beneficiaries’ personal values, including the beneficiaries’ desire to engage in sustainable investing strategies that align with the beneficiaries’ social, environmental, governance or other values or beliefs of the beneficiaries”).

135. *See, e.g.,* Janet Kiholm Smith & Richard L. Smith, *Socially Responsible Investing by Colleges and Universities*, 45 FIN. MGMT. 877, 877 (2016) (finding that “highly selective and elite schools do not seek differentiation through SRI and are unlikely to sacrifice returns for SRI, and we find that Less Selective schools appear to regard costs of SRI as branding investments . . . [and that boards with] less investments expertise . . . appear more oriented toward generating donations and less focused on investment policy.”).

136. *See* Deeks, *supra* note 69, at 341.

mission of education, divestment from that firm or sector is permitted under prudent investor statutes.¹³⁷ And, while politically motivated investment decisions may indeed be prohibited by the fiduciary duties of loyalty and prudence, a fund manager can legitimately take ESG factors into account, so long as they serve the financial viability of the endowment.¹³⁸ Thus, a liberal reading of the prudent investor rule would require an institutional fund manager to take into account many factors when making investment decisions, including “[e]conomic, regulatory, litigation, and reputational risk.”¹³⁹

As recently as the late Twentieth Century, considering ESG factors was frowned upon, since these concerns were considered noneconomic. However, as time has progressed, observers have noted that ESG factors may be mandatory, in light of the research showing how important these factors can be in terms of risk management.¹⁴⁰ Harvard’s Board of Overseers manages its endowment without total official divestment and still regularly considers social and environmental factors, though mostly by proxy action.¹⁴¹ Yet, despite the fact that Harvard has not yet fully divested from fossil fuel producers, it may be a university ripe for full divestment given these concerns.¹⁴² In fact, the moral presumption against divestment is drawn from legal principles, such as the concern of breaking

137. See *id.* at 341–42 (citing BURTON A. WEISBROD, JEFFREY P. BALLOU & EVELYN D. ASCH, *MISSION AND MONEY: UNDERSTANDING THE UNIVERSITY* 145 (2008)).

138. For a discussion of how such a decision could violate the duty of loyalty, see RESTATEMENT (THIRD) OF TRUSTS: P.I.R. §170 cmt. Q (1992) (noting that the trustee has a duty “not to be influenced by the interests of any third person or by motives other than the accomplishment of the purposes of the trust”). For a discussion of how such a decision could violate the duty of prudence, see John H. Langbein, *The Uniform Prudent Investor Act and the Future of Trust Investing*, 81 IOWA L. REV. 641, 646–49 (1996) (describing how divestment may be at odds with the duty of prudence); and Langbein & Posner, *supra* note 15, at 88 (arguing, presciently, that investment based on social concerns, such as divestment from fossil fuels, could result in underdiversification, contrary to what the duty of prudence requires).

139. See Deeks, *supra* note 69, at 342–43.

140. See *id.* at 343–45. It “is helpful to recall that the modern rules governing SRI and divestment reflect an accommodation of the concerns presented by previous campaigns.” *Id.* at 350.

141. See *id.* at 350–53.

142. See *id.* at 354. First, there must be a finding of “substantial social injury,” and then the following analysis is applied:

from compliance with fiduciary duties. But is also based on the trouble that comes with basing an objective financial decision on a subjective factor—like what constitutes “substantial social injury”—and scant evidence that divesting is an effective mode of effecting social change.¹⁴³

Apart from the requirements arising under the fiduciary duty of prudence, there may be little incentive for universities with large endowments, like Harvard and Yale, to fully diversify their portfolios.¹⁴⁴ Yet, both have actually divested their endowments over social issues in the past.¹⁴⁵ Nevertheless, any investment decision by a fiduciary of an endowment is “firmly rooted in the fiduciary obligations of prudence and care.”¹⁴⁶ The context of fossil fuel divestment, however, may be different than previous divestment decisions for a variety of reasons. Chief among these reasons is the sheer scale and pervasiveness of fossil fuels in investment markets.¹⁴⁷ Furthermore, “[i]t is not currently possible to swap fossil fuel and alternative energy assets like-for-like without harming returns and, in so doing, violating the duty of prudence.”¹⁴⁸ As such, the moral or ethi-

1) corporate action (or inaction) is the direct cause of the social injury; 2) all practicable shareholder rights have been exhausted or deemed to be futile; 3) there is redressability—i.e., “[t]he desired change in the company’s behavior will clearly, directly, and materially diminish the social harm caused by the company”; 4) the benefits of the company action over the long term do not outweigh the social injury caused; 5) the company has been afforded the “maximum reasonable opportunity” to change its behavior and has failed to do so in a way that materially alleviates the injury; and 6) divesting does not infringe on the university’s capacity to carry out its mission. Then, if the action is “consistent with fiduciary obligations,” the stock may be divested.

Id. (citing STANFORD UNIV., STATEMENT ON INVESTMENT RESPONSIBILITY 2 (2015), <https://perma.cc/MU3B-EYNN>).

143. *See id.* at 355–57.

144. *See* Smith & Smith, *supra* note 135, at 877–78 (discussing the fact that “highly selective and elite schools do not seek differentiation through SRI and are unlikely to sacrifice returns for SRI”).

145. For instance, these universities have previously divested from companies that were implicated in the following: South African apartheid, tobacco sales, and oil supporting the Sudanese government. *See* ANSAR, CALDECOTT & TILBURY, *supra* note 13, at 10; *see also* Deeks, *supra* note 69, at 358.

146. Deeks, *supra* note 69, at 358–62.

147. *See id.* at 362–68.

148. *Id.* at 368 (citing NATHANIEL BULLARD, FOSSIL FUEL DIVESTMENT: A \$5 TRILLION CHALLENGE 16–17 (2014), <https://perma.cc/B9UV-437L>).

cal part of the divestment calculus is less than clear: “[t]he ethical case at first blush would seem to support divestment, but if the ethical thing to do is that which will be most effective at addressing climate change, divestment may not be the most ethical choice.”¹⁴⁹

Ultimately, the success of divestment will be evaluated not only “by how closely aligned the campaign discourse is with the discourse of endowment law”¹⁵⁰ but also how a divestment campaign gains legitimacy in reference to fiduciary law, as inconsistent narratives constitute significant opportunity costs to the campaigners.¹⁵¹ In fact, fossil fuel divestment campaigns at universities are somewhat fragmented, in that the shared rationale between groups on different campuses is not always apparent, and the legal context is almost entirely ignored by most campus-based divestment campaigns.¹⁵²

149. *Id.* Thus, the matter of which companies from which a university endowment should divest—the fossil fuel producers, or heavy fossil fuel consumers—should also be considered. *See id.* There may be moral reasons proffered for divestment. For example, “fossil fuels contribute to climate change and climate change is bad for the environment; therefore, fossil fuel companies are bad and should be divested from.” *Id.* at 369; *see also* Bergman, *supra* note 22, at 4–5; and Green, *supra* note 72, at 107–12. There may also be equitable concerns to consider. For instance, “fossil fuel companies emit carbon dioxide for free, those emissions harm the environment, and the companies should be made to internalize the costs associate with those emissions via a carbon tax.” Deeks, *supra* note 69, at 369. Finally, there are and should be financial concerns to weigh. As an example, “80% of known fossil fuel reserve must be kept in the ground if the world is to stay below the 2 degree Celsius . . . target agreed upon in the Paris Accord. These reserves will become ‘stranded assets,’ incurring significant write-offs and rendering fossil fuel stocks financial liabilities.” *Id.* at 370. *See also* Tom Sanzillo, Cathy Hipple, & Clark Williams-Derry, *The Financial Case for Fossil Fuel Divestment*, INST. FOR ENERGY ECON. & FIN. ANALYSIS, 7–10, 17–23 (2018), http://ieefa.org/wp-content/uploads/2018/07/Divestment-from-Fossil-Fuels_The-Financial-Case_July-2018.pdf.

150. Deeks, *supra* note 69, at 378–82; *see also* Sarang, *supra* note 112, at 303–10 (outlining the fact that divestment may be at odds with some fiduciary duties—such as the duty to diversify, which is a facet of the duty of prudence).

151. *See* Deeks, *supra* note 69, at 404–13 (“[T]here is a cost to using discourse that does not coincide with the dominant discourse of the arena of action. . . . Giving political justifications for divestment is rhetorically costly vis-à-vis the trustees because they are prohibited from making politically motivated divestment decisions.”).

152. *See* Richardson, *supra* note 110, at 64.

Perhaps, then, university endowment divestment from fossil fuel holdings, along with how it fits within the wider phenomenon of socially responsibility investing, is a question of weighing the financial and reputational costs associated with divestment or continued investment in the fossil fuel sector.¹⁵³ As a result, some universities that have resisted calls to divest are nonetheless signatories of the United Nations Principles for Responsible Investment (UNPRI)—evidence of the proverbially hedged bet until the financial and reputational costs of not divesting are too great to ignore.¹⁵⁴ But the “business case” for fossil fuel divestment—to avoid the downside of financial risks associated with the fossil fuel industry and catch the upside of the growing green energy industry—is often ignored by endowment fiduciaries.¹⁵⁵ In fact, there may be compelling business reasons to motivate universities to divest from fossil fuels, including: avoiding complicity,¹⁵⁶ reputational concerns,¹⁵⁷ and that divesting represents a socially responsible leverage of power over powerful bad actors.¹⁵⁸ Thus, a decision by a university endowment to divest from fossil fuels would likely be consistent with fiduciary principles so long as it is genuinely motivated by financial and legal factors.¹⁵⁹ And, depending on a trust’s purpose, divestment may indeed be consistent with fiduciary law.¹⁶⁰

153. *See id.* at 65–66.

154. *See id.* at 63–64. The UNPRI does not require divestment *per se*, but simply that the signatories take active steps towards acting in a socially responsible managers with their funds, as well as publicly disclosing their SRI policies and practices. *See id.* at 64. Although outside the U.S., it is worth noting that in 2014, the Australian National University caused an uproar when it announced it had divested from seven companies, citing concern with their environmental practices and impacts; even Tony Abbott, then the Australian Prime Minister, expressed his disapproval at what he saw as simply a bad investment decision. *See id.*

155. This includes the presumption that “over the long term the business case to take climate change seriously is compelling, in the near term is may not necessarily be so.” *Id.* at 65.

156. *See id.* at 65–66.

157. *See id.* at 66–67.

158. *See id.* at 67–68.

159. *See id.* at 70.

160. *See* Sarang, *supra* note 112, at 307–14. “Given the wide-ranging physical, social, and economic havoc that climate change will cause, it may be possible to argue that minimizing climate risk *is* related to the purposes of the trust and in the beneficiaries best interest.” *Id.* at 309; *see also* UNIF. PRU-

That said, business reasons alone are not enough motivation for most universities to divest, given that endowment managers, like other trust administrators, are historically averse to change and only respond when their duties are externally changed. This is because endowment managers are beholden to principles of fiduciary law.¹⁶¹ Yet, because trust fiduciaries are required to oversee a trust in a manner protect all beneficiaries' interests equitably under the fiduciary duty of impartiality, "fossil fuel investments impermissibly favor current beneficiaries at the expense of future beneficiaries who will suffer the severest effects of climate change, and . . . breach this duty."¹⁶² While a consideration of violating the duty of impartiality on these grounds is beyond the scope of this Article, we seek to test the concern of many endowment fiduciaries about violating the duty of loyalty through a divestment decision that negatively impacts the endowment value in the section that follows.

DENT MGMT. OF INSTITUTIONAL FUNDS ACT § 3(e) (2006), <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=D7b95667-ae72-0a3f-c293-cd8621ad1e44&forceDialog=0> (enumerating the factors that must be considered in investing funds).

161. Richardson, *supra* note 110, at 69. "The fact that [socially responsible investing] comprises an exceptionally wide range of goals and methods further complicates [legal analysis] because each carries different legal consequences." *Id.* These principles are unaffected even when a school delegates the fund management to an external manager. *See id.*

162. Sarang, *supra* note 112, at 311. This duty and theory would likely not apply so strictly to college endowments, but it is nevertheless an interesting theory. Exerting shareholder pressure on companies is another action that endowments may take, as referenced previously. *See id.* at 318–23, 327–38 (describing various studies regarding the conflicting findings of divestment on portfolio performance); *see also* Gary, *supra* note 48; Sarang, *supra* note 112, at 327–28; Cynthia E. Clark & Elise Perrault Crawford, *Influencing Climate Change Policy: The Effect of Shareholder Pressure and Firm Environmental Performance*, 51 *Bus. & Soc'y* 148, 152 (2012) (discussing the proposition that shareholders have pressured firms to change their behavior in reference to social and political goals). Many investors tend to be biased against action which may have a short-term negative impact, even if there may be a positive long-term impact.

III.

ANALYSIS OF THE IMPACT OF DIVESTMENT ON UNIVERSITY
ENDOWMENTS

Given that there may be no actual legal restriction against divestment—or, put another way, prudent investment principles may indeed require fiduciaries of endowments to consider ESG factors in alignment with the university’s mission—the only major concern of endowment fiduciaries is the possibility that divestment reduces the annual returns and overall value of the endowment. We examine this possibility using two methods commonly employed in the economics and higher education research literatures: the difference-in-differences method,¹⁶³ as well as another statistical method known as a synthetic control.¹⁶⁴ Both methods identify institutions that committed to divestment and create artificial counterfactual institutions that approximate, as closely as practicable, a world in which divesting institutions did not publicly state their decision to divest from fossil fuels. We further explain both methods later in this Article. Using these methods, we find no discernible evidence of a reduction in endowment assets due to fossil fuel divestment and evidence of modestly positive returns to some university endowments based on their divestment decision.

A. *Data and Methods*

Data for this study come from three primary sources. We rely heavily on the Integrated Postsecondary Education Data System (IPEDS) for a large proportion of our data concerning

163. For two examples of recent scholarship employing a difference-in-differences methodology, see, Andrew S. Belasco, Kelly O. Rosinger & James C. Hearn, *The Test-Optional Movement at America’s Selective Liberal Arts Colleges: A Boon for Equity or Something Else?*, 37 *EDUC. EVALUATION & POL’Y ANALYSIS* 206 (2015), and Susan M. Dynarski, *Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion*, 93 *AM. ECON. REV.* 279 (2003).

164. For two examples of recent scholarship employing a synthetic control methodology, see, Jennifer A. Delaney, Univ. of Ill. at Urbana-Champaign & Taylor K. Odle, Univ. of Pa., *State-Level Common Application Policies and College Enrollment*, Presentation at the 44th Annual Association for the Study of Higher Education Conference: The Will to Reimagine the Study of Higher Education (Nov. 14, 2019), and Ozan Jaquette, Dennis A. Kramer II & Bradley R. Curs, *Growing the Pie? The Effect of Responsibility Center Management on Tuition Revenue*, 89 *J. HIGHER EDUC.* 637 (2018).

institutional characteristics. IPEDS includes results from a number of interrelated surveys conducted by the National Center for Education Statistics, an agency within the U.S. Department of Education. For our endowment data, we rely on proprietary data from the NACUBO-Commonfund Study of Endowments. The NACUBO-Commonfund includes data on institutional endowment values and, in some years, distributions of endowment funds. However, the NACUBO-Commonfund data carry the limitation that in some years, institutions will drop-in and drop-out of analysis, leaving gaps in their reporting. To deal with this issue, we also use proprietary data from Edmit, a college costs and choice advisory company, that includes endowment values for several non-profit institutions. Where the NACUBO-Commonfund data are incomplete, we replace missing values with data from Edmit. Edmit data account for 1,220 endowment values for institution-years across 134 institutions. The remaining endowment values come from the NACUBO-Commonfund Study of Endowments.

Using these datasets, we created a unique panel dataset in which the unit of analysis is an institution in a given year, for 697 institutions from the years 2007 to 2016. We chose these years due to the recency of the divestment phenomenon and the cleanliness of the data;¹⁶⁵ prior years used different measures for endowment assets, enrollment, and other key institutional characteristics. We include only institutions for which we have full data on enrollment and endowment values, choosing case-wise deletion to eliminate institutions without full endowment values through the 10-year period. The resulting dataset includes 6,970 individual observations.

Using a difference-in-differences method, we leverage institutional changes in policy concerning fossil fuel divestments. We compare university endowment returns of institutions that change their investment policy to those that do not. Fossil-fuel divestment serves as a treatment condition. We call those institutions that chose to divest “divestors.” Those that do not divest from fossil fuels serve as the control group. We call those who do not publicly divest from fossil fuels “investors.” Traditional models of the difference-in-differences equation would follow the “classic” model as follows, $Y_{it} = \beta_1 F_i + \beta_2 D_t + \beta_3 (F \times D)_{it} + \gamma X_{it} + \varepsilon_{it}$ where Y represents the out-

165. See generally *1000+ Divestment Commitments*, *supra* note 8.

come variable (natural log of endowment assets) for institution i in year t . D_i is a dichotomous indicator for whether the institution, i , divested from fossil fuels in any year in the panel. The coefficient of this measure, β_2 , will show any pre-divestment differences between treatment and control universities. F_t is a dichotomous indicator that equals “1” in years in which an institution divested from fossil fuels. Its coefficient, β_1 , therefore captures the differences between the time period in which the institution divested from fossil fuels and when the institution was willing to invest its endowment in fossil fuel companies. The coefficient of interest is $\hat{\alpha}_3$ of the interaction represented by $(F \times D)_{it}$, where,

$$\beta_3 = (Y_{\text{Divestor}(\text{before})} - Y_{\text{Divestor}(\text{after})}) - (Y_{\text{Investor}(\text{before})} - Y_{\text{Investor}(\text{after})}),$$

represents the difference in outcomes between the time period in which an institution did not state that it was divesting from fossil fuels and the time period after the institution says that it divested, controlling for already extant differences between investor and divestor institutions. X_{it} from model 2 represents a vector of covariates—number of students applied, admitted, and enrolled—included in the model to increase precision. γ represents the coefficients on each of the covariates in the vector. Lastly, ε represents the error term.

However, this traditional method of modelling the difference-in-differences approach does not allow the slopes to vary year-by-year, nor does it allow differential policy changes. The traditional method restricts the effect over time for an institution to be linear and the effect over time to be the same for all institutions. Furthermore, because divestor institutions did not all choose the same year to divest, we must allow for multiple treatment take up years. For those reasons, we model the above difference-in-differences model as a two-way fixed effects model. We eliminate the need for a single treatment adoption year and the need to make functional form decisions by creating the following non-parametric equation as shown here:

$$Y_{it} = \beta_1 F_t + \beta_2 D_i + \beta_3 (F \times D)_{it} + \alpha A_i + \Omega Z_t + \gamma X_{it} + \varepsilon_{it}$$

In this model, we add vectors of indicator variables for institutions (i) and years (t) - A_i and Z_t . We also add α and Ω , which represent all of the individual coefficients associated

with each institution and year indicator; the remaining variables from model 2 retain their meanings in model 4. Because the institution and year fixed effects account for the variation in F_t and D_i , we eliminate the terms from the model and simplify the equation as follows:

$$Y_{it} = \alpha A_i + \Omega Z_t + \beta_3 (F \times D)_{it} + \gamma X_{it} + \varepsilon_{it}$$

In this model, $(F \times D)_{it}$ serves as an indicator variable that is equal to “1” for divestor institutions in the years after they have announced divestment. β_3 is the coefficient of interest for that indicator. For example, Harvard University never divested from fossil fuels. As a fossil fuel investor, Harvard will maintain a value of “0” for this measure throughout the panel. Stanford University, however, divested from coal extraction in 2014. Stanford will have a value of “0” prior to 2014. Stanford receives a value of “1” in 2014 and all successive years. Functionally, $\beta_3 (F \times D)_{it}$ in model 5 is equivalent to $\beta_3 (F \times D)_{it}$ in models 4 and 2.

By specifying a difference-in-differences model that employs two-way fixed effects, we assume that divestment is systematic; that is, divestment may occur at institutions with large or small endowments. The fixed effects model allows covariance between the treatment indicator and A_i and Z_t . Therefore, the year fixed effects allow us to control for differences across to all institutions over time, and the institution fixed effects allow us to control for institution-level differences that do not change over time.

Another specification of the two-way fixed effects model that we employ is as follows:

$$Y_{it} = \alpha A_i + \beta_3 (F \times D)_{it} + \tau_1 + \tau_1^2 + \tau_1^3 + \tau_1 (F \times D)_{it} + \tau_1^2 (F \times D)_{it} + \tau_1^3 (F \times D)_{it} + \gamma X_{it} + \varepsilon_{it}$$

Rather than include year fixed effects, we use a different specification of the year variables in this model. We include the term τ , which represents a continuous year variable, and the squared and cubed forms of that same variable. We then interact each of those year terms with the indicator of treatment in years of treatment. The remaining terms in model 5 retain their meanings from model 4. Given the necessarily small number of institutions that have divested from fossil fu-

els and short time period, we are concerned that traditional year fixed effects may soak up necessary variation and overspecify the model. We attempt to offset those concerns with the continuous, polynomial year variables in model 5.

We also use multiple comparison groups to increase confidence in our models. First, we compare all institutions that divested fully from fossil fuels to all of the remaining institutions in our data set that did not. Next, we compare all institutions that partially divested their endowments from fossil fuels—for example, those schools that divested from coal or tar sands only—to those that did not partially divest. We then confine groups to public institutions and private institutions, resulting in three distinct comparison groups. We hope that using multiple comparison groups will ensure that any findings will be generalizable to multiple contexts.

In order to attain precise estimates, difference-in-differences models must meet the standard that divestors and fossil fuel investors would behave *identically* in the absence of fossil fuel divestment. We cannot practically meet that standard; it is impossible to ensure that Harvard and Stanford would make the exact same decisions over the period of time that Stanford divested from fossil fuels and Harvard did not. Therefore, scholars who use the difference-in-differences analytic strategy instead attempt to meet the parallel trends assumption. In short, we assume the divestor and fossil fuel investor groups would show parallel trends in investment behavior in the absence of treatment during the post-treatment time period. To ensure that assumption stands, we assess pre-treatment trends of the divestor group and compare those trends to those of the investor group. We also assume in difference-in-difference models with multiple treatment times that every institution—regardless of eventual treatment status—will act as a control for treated institutions at the time of treatment status if the institution has not yet adopted treatment. The institution-level difference-in-difference estimates for each divestor may vary wildly as a result of this aspect of the two-way fixed effects model. To account for the parallel trends assumption and heterogeneous effects as a result of differential time of divestment, we also perform synthetic control models for four major divesting institutions as a robustness check for our difference-in-differences models.

The synthetic control method uses all available comparison investor institutions and weights institutions to create a comparison group from a specified donor pool that follows the trends within the divestment group in the pre-divestment period allowing us to relax the parallel-trends assumption. For a given institution, the method creates a synthetic institution with outcomes that mirror the divesting institution on observable characteristics prior to divestment. The synthetic institution then serves as a viable control to the actual divestor institution, as it is statistically indistinguishable from the actual divestor prior to divestment. We chose four private institutions for our synthetic control institutions: Pitzer College, the University of Dayton, Syracuse University, and Stanford University. Three of these institutions— Pitzer, Dayton, and Syracuse— have fully divested from fossil fuels, while Stanford has divested from coal only.

The basic purpose of the synthetic control method is to use a combination of units—in this case, a series of investor institutions—to provide a better comparison group for each divestor institution than guaranteed by difference-in-differences estimation. Thus, synthetic control takes a weighted average of investor institutions to serve as a synthetic control institution for each divestor institution.

The first step in creating a synthetic control is to choose a donor pool for the institutions. An adequate donor pool must include a sufficient number of institutions that match the divesting institutions on pre-divestment observable characteristics. The synthetic control method also assumes that the divesting institution does not experience post-divestment shocks that the donor pool would not experience, and that donor pool institutions do not experience any results of the treatment. Therefore, for these private institutions, we confined our donor pool to all private institutions. We see no reason that the entire pools of donor institutions would experience systematically different trends than the divesting institutions themselves.

Using those donor pool institutions, J , as a base, we assign weights $(\omega_1, \dots, \omega_J)'$ —as a vector $(J \times 1)$ —to each institution, where,

$$\omega_j \geq 0 \text{ with } \sum_{j=1}^J \omega_j = 1$$

The weights are chosen so that the synthetic divestor most closely resembles the actual divestor prior to divestment. The underlying procedure of selecting the weights is chosen to minimize

$$D(\omega) = (x_1 - X_0 \omega)' V (x_1 - X_0 \omega)$$

Where x_1 is a $(K \times 1)$ vector of predictor variables including pre-divestment lagged outcome variables and other covariates for a given divestor, and X_0 is a $(K \times J)$ matrix containing the values of the same predictor variables for the J possible control institutions, and V is a diagonal matrix with positive components that reflects the importance of the different outcome predictors.

From these weights, we construct the counterfactual synthetic divestor institution. Assume y_1 is a $(T \times 1)$ vector including the values of the outcome variable for T years in the divestor institution, and that y_0 is a $(T \times J)$ vector the values of the same variables for T years in the donor pool institutions; we can construct the counterfactual outcome variable pattern (the log-transformed endowment variable in the absence of divestment) as $y_1^* = y_0 \bullet \omega^*$. By plotting the counterfactual outcome pattern and visually comparing it to the divestor institution, we can examine the potential impact of divestment on institutional endowment outcomes.

B. *Methodological Limitations*

Both the difference-in-differences method and the synthetic control method require a theoretically sound control group to compare against the treatment group (in difference-in-differences) or from which to select a donor pool (in synthetic control). Furthermore, it is possible that the variables used to add to precision of the difference-in-differences method estimates in vector γX_{it} in equation 4 or the predictor variables selected to create the weights in the synthetic control method in equation 6 could bias the results of either estimation. There are a series of robustness checks that allow researchers to account for these issues. We do not undertake them for this manuscript; given repeated null to moderately significant results in our findings section and our reticence to make strong policy recommendations from those results, we argue that further study with more comprehensive data would

provide a greater understanding of the robustness of the null results than running those checks on our available data.

Our data themselves have a number of limitations. First, the data are not fully comprehensive. In a number of years, institutions did not report endowment returns to the NACUBO-Commonfund study. While we supplement these data with a proprietary dataset of non-profit institutions from Edmit, we believe the choice not to present those data is an intentional one; therefore, data are not missing at random, especially for public institutions. Rather than impute those data based on previous years, we confine to only those institutions that provide data throughout the time period. This eliminates over a hundred institutions from our dataset. While the total number of institutions in our study still allows us sufficient power to detect a result, it may be unintentionally biased in the outcomes presented. It is possible that the institutions sharing data with the NACUBO-Commonfund Study systematically perform better or worse than those institutions that did not share the data.

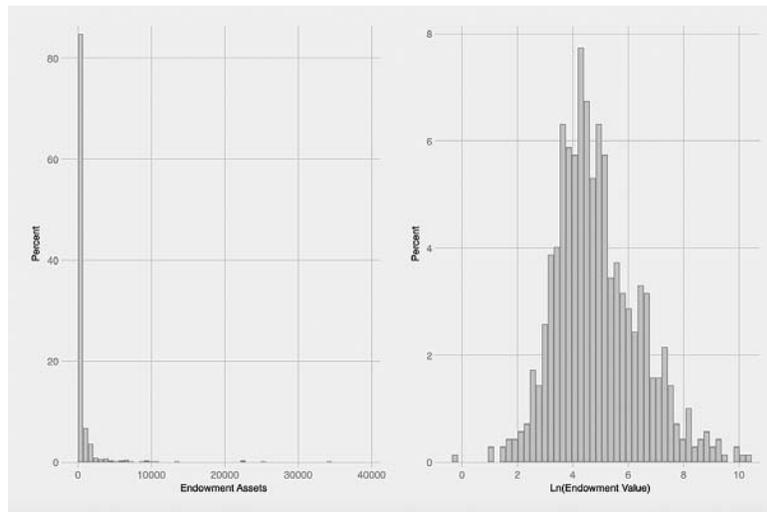
Another major data limitation is our identification of “divestment.” We collected indicators for divestment based on public pronouncements of divestment from fossil fuels by institutions themselves. It is possible that seemingly divestor institutions are actually invested in fossil fuels and institutions that have not stated publicly that they have divested from fossil fuels have actually done so quietly. We are making the assumption that institutions that say they have divested have remained faithful to that commitment.

Lastly, we cannot isolate the direct amount of an institution’s endowment associated with investment returns. It is possible any investment gains we could see may be wholly due to charitable giving or other revenue sources. Furthermore, endowment managers most often focus on long-term gains. Our estimates generally apply to the result of divestment after a short-term time period, for example between 2015 and 2016. It is entirely possible that returns in successive years would provide long-term trend that differs from short-term gains and losses. In spite of these clear limitations, we believe this analysis is the first and—to this point—best attempt at determining the impact of fossil fuel investment on university endowments. It should be viewed as a “first cut” for future researchers to improve upon.

C. Findings

Before we began our analysis, we noticed the vast difference in endowment sizes in our dataset, illustrated in graphic on the left panel in Figure 1, which range from small endowments—under \$100 million—to very large endowments—well over \$20 billion. For example, in 2011 Augustana College had an endowment valued just over \$110,000, while Harvard University’s endowment was valued over \$31 billion. In fact, just under 85 percent of the sample was comprised of institutions with endowment values of less than \$650 million in any given year. Additionally, while the mean value of the remaining 15 percent of institutions is \$3 billion, the mean of the endowment values for all institutions is around \$520 million, with a standard deviation is \$2.2 billion. The tremendous variation that exists between endowments on the basis of their fair market values lead us to log-transform our dependent variable of interest, endowment values, illustrated in the right panel of Figure 1. This natural-log transformation limits error in our estimates related to a non-normally distributed sample of endowment values.

FIGURE 1
DIFFERENCE IN DISTRIBUTION OF KEY ENDOWMENT OUTCOMES



After controlling for this error with the log-transformation of endowment values, we began our analysis. Table 1 presents the difference-in-differences estimates of fossil fuel di-

vestment on the natural log of endowment assets, the latter of which can be interpreted as a percent change in overall assets. Models 1 through 3 present the results for the comparison group that includes all 697 institutions in our sample. Models 4 through 6 represent the public institutions, and models 7 through 9 show the results of the private institution comparison group. The first, fourth, and seventh models show the results of a naïve two-way fixed effects difference-in-differences model without a vector of controls. In short, they represent equation 4 the previous section without the γX_{it} term. The second, fifth, and eighth models add that term. The final model in each comparison group reflects the time-trends model as represented by equation 5. We present clustered standard errors in parentheses, adjusted R-squared values in angle brackets, and within R-squared values in braces. The within R-squared values attempt to determine the extent to which the treatment interaction term contributes to the overall explanatory power of the model.

When looking across all institutions, we find null results across all three model specifications and all three comparison groups in the log-transformed endowment outcome. This suggests no discernable impact of fossil fuel divestment the natural log of endowment assets. The fact that we have complete data for far fewer divestor institutions than investor institutions may be leading to null result that these estimates provide. Unlike the endowment level outcomes, the lack of significant results is robust to multiple comparison groups—all institutions, private institution, and public institutions—and all treatment conditions—any divestment, partial divestment, or full divestment. The most striking support for a lack of any relationship between divestment of any kind and endowment values is not the lack of statistical significance, but the consistent null within R-squared values encapsulated by braces. Those values represent the proportion of variation in the outcome variable accounted for by the treatment indicator alone. In all models, the value is less than 0.02. This means that, when accounting for several time-varying and invariant institutional characteristics, the choice to divest from fossil fuels in a partial or full manner accounts for little to no variation in the percent change in an endowment from one year to the next.

TABLE 1. DIFFERENCE-IN-DIFFERENCE ESTIMATES FOR THE IMPACT OF FULL FOSSIL FUEL DIVESTMENT

<i>Endowment Value</i>	All Institutions (N=697)			Public Institutions (N=152)			Private Institutions (N=545)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Any Divestment	-0.0237 (0.0452) <0.98> {0.00}	-0.0560 (0.0364) <0.98> {0.01}	-0.0639 (0.0379) <0.98> {0.01}	-0.0719 (0.0686) <0.97> {0.00}	-0.0522 (0.0508) <0.97> {0.00}	-0.0179 (0.0679) <0.97> {0.01}	-0.0541 (0.0506) <0.98> {0.00}	-0.0512 (0.0527) <0.98> {0.00}	-0.0675 (0.0444) <0.99> {0.00}
Full Divestment	-0.0806 (0.0621) <0.98> {0.00}	-0.0942 (0.0553) <0.98> {0.01}	-0.0921 (0.0519) <0.98> {0.01}	-0.0202 (0.0340) <0.97> {0.00}	-0.0296 (0.0264) <0.97> {0.00}	-0.0334 (0.0347) <0.97> {0.01}	-0.0944 (0.0644) <0.98> {0.00}	-0.1020 (0.0615) <0.98> {0.00}	-0.0934 (0.0635) <0.99> {0.00}
Partial Divestment	0.0031 (0.0569) <0.98> {0.00}	-0.0364 (0.0438) <0.98> {0.01}	-0.0499 (0.0492) <0.98> {0.01}	-0.0787 (0.0752) <0.97> {0.00}	-0.0584 (0.0575) <0.97> {0.00}	-0.0170 (0.0756) <0.97> {0.01}	0.0247 (0.0245) <0.98> {0.00}	0.0502 (0.0364) <0.98> {0.00}	-0.0176 (0.0198) <0.99> {0.00}

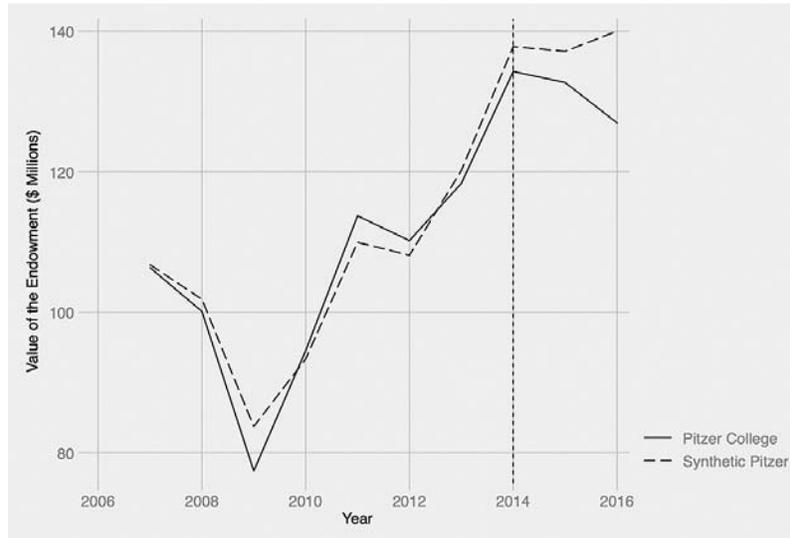
* p<0.05, ** p<0.01, *** p<0.001

Notes: Clustered standard errors in parentheses. Adjusted R-Squared value in angle brackets. Within R-Squared in Braces. Public institution treatment group excludes the University of Washington and the University of Maine System (partial divestment for both in 2015) and Union Theological Seminary (full divestment in 2014) due to incomplete endowment and enrollment data. The total number of divestment institutions in any given year is 17. Full divestment treatment institutions include Hampshire College (divested in 2011), Pitzer College (2014), the University of Dayton (2014), Syracuse University (2015), and California State – Chico (2014). Partial divestment institutions include San Francisco State University (2013), Humboldt State University (2013), California Institute of the Arts (2014), Stanford University (2014), and all University of California system institutions (2015). Partial divestment institutions removed from the control group for full divestment institutions and vice versa. The University of California System does not report institution-specific endowment values; therefore, UC institution endowments derived by multiplying the total UC System endowment by the proportion of the overall UC student body at each institution.

Given the small number of institutions that have divested from fossil fuels in our sample, the synthetic control method may provide a much better understanding of the impact of fossil fuel divestment on institutional endowments. While our difference-in-differences analysis yielded null results in the aggregate, our synthetic control analysis can provide insight into individual institutional contexts. We ran the synthetic control process using only NACUBO data. Given that all four institutions are NACUBO members that reported endowment values, we wanted to condition our sample on institutions that made the same choice. By doing so, we account for one of the limitations we mentioned earlier in this paper—that NACUBO reporters and non-reporters may have differential investing or endowment return patterns.

Figure 2 represents the synthetic control results for Pitzer College, which is the only institution in our synthetic control analysis that demonstrates possibly negative effects of divestment. Since divesting, Pitzer College's endowment declined by more than \$10 Million. Meanwhile, Synthetic Pitzer's endowment value increased in the post-divestment time period. This suggests a negative impact associated with divestment for a school with a relatively small endowment, like Pitzer. However, the magnitude of that negative impact may be negligible, given that the trend lines for Pitzer and Synthetic Pitzer are farthest apart at the time of divestment, differing by as much as \$5 million—a non-trivial amount, given Pitzer's endowment size.

FIGURE 2
SYNTHETIC CONTROL RESULTS—PITZER COLLEGE



Figures 3 and 4 represent the synthetic control results for the University of Dayton and Syracuse University, respectively. Both of the synthetic control trend graphs tell the same story. In both cases, the synthetic institution closely matches the actual institution's outcome in the pre-treatment time period. However, in neither case do we see differences in trends after divestment. Both synthetic institutions follow their actual institutions post-divestment in a manner consistent with the actual outcome, suggesting no discernable negative impact of divestment on these institutions' endowment values. In fact, given that the synthetic institutions' endowment values fall below the actual institutions' endowment values, we interpret these graphs to indicate that there may even be a modestly positive impact of divestment for institutions with mid-sized and large endowments, like Dayton and Syracuse, respectively.

FIGURE 3
SYNTHETIC CONTROL RESULTS—UNIVERSITY OF DAYTON

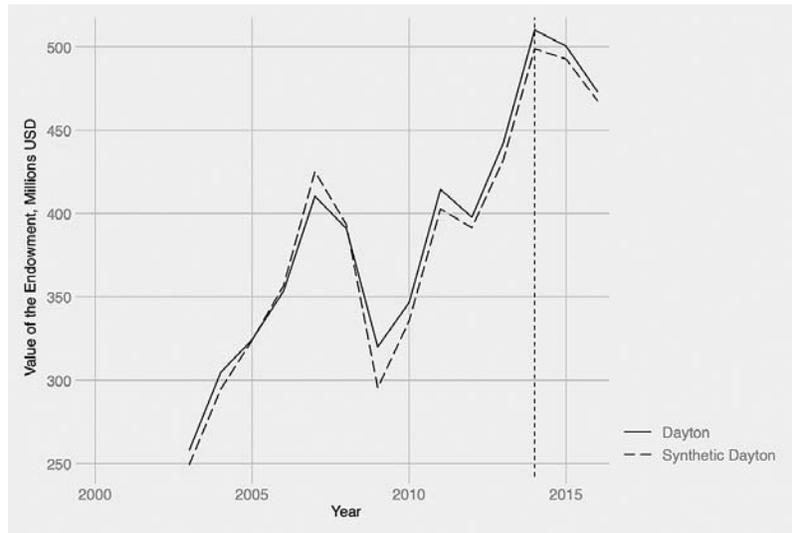


FIGURE 4
SYNTHETIC CONTROL RESULTS—SYRACUSE UNIVERSITY

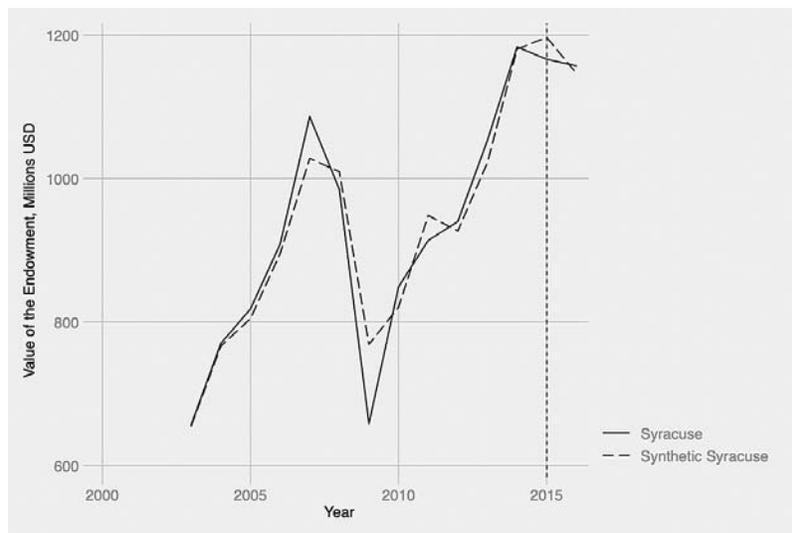
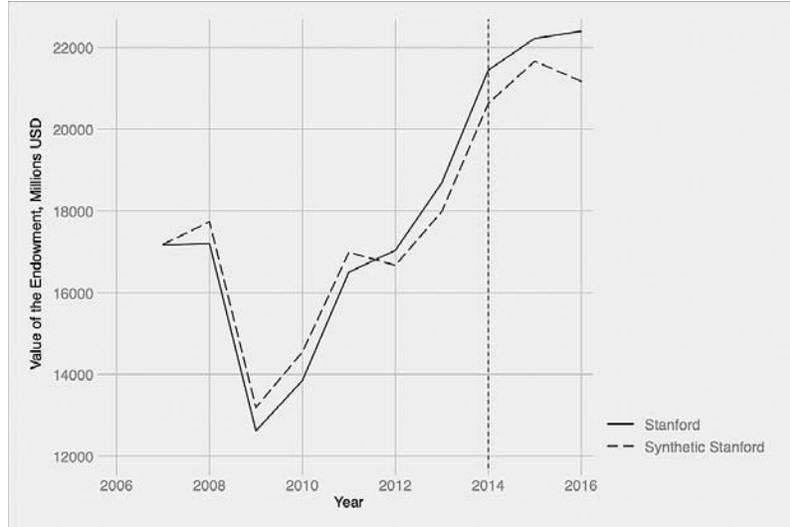


Figure 5 shows the synthetic control results for Stanford University. Like Figures 3 and 4, Figure 5 provides no discerni-

ble evidence that partial divestment has hampered Stanford's endowment value and may indeed suggest that divestment substantially positively impacted Stanford's endowment value. This would seem to suggest that for the most elite endowments, divestment is not the risk to endowment value that it is purported to be. However, we note two points of caution with this interpretation. First, the distance between real and synthetic Stanford is quite large—in real dollars, given the size of Stanford's endowment value—in some years. That said, Synthetic Stanford follows the overall trend of actual Stanford in all years but 2012; moreover, the trend lines never diverge by more than \$0.5 billion at any point in the pre-treatment trend line, demonstrating a relatively good synthetic match. However, because the Synthetic Stanford diverges from the actual Stanford a year post-divestment, we also caution against making causal claims from this trend graph about the magnitude of the positive impact of divestment observed, which is fairly substantial—over \$1.25 billion dollars.

FIGURE 5
SYNTHETIC CONTROL RESULTS—STANFORD UNIVERSITY



In summary, the findings from our synthetic control analysis suggest that there are limited, if any, negative effects of divestment on endowment values. To wit, only the synthetic

control trend graph of Pitzer College could support the notion that divestment marginally hurts a smaller college endowment. However, the synthetic controls for Syracuse University and the University of Dayton offer a much clearer picture and would suggest that divestment has a negligible if not a marginally positive effect on endowment values for mid- to large-sized endowments. Finally, with the caveats to the synthetic control trend graph for Stanford University, it is hard to make causal claims about the overwhelmingly positive magnitude of divestment on Stanford's endowment value. That said, it is clear that there is no discernibly negative effect of partial divestment on Stanford's endowment, suggesting that divestment does not necessarily negatively impact very large university endowments either. In fact, divestment appears to have benefitted Stanford's endowment value when comparing it to its synthetic counterfactual self. However, when taken together with our difference-in-difference estimates, it is difficult to paint clear conclusions about the economic effects of divestment for all universities with such a broad brush. On one hand, with the possible exception of Pitzer, divestment does not appear to draw down endowment values in any of the institutions for which we conducted the synthetic control analysis. On the other hand, divestment does not conclusively yield guaranteed positive gains to endowment values either.

CONCLUSION

We began our study and published a working paper before the effects of the global COVID-19 pandemic took hold. Now, more than ever, universities have competing responsibilities in the management of their endowments. First, they must attempt to earn the greatest possible return, thereby enabling them to pursue their trifold mission of educating the next generation of leaders, pushing forward the frontiers of science through cutting edge research, and engaging in civic leadership in their communities. Second, universities must invest and spend their endowments in a way that keeps them financially solvent.¹⁶⁶ And third, they must invest intentionally

166. See, e.g., Emma Whitford, *Will Colleges Tap Large Endowments During Pandemic?*, INSIDE HIGHER ED (May 22, 2020, 3:00 AM), <https://www.insidehighered.com/news/2020/05/22/colleges-faced-whether-increase-endowment-spending-finances-grow-more-dire> (reporting on the challenges some

in a manner that is consistent with their values as well as fiduciary law. Given the clear signals from researchers at universities throughout the world, climate change presents an existential threat in opposition to most universities' values. Yet, a decision to divest an endowment from fossil fuels is clouded by political controversy and is perhaps contrary to strict constructions of the duties of loyalty, prudence, and impartiality required of fiduciaries.

How then should a university respond to these competing responsibilities? Our research found no discernable, consistent, average impact of divestment on endowment assets and no conclusive evidence of negative effects to private university endowments more generally. However, among the institutions we selected for synthetic control analysis, we find that divestment had limited but positive effect on the value of mid-sized, large, and very large endowments. While it is possible that divestment could still negatively impact endowment assets in ways undetectable to our methods, we find no credible evidence to suggest that divestment causes poor market returns. As such, endowment fiduciaries at institutions that have divested should rest easy with their decision to divest, given these findings. And endowment fiduciaries at institutions that are on the fence about divestment should consider our findings in light of their duties to make investment decisions that inure to the growth of the endowment value—even if the regime governing institutional fund management may not yet be explicitly permissive of this investment decision.

If there are no necessary costs to financial decisions like divestment, then fiduciaries should integrate non-financial factors into their investment decision calculus. A university could reasonably consider its reputation and institutional concerns for social responsibility as encompassed in making a decision consistent with the university's best interest.¹⁶⁷ In addition, given that fossil fuel assets are not as profitable at present than they historically have been, UPMIFA may implicitly provide

universities face in spending their endowments); Brian Galle, *If Not Now, When: Why Won't Universities Spend Their Money?*, MEDIUM (May 10, 2020), <https://medium.com/whatever-source-derived/if-not-now-when-why-wont-universities-spend-their-money-cf4c1c4b8bd8> (discussing the present need for universities to draw on their endowments to meet financial obligations, amidst salary cuts, hiring freezes, and other austerity measures).

167. See Richardson, *supra* note 110, at 70–71.

the opening for universities to shed their holdings in fossil fuels through the requirement that endowment fiduciaries consider the general economic conditions of their investments.¹⁶⁸ Moreover, universities may already be functionally underinvested in the fossil fuel sector to begin with. Because the effect of divestment negligibly—if at all—impacts endowment values for mid-sized, large, and very large endowments, our results may indeed provide evidence that ESG factors could further the charitable purposes for university endowments were created without sacrificing their value. Ultimately, given the financial benefits of ESG integration, UPMIFA should be explicitly reformed to permit institutional fiduciaries to take ESG factors into account, particularly where such a choice is consistent with the institution’s mission. Until UPMIFA directly contemplates ESG factors in institutional investment decision-making, at the very least, ethical and social concerns might be used as a “tie-breaker” when endowment fund managers are faced with making a decision between two options—one involving continued investment in fossil fuels and the other in renewable energies or divestment from fossil fuels—projecting similar financial returns.¹⁶⁹ We hope that this study both grounds and advances the debate about endowment fiduciaries’ duties with empirical evidence and a reasoned discussion of the indiscernible costs and possible benefits of fossil-fuel divestment.

168. UNIF. PRUDENT MGMT. OF INSTITUTIONAL FUNDS ACT § 3(e)(1)(A) (2006).

169. *See id.* at 71. For example, if an instrument establishing a university endowment stated—explicitly or implicitly—that the trust’s purpose was to serve ethical principles, then this might provide a clean legal pathway for the university to divest. *See generally, id.* at 70-71; Gary, *supra* note 48, at 796-801.